



Donald P. Wagner
Mayor/Chairman

Lynn Schott
Mayor Pro Tem/Vice Chairwoman

Melissa Fox
Councilmember/Boardmember

Jeffrey Lalloway
Councilmember/Boardmember

Christina Shea
Councilmember/Boardmember

AGENDA

CITY COUNCIL REGULAR MEETING AND REGULAR JOINT MEETING WITH THE CITY OF IRVINE AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY

August 8, 2017

4:00 PM

City Council Chamber
One Civic Center Plaza
Irvine, CA 92606

Speaker's Card/Request to Speak: If you would like to address the City Council / Successor Agency on a scheduled agenda item – including a Consent Calendar item, Business item, a Public Hearing item, or Public Comments – please complete the [Request to Speak Form](#). The card is at the table at the entrance to the City Council Chamber. Please identify on the card your name and the item on which you would like to speak and return to the City Clerk / Agency Secretary. The [Request to Speak Form](#) assists the Mayor / Chair in ensuring that all persons wishing to address the City Council / Successor Agency are recognized. It also ensures the accurate identification of meeting participants in the City Council / Successor Agency minutes. Your name will be called at the time the matter is heard by the City Council / Successor Agency. City policy is to limit public testimony to up to three minutes per speaker depending on relevant circumstances (unless the time limit is extended by the Mayor / Chair), which includes the presentation of electronic or audio visual information. Speakers may not yield their time to other persons.

Please take notice that the order of scheduled agenda items below and/or the time they are actually heard, considered and decided may be modified by the Mayor / Chair or the City Council / Successor Agency Board during the course of the meeting, so please stay alert.

CALL TO ORDER

ROLL CALL

Scan this QR code for an electronic copy
of the City Council and Successor Agency
Agenda and staff reports.



1. CLOSED SESSION

1.1 CONFERENCE WITH LABOR NEGOTIATORS (Pursuant to Government Code Section 54957.6) Agency Negotiators: Sean Joyce, City Manager; Grace Leung, Assistant City Manager; Michelle Grettenberg, Deputy City Manager; Jimmee Medina, Deputy Director of Administrative Services; Brian King, Manager of Human Resources; Peter Brown, Liebert, Cassidy, Whitmore; Employee Organizations: Associated Supervisory/Administrative Personnel (ASAP); Irvine City Employees Association (ICEA); Irvine Professional Employees Association (IPEA); Irvine Police Association (IPA); Irvine Police Management Association (IPMA); Management and Non-Represented Employees; Confidential Employees; and Part-Time Employees

RECONVENE TO THE CITY COUNCIL MEETING

PLEDGE OF ALLEGIANCE

INVOCATION

CITY MANAGER'S REPORT

ANNOUNCEMENTS/COMMITTEE REPORTS/COUNCIL REPORTS

Announcements, Committee Reports and Council/Agency Comments are for the purpose of presenting brief comments or reports, are subject to California Government Code Section 54954.2 of the Brown Act and are limited to 15 minutes per meeting.

ADDITIONS AND DELETIONS

Additions to the agenda are limited by California Government Code Section 54954.2 of the Brown Act and for those items that arise after the posting of the Agenda and must be acted upon prior to the next City Council meeting.

CONVENE TO THE REGULAR JOINT MEETING

2. CONSENT CALENDAR - CITY COUNCIL

All matters listed under Consent Calendar are considered by the City Manager to be routine and enacted by one roll call vote. There will be no discussion of these items unless members of the City Council request specific items to be removed from the Consent Calendar for separate discussion. Any member of the public may address the Council on items on the Consent Calendar. See information for Speaker's Card/Request to Speak on first page.

2.1 MINUTES

ACTION:

Approve the minutes of a regular meeting of the Irvine City Council held on July 25, 2017.

2.2 WARRANT AND WIRE TRANSFER RESOLUTION

ACTION:

Adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ALLOWING CERTAIN CLAIMS AND DEMANDS AND SPECIFYING THE FUNDS OUT OF WHICH THE SAME ARE TO BE PAID

2.3 DEFINED BENEFIT AND DEFINED CONTRIBUTION PENSION PLAN AUDITS FOR THE YEAR ENDED DECEMBER 31, 2016

ACTION:

Receive and file the Defined Benefit and the Defined Contribution Pension Plan audits for the year ended December 31, 2016.

2.4 AMENDMENT FOR LEGAL ENTITY NAME CHANGE TO THE OUTSOURCED INFORMATION TECHNOLOGY SERVICES CONTRACT

ACTION:

Approve the First Amendment to the Outsourced Information Technology Services contract changing the legal entity to Enterprise Services, LLC from HP Enterprise Services, LLC.

2.5 ASSIGNMENT AND ASSUMPTION OF FIVE POINT OFFICE VENTURE I LLC TO BE A PARTY TO THE APPROVED AMENDED AND RESTATED DEVELOPMENT AGREEMENT (00470035-PDA)

ACTION:

Adopt – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, APPROVING THE ASSIGNMENT AND ASSUMPTION OF CERTAIN OBLIGATIONS UNDER THE APPROVED AMENDED AND RESTATED DEVELOPMENT AGREEMENT (00470035-PDA) BY AND BETWEEN THE CITY OF IRVINE, CITY OF IRVINE AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY AND O.C. PROPERTY COMPANY LLC TO FIVE POINT OFFICE VENTURE I LLC FOR THE GREAT PARK NEIGHBORHOODS DEVELOPMENT DISTRICT 3 CORPORATE CAMPUS PROJECT LOCATED IN PLANNING AREA 51

2.6 ACCEPTANCE OF AGREEMENT FOR TRANSFER OR PURCHASE OF EQUIPMENT/SERVICES OR FOR REIMBURSEMENT OF TRAINING COSTS FOR FISCAL YEAR 2016 URBAN AREAS SECURITY INITIATIVE GRANT

ACTION:

- 1) Authorize the Director of Public Safety to accept the Agreement for Transfer or Purchase of Equipment/Supplies or for Reimbursement of Training Costs for Fiscal Year 2016 Urban Areas Security Initiative Grant.
- 2) Authorize the Director of Public Safety to accept equipment, technology, services or supplies purchased by the City of Anaheim and transferred to the City of Irvine to enhance countywide emergency preparedness.
- 3) Approve a budget adjustment request in the amount of \$50,000 in grant revenues and appropriations for training costs and necessary personnel; as well as equipment, supplies or services.
- 4) Authorize the Director of Public Safety to submit for reimbursement up to \$25,000 in training and personnel costs, and \$25,000 in approved equipment, supplies or services through the Fiscal Year 2016 Urban Areas Security Initiative Grant.

2.7 ACCEPTANCE OF MARUCHAN, INCORPORATED DONATION

ACTION:

Accept a \$100,000 donation from Maruchan, Incorporated.

2.8 APPROVAL OF PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS FOR ORANGE COUNTY GREAT PARK SOUTH LAWN PUMP STATION ENCLOSURE

ACTION:

- 1) Approve the construction plans, specifications and contract documents for the Orange County Great Park, South Lawn Pump Station Enclosure, Capital Improvement Project 381703.
- 2) Approve the Engineer's Estimate, Construction Contingency and Project Funding Summary.
- 3) Authorize staff to solicit competitive bids and award the construction contract to the lowest responsive and responsible bidder, in accordance with the City's purchasing policies and procedures, within the approved budget.

2.9 APPROVAL OF PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS FOR OPERATIONS SUPPORT FACILITY ACCESSIBILITY IMPROVEMENTS

ACTION:

- 1) Approve the construction plans, specifications and contract documents for the Operations Support Facility Accessibility Improvements, Capital Improvement Project 361602.
- 2) Approve the Engineer’s Estimate, Construction Contingency and Project Funding Summary.
- 3) Authorize staff to solicit competitive bids and award the construction contract to the lowest responsive and responsible bidder, in accordance with the City’s purchasing policies and procedures, within the approved project budget.

2.10 NOTICE OF PENDING APPROVAL FOR TRACT MAPS IN ORCHARD HILLS, LOS OLIVOS AND PORTOLA SPRINGS

ACTION:

Receive and file.

2.11 COMMUNITY PARTNERSHIP FUND GRANT NOMINATIONS

ACTION:

- 1) Approve Mayor Pro Tempore Schott’s requests for Community Partnership Fund Grant nominations to the Irvine Korean Evergreen Association in the amount of \$1,000, and the Irvine Barclay Theatre in the amount of \$2,000, in support of program costs; and New Outlook Center in the amount of \$2,000 in support of its mission and goals.
- 2) Authorize the City Manager to prepare and sign the funding agreements listed in Action 1.

3. CONSENT CALENDAR - SUCCESSOR AGENCY

All matters listed under Consent Calendar are considered by the Executive Director to be routine and enacted by one roll call vote. There will be no discussion of these items unless members of the Agency request specific items to be removed from the Consent Calendar for separate discussion. Any member of the public may address the Agency on items on the Consent Calendar. See information for Speaker’s Card/Request to Speak on first page.

3.1 MINUTES

ACTION:

- 1) Approve the minutes of a regular joint meeting of the City of Irvine as Successor Agency to the dissolved Irvine Redevelopment Agency with the Irvine City Council held on March 28, 2017.

- 2) Approve the minutes of a regular joint meeting of the City of Irvine as Successor Agency to the dissolved Irvine Redevelopment Agency with the Irvine City Council held on July 11, 2017.

3.2 WARRANT AND WIRE TRANSFER RESOLUTION – CITY COUNCIL AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY

ACTION:

Adopt – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY ALLOWING CERTAIN CLAIMS AND DEMANDS OF THE CITY COUNCIL AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY AND SPECIFYING THE FUNDS OUT OF WHICH THE SAME ARE TO BE PAID

3.3 ASSIGNMENT AND ASSUMPTION OF FIVE POINT OFFICE VENTURE I LLC TO BE A PARTY TO THE APPROVED AMENDED AND RESTATED DEVELOPMENT AGREEMENT (00470035-PDA)

ACTION:

Adopt – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY APPROVING THE ASSIGNMENT AND ASSUMPTION OF CERTAIN OBLIGATIONS UNDER THE APPROVED AMENDED AND RESTATED DEVELOPMENT AGREEMENT (00470035-PDA) BY AND BETWEEN THE CITY OF IRVINE, CITY OF IRVINE AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY AND O.C. PROPERTY COMPANY LLC TO FIVE POINT OFFICE VENTURE I LLC FOR THE GREAT PARK NEIGHBORHOODS DEVELOPMENT DISTRICT 3 CORPORATE CAMPUS PROJECT LOCATED IN PLANNING AREA 51

PUBLIC COMMENT - SUCCESSOR AGENCY (LIMITED TO 3 MINUTES PER SPEAKER)

Any member of the public may address the Successor Agency on items within the Successor Agency's subject matter jurisdiction but which are not listed on this agenda during Public Comments; however, no action may be taken on matters that are not part of the posted agenda. See information for Speaker's Card/Request to Speak on the first page.

ADJOURNMENT - REGULAR JOINT MEETING

RECONVENE TO THE CITY COUNCIL MEETING

4. PUBLIC HEARINGS

Public Hearings are scheduled for a time certain of 4:00 p.m., unless noticed otherwise, or as soon thereafter as possible. Those wishing to address the City Council during the Public Hearing are requested to complete a form and provide it to the City Clerk prior to the hearing.

Notice: Public Hearings listed for continuance will be continued as noted and posting of this agenda serves as notice of continuation. Any matter not noted for continuance will be posted separately.

4.1 ZONE CHANGE TO AMEND IRVINE'S SIGN CODE TO ALLOW OFF-PREMISES ADVERTISING ON THE EXISTING ELECTRONIC FREEWAY SIGN LOCATED IN THE IRVINE AUTO CENTER AT 30 AUTO CENTER DRIVE IN PLANNING AREA 35 (IRVINE SPECTRUM 2)

ACTION:

- 1) Open the public hearing.
- 2) Continue the public hearing to September 26, 2017.

5. COUNCIL BUSINESS

5.1 BOND ISSUANCE FOR REASSESSMENT DISTRICT NO. 05-21

ACTION:

Adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, AUTHORIZING THE ISSUANCE AND SALE OF NOT TO EXCEED \$19,500,000 AGGREGATE PRINCIPAL AMOUNT OF CITY OF IRVINE REASSESSMENT DISTRICT NO. 05-21 LIMITED OBLIGATION IMPROVEMENT BONDS, FIXED RATE SERIES, GROUP THREE, APPROVING THE EXECUTION AND DELIVERY OF A THIRD SUPPLEMENTAL INDENTURE AND A BOND PURCHASE AGREEMENT

5.2 A RESOLUTION OF INTENT TO CONSIDER GRANTING NONEXCLUSIVE FRANCHISE AGREEMENTS FOR COMMERCIAL WASTE COLLECTION AND RECYCLING SERVICES

ACTION:

Adopt – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, DECLARING ITS INTENT TO CONSIDER GRANTING NONEXCLUSIVE FRANCHISE AGREEMENTS FOR COMMERCIAL SOLID WASTE COLLECTION AND RECYCLING SERVICES AND SETTING FORTH THE PROPOSED TERMS AND CONDITIONS OF SAID FRANCHISE

5.3 ORDINANCE TO ESTABLISH CHANGES AND ADDITIONS TO POSTED SPEED LIMITS

ACTION:

Introduce for first reading, and read by title only – AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, DIRECTING AN AMENDMENT TO THE “CITY OF IRVINE ENGINEERING AND TRAFFIC SURVEYS FOR SPEED LIMITS,” AS MAINTAINED BY THE CITY ENGINEER AS THE OFFICIAL DOCUMENTATION OF DECLARED PRIMA FACIE SPEED LIMITS

5.4 CONSIDERATION OF MEMORANDUM OF UNDERSTANDING WITH PRETEND CITY CHILDREN’S MUSEUM FOR PROPERTY AT THE CULTURAL TERRACE

ACTION:

Approve a Memorandum of Understanding with Pretend City Children’s Museum for lease of property at the Great Park Cultural Terrace.

5.5 DESIGNATION OF VOTING DELEGATE FOR LEAGUE OF CALIFORNIA CITIES 2017 ANNUAL CONFERENCE

ACTION:

Appoint a member of the City Council to serve as the voting delegate for the Annual Business Meeting at the League of California Cities 2017 Annual Conference.

PUBLIC COMMENT-CITY COUNCIL - Public comments will be heard at approximately 6:30 p.m. or prior to adjournment, whichever occurs earlier.

Any member of the public may address the City Council on items within the City Council’s subject matter jurisdiction but which are not listed on this agenda during Public Comments; however, no action may be taken on matters that are not part of the posted agenda. See information for Speaker’s Card/Request to Speak on the first page.

ADJOURNMENT-CITY COUNCIL

NOTICE TO THE PUBLIC

LIVE BROADCASTING AND REBROADCASTING

Regular City Council and Successor Agency meetings are broadcast live every 2nd and 4th Tuesday of the month at 4 p.m. and are replayed on Tuesdays at 4 p.m. (in weeks in which there is not a live City Council and/or Successor Agency meeting), Sundays at 11 a.m., Wednesdays at 7 p.m., and Thursdays at 10 a.m. until the next City Council / Successor Agency meeting. All broadcasts can be viewed on Cox Communications Local Access Channel 30 and U-Verse Channel 99. City Council meetings are also available via live webcast and at any time for replaying through the City’s ICTV webpage at cityofirvine.org/ictv. For more information, please contact the City Clerk’s office at (949) 724-6205.

ADJOURNMENT

At 11:00 p.m., the City Council / Successor Agency will determine which of the remaining agenda items can be considered and acted upon prior to 12:00 midnight and will continue all other items on which additional time is required until a future City Council / Successor Agency meeting. All meetings are scheduled to terminate at 12:00 midnight.

STAFF REPORTS

As a general rule, staff reports or other written documentation have been prepared or organized with respect to each item of business listed on the agenda. Copies of these materials are on file with the City Clerk and are available for public inspection and copying once the agenda is publicly posted, (at least 72 hours prior to a regular City Council / Successor Agency meeting). Staff reports can also be downloaded from the City's website at cityofirvine.org beginning the Friday prior to the scheduled City Council / Successor Agency meeting on Tuesday.

In addition, meetings can be viewed live at the time posted on the agenda and related staff reports can be opened and viewed simultaneously along with the streaming of the meeting. To view the meeting, go to cityofirvine.org/ictv.

If you have any questions regarding any item of business on the agenda for this meeting, or any of the staff reports or other documentation relating to any agenda item, please contact City Clerk staff at public meeting. (949)724-6205.

SUPPLEMENTAL MATERIAL RECEIVED AFTER THE POSTING OF THE AGENDA

Any supplemental writings or documents distributed to a majority of the City Council / Successor Agency regarding any item on this agenda after the posting of the agenda will be available for public review in the City Clerk's Office, One Civic Center Plaza, Irvine, California, during normal business hours. In addition, such writings or documents will be made available for public review at the respective

If you have any questions regarding any item of business on the agenda for this meeting, or any of the staff reports or other documentation relating to any agenda item, please contact City Clerk staff at (949)724-6205.

SUBMITTAL OF INFORMATION BY MEMBERS OF THE PUBLIC FOR DISSEMINATION OR PRESENTATION AT PUBLIC MEETINGS

Media Types and Guidelines

1. Written Materials/Handouts:

Any member of the public who desires to submit documentation in hard copy form may do so prior to the meeting or at the time he/she addresses the City Council / Successor Agency. Please provide 15 copies of the information to be submitted and file with the City Clerk at the time of arrival to the meeting. This information will be disseminated to the City Council / Successor Agency Board at the time testimony is given.

2. Large Displays/Maps/Renderings:

Any member of the public who desires to display freestanding large displays or renderings in conjunction with their public testimony is asked to notify the City Clerk's Office at (949)724-6205 no later than 12:00 noon on the day of the scheduled meeting so that an easel can be made available, if necessary.

3. Electronic Documents/Audio-Visuals:

Any member of the public who desires to display information electronically in conjunction with their public testimony is asked to submit the information to the Public Information Office (PIO) no later than 12:00 noon on the day of the scheduled meeting. To facilitate your request contact the PIO Office at (949)724-6253 or the City Clerk's Office at (949)724-6205.

Information must be provided on CD, DVD, or VHS; or, emailed by 12:00 noon on the day of the scheduled meeting to pio@ci.irvine.ca.us. Members of the public will be asked to provide their name, identify the meeting and the agenda item to be addressed, and a day time phone number.

The PIO office will notify the person submitting the information as soon as possible prior to the meeting if the information cannot be accessed or if the version provided is incompatible with the City's system. Every effort will be made by City staff to facilitate the presentation.

CITY SERVICES TO FACILITATE ACCESS TO PUBLIC MEETINGS

It is the intention of the City of Irvine to comply with the Americans With Disabilities Act (ADA) in all respects. If, as an attendee or a participant at this meeting, you will need special assistance beyond what is normally provided, the City of Irvine will attempt to accommodate you in every reasonable manner. Please contact the City Clerk's Office at (949)724-6205.

Assisted listening devices are available at the meeting for individuals with hearing impairments. Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting. (28 CFR 35. 102-35. 104 ADA Title II)

CHALLENGING CITY DECISIONS

The time limit within which to commence any lawsuit or legal challenge to any quasi-adjudicative decision made by the City is governed by Section 1094.6 of the Code of Civil Procedure, unless a shorter limitations period is specified by any other provision. Under Section 1094.6, any lawsuit or legal challenge to any quasi-adjudicative decision made by the City must be filed no later than the 90th day following the date on which such decision becomes final. Any lawsuit or legal challenge that is not filed within this 90-day period will be barred.

If a person wishes to challenge the nature of the above actions in court, they may be limited to raising only those issues they or someone else raised at the meeting described in this notice, or in written correspondence delivered to the City of Irvine, at or prior to the meeting. In addition, judicial challenge may be limited or barred where the interested party has not sought and exhausted all available administrative remedies.

COMMUNICATION AND ELECTRONIC DEVICES

To minimize distractions, please be sure all personal communication and electronic devices are turned off or on silent mode.

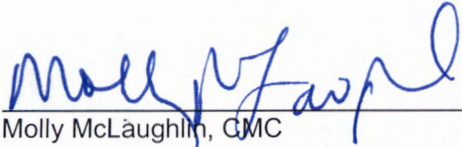
MEETING SCHEDULE

Regular meetings of the City Council / Successor Agency are held on the second and fourth Tuesdays of each month at 4:00 p.m. Study Sessions and/or Closed Sessions are periodically held prior to the start of the regular meeting. Agendas are available at the following locations:

- City Clerk's Office
- Police Department
- Front Entrance of City Hall
- University Park Center (Culver/Michelson)

- Walnut Village Center (Culver/Walnut)
- Northwood Town Center (Irvine Blvd./Yale)
- City's web page at www.ci.irvine.ca.us

I hereby certify that the agenda for the Regular City Council / Successor Agency meeting was posted in the posting book located in the Public Safety Lobby and at the entrance of City Hall, One Civic Center Plaza, Irvine, California on August 3, 2017 by 8:00 pm as well as on the City's web page.



Molly McLaughlin, GMC
City Clerk / Successor Agency Secretary

CLOSED SESSION

1.1

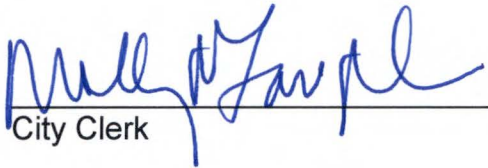
2.1



REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: AUGUST 8, 2017

TITLE: MINUTES



City Clerk

RECOMMENDED ACTION:

Approve the minutes of a regular meeting of the Irvine City Council held on July 25, 2017.



MINUTES

CITY COUNCIL REGULAR MEETING

July 25, 2017
City Council Chamber
One Civic Center Plaza
Irvine, CA 92606

CALL TO ORDER

The regular meeting of the Irvine City Council was called to order at 4:18 p.m. on July 25, 2017 in the City Council Chamber, Irvine Civic Center, One Civic Center Plaza, Irvine, California; Mayor Wagner presiding.

ROLL CALL

| | | | |
|----------|---|--------------------|------------------|
| Present: | 5 | Councilmember: | Melissa Fox |
| | | Councilmember: | Jeffrey Lalloway |
| | | Councilmember: | Christina Shea |
| | | Mayor Pro Tempore: | Lynn Schott |
| | | Mayor: | Donald P. Wagner |

1. CLOSED SESSION

City Attorney Melching announced the following Closed Session item:

- 1.1 **CONFERENCE WITH LABOR NEGOTIATORS (Pursuant to Government Code Section 54957.6) Agency Negotiators: Sean Joyce, City Manager; Grace Leung, Assistant City Manager; Michelle Grettenberg, Deputy City Manager; Jimmee Medina, Deputy Director of Administrative Services; Brian King, Manager of Human Resources; Peter Brown, Liebert, Cassidy, Whitmore; Employee Organizations: Associated Supervisory/Administrative Personnel (ASAP); Irvine City Employees Association (ICEA); Irvine Professional Employees Association (IPEA); Irvine Police Association (IPA); Irvine Police**

Management Association (IPMA); Management and Non-Represented Employees; Confidential Employees; and Part-Time Employees

RECESS

Mayor Wagner convened the City Council meeting to Closed Session at 4:19 p.m.

RECONVENE TO THE CITY COUNCIL MEETING

Mayor Wagner reconvened the City Council meeting at 5:05 p.m. City Attorney Melching, on behalf of the City Council, announced that no reportable action was taken in Closed Session.

PLEDGE OF ALLEGIANCE

Mayor Pro Tempore Schott led the Pledge of Allegiance.

INVOCATION

Rabbi Yisroel Ciner from Beth Jacob Congregation in Irvine provided the invocation.

CITY MANAGER'S REPORT

City Manager Joyce introduced Mark Lisenmayer, Director of Transportation.

ANNOUNCEMENTS/COMMITTEE REPORTS/COUNCIL REPORTS

Mayor Pro Tempore Schott, as the City's representative to the Orange County Mosquito and Vector Control District (District), expressed her appreciation to District staff for bringing "Mrs. Mosquito," an inflatable nine-foot tall mosquito, to the Pacific Symphony concert series at Mike Ward Community Park – Woodbridge held last Sunday, to educate children on the importance of protecting themselves and their families from mosquito bites. She also reminded residents to reduce their risks in contracting West Nile Virus by conducting routing property checks and eliminating standing water sources.

Councilmember Fox introduced City Council summer interns; and announced that the Orange County Soccer Club game against the Vancouver Whitecaps II would take place at the Orange County Great Park, Soccer Field 4, on Saturday, July 29 at 5 p.m., with tickets available online at *orangecountysoccer.com* or at the box office.

Mayor Wagner made the following announcements:

- The Blues Brothers, featuring Dan Aykroyd and Jim Belushi, will perform at the Grand Opening of the first phase of the Orange County Great Park Sports Park on Saturday, August 5 at 7:15 p.m. in the Soccer Stadium. At 2 p.m. prior to the concert, the opening of the soccer fields, tennis courts, sand volleyball courts, and the Children’s Play area will take place, with sports figures and youth teams involved. The official ribbon-cutting is at 3:30 p.m. followed by a soccer match at the Soccer Stadium. For information, visit cityofirvine.org.
- The Irvine Police Department is joining cities across the nation in celebration of National Night Out, with three free events being held on Tuesday, August 1 from 5:30 to 7:30 p.m. The events at Cypress Village Community Park, Adventure Playground at University Community Park, and The Ranch Neighborhood Park will offer chances for residents to come out and meet their local police officers, get a look inside police vehicles and learn about crime prevention. The Irvine Police Department Mounted Unit will make its first public appearance during the event at Cypress Community Park. Hot dogs and drinks will be provided, with desserts available from food trucks. For information, visit cityofirvine.org.

Councilmember Shea inquired about the availability of food and beverages at the August 5 Grand Opening Event at the Orange County Great Park, to which Craig Reem, Director of Public Affairs and Communications, responded that food trucks would be available from 2-8:30 p.m., and water would be available throughout the day across all 53 acres.

ADDITIONS AND DELETIONS

City Manager Joyce noted that Item No. 3.1 (Irvine Business Complex Transportation Mitigation Fee Program Update) would be continued to the September 12, 2017 meeting.

2. CONSENT CALENDAR

ACTION: Moved by Councilmember Lalloway, seconded by Councilmember Shea, and unanimously carried to approve Consent Calendar Item Nos. 2.1 through 2.8, with the exception if Item Nos. 2.4, 2.7, and 2.9, which were removed for separate discussion.

2.1 MINUTES

ACTION:

Approved the minutes of a regular meeting of the Irvine City Council and regular joint meeting with the City of Irvine as Successor Agency to the dissolved Irvine Redevelopment Agency held on July 11, 2017.

2.2 WARRANT AND WIRE TRANSFER RESOLUTION

ACTION:

Adopted RESOLUTION NO. 17-50 - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ALLOWING CERTAIN CLAIMS AND DEMANDS AND SPECIFYING THE FUNDS OUT OF WHICH THE SAME ARE TO BE PAID

2.3 BUDGET ADJUSTMENT FOR ENHANCEMENTS TO SPORTS PARK SUBAREA OF THE ORANGE COUNTY GREAT PARK

ACTION:

- 1) Authorized the City Manager to execute Amendment No. 3 to Letter Agreement regarding Sports Park design enhancements. **(Contract No. 9401C)**
- 2) Approved a budget appropriation of \$71,000 from the unallocated Great Park Fund balance to the Capital Improvement Project Fund, Project No. 361616, Sports Park Subarea Improvements, for the recommended Sports Park design enhancements.

(Unless otherwise directed by a member of the City Council, the vote on this matter will reflect the prior action of each Councilmember when he or she sat and voted as a member of the Board of Directors of the Orange County Great Park Corporation. However, if a Councilmember is not present at the City Council meeting, his or her vote will be reflected as absent.)

Approved 5-0.

2.4 AWARD OF CONTRACT FOR WIRELESS MARKETING AND MANAGEMENT SERVICES AT THE ORANGE COUNTY GREAT PARK

This item was removed for separate discussion at the request of Anne Beehler, representing Bryan Cave LLP on behalf of Connected Nation Exchange (“CNX”), who expressed opposition to the proposed contract with 5 BARS Communities, LLC.

City Council discussion included: whether the City was on the proper path with respect to wireless marketing and management services; referenced concerns raised at a prior meeting related to the bidding and selection process; and reiterated concerns about pending State legislation.

Jonathan Kramer, representing Telecom Law Firm, noted that the proposed contract offered proper protection for the City.

City Manager Joyce suggested that any legal advice related to this matter would be best suited for Closed Session.

ACTION: Moved by Councilmember Shea, seconded by Councilmember Lalloway, to:

- 1) Authorize the Orange County Great Park Director to execute a contract with 5 BARS Communities, LLC for wireless marketing and management services and subsequent sublicenses at the Orange County Great Park. **(Contract No. 9914)**
- 2) Approve a budget adjustment to appropriate \$85,000 in the Orange County Great Park Fund for a wireless infrastructure master plan funded from future lease revenue.

The motion carried as follows:

AYES: 4 COUNCILMEMBERS: Fox, Lalloway, Shea and Wagner

NOES: 1 COUNCILMEMBERS: Schott

ABSENT: 0 COUNCILMEMBERS: None

2.5 AWARD OF CONTRACT FOR WIRELESS MARKETING AND MANAGEMENT SERVICES

ACTION:

- 1) Approved and authorized the City Manager to execute a contract with 5 BARS Communities, LLC for wireless marketing and management services and subsequent sublicenses. **(Contract No. 9915)**
- 2) Approved a budget adjustment to appropriate \$150,000 in the General Fund for a wireless infrastructure master plan funded from future lease revenue.

2.6 CONSIDERATION OF A POLICY FOR POSTING DEPOSITION TRANSCRIPTS ON THE CITY WEBSITE

ACTION:

Adopted the policy related to the timing of posting deposition transcripts on the City’s website, consistent with California Code of Civil Procedure section 2025.520.

2.7 APPROVAL OF SPECIFICATIONS AND CONTRACT DOCUMENTS FOR THE ANNUAL STREET REHABILITATION AND SLURRY SEAL PROJECT

This item was removed for separate discussion at the request of Councilmember Lalloway, who suggested that bike trails remain open on weekends, and asked that disruption to motorists be kept at a minimum during peak times.

There was no City Council discussion.

ACTION: Moved by Councilmember Lalloway, seconded by Councilmember Shea, and unanimously carried to:

- 1) Approve specifications and contract documents for the Annual Street Rehabilitation and Slurry Seal Capital Improvement Projects 311801, 361807, and 341701.
- 2) Approve the Engineer's Estimate, Construction Contingency and Funding Summary.
- 3) Authorize the City Manager to execute the Reimbursement Agreement with Irvine Ranch Water District for installation and adjustment of water district facilities within the project limits.
- 4) Authorize staff to solicit competitive bids and award the construction contract to the lowest responsive and responsible bidder in accordance with the City's financial policies and purchasing procedures.

2.8 NOTICE OF REVIEW AND PENDING APPROVAL FOR TRACT MAPS IN IRVINE BUSINESS COMPLEX AND EASTWOOD

ACTION:
Received and filed.

2.9 KELVIN AVENUE PEDESTRIAN BRIDGE

This item was removed for separate discussion at the request of Mayor Wagner, who asked for City Council reconsideration to defer the pedestrian bridge project based on Transportation and Planning Commission recommendations.

City Council discussion included: identifying the advantages of a pedestrian bridge at the designated location; noted that certain Planning and Transportation Commissioners were unaware of the project's history when the item was before them for consideration; reiterated that the Irvine Residents with Disabilities Advisory Board (IRDAB) voted unanimously in support of the bridge; and suggested that the City be proactive with

respect to future infrastructure to further public benefits while also reducing costs.

ACTION: Moved by Mayor Pro Tempore Schott, seconded by Councilmember Shea, to:

- 1) Adopted RESOLUTION NO. 17-51 – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, CERTIFYING THE ADDENDUM TO THE IBC VISION PLAN AND MIXED USE OVERLAY ZONING CODE FINAL PROGRAM ENVIRONMENTAL IMPACT REPORT (SCH NO. 2007011024) FOR THE KELVIN AVENUE PEDESTRIAN BRIDGE PROJECT
- 2) Authorized the Director of Community Development to execute Amendment No. 2 to the Kelvin Apartments Conditional Use Permit Letter Agreement. **(Contract No. 9916B)**

The motion carried as follows:

AYES: 4 COUNCILMEMBERS: Fox, Lalloway, Schott and Shea

NOES: 1 COUNCILMEMBERS: Wagner

ABSENT: 0 COUNCILMEMBERS: None

3. PUBLIC HEARINGS

3.1 IRVINE BUSINESS COMPLEX TRANSPORTATION MITIGATION FEE PROGRAM UPDATE

ACTION: By consensus, the public hearing was continued to September 12, 2017.

3.2 CITY COUNCIL OVERRIDE OF INCONSISTENCY DETERMINATION BY THE AIRPORT LAND USE COMMISSION OF ORANGE COUNTY

Joel Belding, Principal Planner, and Stephanie Frady, Senior Planner, presented the staff report and responded to questions.

Mayor Wagner opened the public hearing at 5:42 p.m.

Tim Strader Jr., representing Starpointe Ventures on behalf of the applicant, Great Far East, LLC, spoke in support; and indicated that the applicant was willing to engage an independent expert in safety and land use for the August 8, 2017 City Council meeting.

Joe Daichendt spoke in opposition, noting the need to protect air space for future generations.

ACTION: Moved by Councilmember Lalloway, seconded by Councilmember Shea, and unanimously carried to close the public hearing at 5:47 p.m.

City Council discussion included: conflicting opinions amongst the different experts regarding public safety and how to reconcile those differences; suggested the City seek an independent consultant through a limited Request for Proposals (RFP); inquired about the timeframe related to the RFP process; and questioned the scope of services and whether more than one consultant was necessary.

Sean Joyce, City Manager, noted that estimated costs for an independent consultant would be determined once a scope of services was developed.

ACTION: Moved by Councilmember Lalloway, seconded by Mayor Pro Tempore Schott, to:

Direct staff to a) issue a limited Request for Proposals (RFP) pursuant to the City's Purchasing Policies and Procedures; b) request that the developer coordinate the entity with City staff once the independent consultant is determined; c) require the developer to provide a deposit to cover the cost of an independent consultant; and d) return to the City Council with a detailed report about the project.

Jeffrey Melching, City Attorney, suggested the motion be amended to include continuation of the public hearing to a date certain.

ACTION: An amendment to the motion was made by Councilmember Lalloway, accepted by Mayor Pro Tempore Schott as the seconder, and unanimously carried to:

- 1) Direct staff to a) issue a limited Request for Proposals (RFP) pursuant to the City's Purchasing Policies and Procedures; b) request that the developer coordinate the entity with City staff once an independent consultant is determined; c) require the developer to provide a deposit to cover the cost of the independent consultant; and d) return to the City Council with a detailed report about the project.
- 2) Continue the public hearing to September 12, 2017.

4. COUNCIL BUSINESS

4.1 CONSIDERATION OF COUNCILMEMBER SHEA'S REQUEST FOR ANIMAL CARE CENTER REDESIGN UPDATE

This item was agendaized at the request of Councilmember Shea, who asked for an update on the redesign of the Irvine Animal Care Center (IACC).

Mayor Pro Tempore Schott, on behalf of the IACC Subcommittee, provided a brief update on the project, noting that the Fiscal Year 2016-17 budget included funds for the preparation of conceptual design plans for the renovation or replacement of IACC, and that the Subcommittee has been exploring how to best update IACC. She also noted that \$25 million was included in the adopted budget for Fiscal Year 2017-18 to be appropriated by the City Council for the scope of improvements, with the Subcommittee returning to the City Council in the fall for review and approval.

Sharon Landers, Assistant City Manager, reiterated the Subcommittee's goal in determining how to best update the IACC while simultaneously caring for the animals during the rehabilitation or reconstruction process.

There was no City Council discussion.

Received and filed.

PUBLIC COMMENT

Lynne Hodgson spoke in support of solar panels in all parking lots within the City and County.

Andy Zelinko, Irvine resident, clarified his comments made at the May 23, 2017 Orange County Great Park Board and City Council meetings with respect to alternative uses for the proposed golf course at the Orange County Great Park.

Alan Meyerson, Irvine resident, noted that Irvine City News was not a City sponsored newspaper; spoke in opposition to the land exchange for the Veterans Cemetery; and spoke in support of a monorail within the City to relieve traffic congestion.

Michael Klubniken spoke on behalf of his friend, Ilya Tseglin, and issues related to his autistic son.

Ilya and Robert Tseglin reiterated a domestic issue related to an autistic family member.

Stephen Wontrobski, Mission Viejo resident, spoke in in opposition to the Orange County Fire Authority overcharging the City of Irvine for fire related services.

ADJOURNMENT

Moved by Councilmember Lalloway, seconded by Councilmember Fox, and unanimously carried to adjourn the City Council meeting at 6:29 p.m.

MAYOR OF THE CITY OF IRVINE

CITY CLERK OF THE CITY OF IRVINE

August 8, 2017

2.2



REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: AUGUST 8, 2017

TITLE: WARRANT AND WIRE TRANSFER RESOLUTION

Director of Administrative Services

City Manager

RECOMMENDED ACTION

Adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ALLOWING CERTAIN CLAIMS AND DEMANDS AND SPECIFYING THE FUNDS OUT OF WHICH THE SAME ARE TO BE PAID

EXECUTIVE SUMMARY

A detailed register of claims, the Register of Warrants and Wire Transfers, are submitted to the City Council for review and authorization on a weekly basis. Approval of the attached resolution ratifies the disbursement of funds for the period of July 19, 2017 through August 1, 2017 in accordance with Section 2-7-211 of the Irvine Municipal Code.

ATTACHMENT Warrant and Wire Transfer Resolution

CITY COUNCIL RESOLUTION NO. 17-____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ALLOWING CERTAIN CLAIMS AND DEMANDS AND SPECIFYING THE FUNDS OUT OF WHICH THE SAME ARE TO BE PAID

(SEE ATTACHED)

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 8th day of August 2017.

MAYOR OF THE CITY OF IRVINE

ATTEST:

CITY CLERK OF THE CITY OF IRVINE

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine, held on the 8th day of August 2017.

AYES: COUNCILMEMBERS:
NOES: COUNCILMEMBERS:
ABSENT: COUNCILMEMBERS:
ABSTAIN: COUNCILMEMBERS:

CITY CLERK OF THE CITY OF IRVINE

7/19/2017 through 7/25/2017

REGISTER OF DEMANDS AND WARRANTS

| Fund | Fund Description | Amount |
|-------------|--------------------------------|---------------|
| 001 | GENERAL FUND | 1,019,258.75 |
| 004 | PAYROLL CLEARING FUND | 1,174,431.33 |
| 005 | DEVELOPMENT SERVICES FUND | 33,897.50 |
| 009 | REVENUE CLEARING FUND | 82.47 |
| 010 | INFRASTRUCTURE & REHABILITAT'N | 39,803.91 |
| 024 | BUILDING & SAFETY FUND | 472.50 |
| 027 | DEVELOPMENT ENGINEERING FUND | 32,355.75 |
| 111 | GAS TAX FUND | 536.05 |
| 113 | FEES & EXACTIONS FUND | 62,193.31 |
| 114 | HOME GRANT | 11,956.60 |
| 119 | LIGHTING, LANDSCAPE & PARK MNT | 392,404.02 |
| 125 | COMM DEVELOP BLOCK GRANT FUND | 62,549.41 |
| 126 | SENIOR SERVICES FUND | 6.50 |
| 128 | OFFICE ON AGING PROGRAMS FUND | 1,160.30 |
| 130 | AB2766 - AIR QUALITY IMPROVMNT | 569.22 |
| 132 | SLURRY SEAL SUR CHG FUND | 1,960.00 |
| 139 | SUPPL LAW ENFORCEMENT SERVICES | 9,271.35 |
| 143 | PUBLIC SAFETY GRANTS | 60.65 |
| 149 | SPECIAL PROGRAM GRANTS | 598.13 |
| 155 | COMMUNITY SERVICES PROGRAMS | 97.50 |
| 180 | ORANGE COUNTY GREAT PARK | 303,151.86 |
| 204 | CFD 2013-3 GREAT PARK | 356.00 |
| 250 | CAPITAL IMPROV PROJ FUND - CIR | 7,392.50 |
| 260 | CAPITAL IMPROV PROJ-NON CIRC | 154,747.49 |
| 270 | NORTH IRVINE TRANSP MITIGATION | 7,934.29 |
| 271 | IRVINE BUSINESS COMPLEX | 18,906.80 |
| 286 | GREAT PARK DEVELOPMENT FUND | 54,949.14 |
| 570 | INSURANCE FUND | 719,540.54 |
| 574 | FLEET SERVICES FUND | 257,123.46 |
| 578 | MAIL INTERNAL SERVICES | 26,729.54 |
| 579 | STRATEGIC TECHNOLOGY PLAN FUND | 120,774.59 |
| 580 | CIVIC CTR MAINT & OPERATIONS | 556.91 |
| 714 | REASSESSMENT 12-1 FIXED RATE | 157,406.27 |
| 716 | RAD 13-1 FIXED RATE | 94,327.65 |
| 718 | RAD 05-21 ORCHARD HLS VAR RT | 15,960.95 |
| 719 | REASSESSMENT 85-7A VARIABLE RT | 3,034.29 |
| 721 | AD00-18 SHADY CNYN&TURTL ROCK | 3,765.24 |
| 723 | AD03-19 WOODBURY SER B VAR RT | 7,980.48 |
| 726 | AD10-23 SERIES B FR LAGUNA ALT | 15,313.17 |
| 730 | 11-24 FIXED RT CYPRESS VILLAGE | 76,507.80 |
| 731 | AD07-22 GROUP 4 FIXED RATE | 41,236.81 |
| 732 | RAD 04-20 GROUP 3 FIXED RATE | 8,534.46 |
| 735 | AD03-19 WOODBURY SER A VAR RT | 7,980.48 |
| 744 | CFD 2013-3 GREAT PARK | 585,547.61 |
| 745 | CFD 2005-2R COLUMBUS GROVE SP | 12,671.94 |
| 746 | CFD 2004-1 CENTRAL PARK | 33,336.41 |
| 760 | AD87-8 ICD/BAKE PKWY DEBT SVC | 5,765.24 |

7/19/2017 through 7/25/2017

REGISTER OF DEMANDS AND WARRANTS

| Fund | Fund Description | Amount |
|-------------|-------------------------------|---------------------|
| 767 | AD94-15 WESTPARK II SERIES A | 5,894.28 |
| 771 | AD97-16 NORTHWEST IRVINE VARI | 5,054.28 |
| 772 | RAD 15-1 FIXED RATE | 91,185.48 |
| 773 | RAD 15-2 FIXED RATE | 47,926.73 |
| 774 | AD94-13 VARIABLE RT-OAKCREEK | 5,894.28 |
| 775 | AD97-17 LOWER PETERS CYN EAST | 104,605.24 |
| 777 | RAD 05-21 G1 FIXED RATE | 131,965.42 |
| 778 | RAD 04-20 G4 FIXED RATE | 16,507.59 |
| 780 | RAD 04-20 G6 FIXED RATE | 13,249.32 |
| | GRAND TOTAL | 6,007,479.79 |

7/26/2017 through 8/1/2017

REGISTER OF DEMANDS AND WARRANTS

| Fund | Fund Description | Amount |
|-------------|--------------------------------|---------------|
| 001 | GENERAL FUND | 1,094,295.17 |
| 004 | PAYROLL CLEARING FUND | 1,052,167.06 |
| 005 | DEVELOPMENT SERVICES FUND | 96,089.00 |
| 009 | REVENUE CLEARING FUND | 1,385.49 |
| 010 | INFRASTRUCTURE & REHABILITAT'N | 19,725.00 |
| 024 | BUILDING & SAFETY FUND | 110,830.63 |
| 113 | FEES & EXACTIONS FUND | 8,361.40 |
| 119 | LIGHTING, LANDSCAPE & PARK MNT | 16,823.23 |
| 126 | SENIOR SERVICES FUND | 2,364.42 |
| 128 | OFFICE ON AGING PROGRAMS FUND | 2,775.00 |
| 143 | PUBLIC SAFETY GRANTS | 2,499.94 |
| 149 | SPECIAL PROGRAM GRANTS | 26,607.37 |
| 155 | COMMUNITY SERVICES PROGRAMS | 11,145.16 |
| 180 | ORANGE COUNTY GREAT PARK | 108,719.07 |
| 204 | CFD 2013-3 GREAT PARK | 58,197.64 |
| 218 | AD 03-19 NORTHERN SPHERE | 3,300.00 |
| 250 | CAPITAL IMPROV PROJ FUND - CIR | 110,499.19 |
| 260 | CAPITAL IMPROV PROJ-NON CIRC | 193,871.71 |
| 270 | NORTH IRVINE TRANSP MITIGATION | 7,965.00 |
| 271 | IRVINE BUSINESS COMPLEX | 25,866.79 |
| 286 | GREAT PARK DEVELOPMENT FUND | 97,019.20 |
| 501 | INVENTORY | 15,398.98 |
| 570 | INSURANCE FUND | 50,091.53 |
| 574 | FLEET SERVICES FUND | 113,576.75 |
| 578 | MAIL INTERNAL SERVICES | 102,746.86 |
| 579 | STRATEGIC TECHNOLOGY PLAN FUND | 140,673.86 |
| 580 | CIVIC CTR MAINT & OPERATIONS | 586.45 |
| 714 | REASSESSMENT 12-1 FIXED RATE | 14.57 |
| 716 | RAD 13-1 FIXED RATE | 14.57 |
| 717 | RAD 04-20 PORTOLA SPR VAR RT A | 14.57 |
| 718 | RAD 05-21 ORCHARD HLS VAR RT | 14.57 |
| 719 | REASSESSMENT 85-7A VARIABLE RT | 14.57 |
| 724 | AD 07-22 STONEGATE VAR RT A | 465.86 |
| 745 | CFD 2005-2R COLUMBUS GROVE SP | 972.53 |
| 746 | CFD 2004-1 CENTRAL PARK | 1,603.52 |
| 772 | RAD 15-1 FIXED RATE | 14.57 |
| 781 | INTERAGENCY CUSTODIAL FUND | 7,747.47 |

7/26/2017 through 8/1/2017

REGISTER OF DEMANDS AND WARRANTS

| Fund | Fund Description | Amount |
|-------------|-------------------------|---------------------|
| | GRAND TOTAL | 3,484,458.70 |

2.3



REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: AUGUST 8, 2017

TITLE: DEFINED BENEFIT AND DEFINED CONTRIBUTION PENSION
PLAN AUDITS FOR THE YEAR ENDED DECEMBER 31, 2016

Director of Administrative Services

City Manager

RECOMMENDED ACTION

Receive and file the Defined Benefit and the Defined Contribution Pension Plan audits for the year ended December 31, 2016.

EXECUTIVE SUMMARY

The City of Irvine administers two public retirement plans: 1) the Defined Benefit Pension Plan, and 2) the Defined Contribution Pension Plan. California State Government Code, Sections 7501-7504, requires public retirement plans to furnish annual audited financial statements to the State Controller. The City of Irvine's financial policies require the audit report to be submitted to the City Council and Finance Commission.

The City's independent auditor, White, Nelson, Diehl, Evans, LLP, audited the financial statements of the Defined Benefit Pension Plan and the Defined Contribution Pension Plan for the calendar year ended 2016. The auditor provided an opinion that the financial statements accurately reflect the financial positions of both retirement plans. As required by the State of California, the annual audits were furnished to the State Controller prior to June 30, 2017.

COMMISSION/BOARD/COMMITTEE RECOMMENDATION

At its regular meeting of July 17, 2017, with all members present, the Finance Commission reviewed the Defined Benefit and Defined Contribution Pension Plan audit documents and recommended the City Council receive and file by a 5-0 vote.

ANALYSIS

Prior to the adoption of retirement plans through the California Public Employees' Retirement System (CalPERS), the City of Irvine administered its own retirement plans, a defined benefit plan for sworn employees and a defined contribution plan for non-sworn employees. These plans, known respectively as the City of Irvine Defined Benefit

Pension Plan (Benefit Plan) and the City of Irvine Defined Contribution Pension Plan (Contribution Plan), were closed to new members when the CalPERS plans became effective. Employees in the City plans were given the choice to remain in the City plans or move to the CalPERS plan. The City continues to administer these plans, which are overseen by a Board of Trustees.

As of December 31, 2016, the combined plans had \$28,696,008 in assets and 89 members. Benefit Plan members include three active employees and 33 retirees and beneficiaries. Contribution Plan members include 8 active employees and 45 former employees and beneficiaries. The auditor's opinion is the financial statements present the pension plans' financial condition, including the net position held in the trust for benefits, fairly and in accordance with generally accepted accounting principles (Attachments 1 and 2).

The Audit Committee Letter (Attachments 3 and 4) is the formal communication from the auditor to the audit committee required by Government Auditing Standards. The standards require the auditor to communicate information related to the audit concerning qualitative aspects of accounting practices, difficulties encountered in performing the audit, corrected and uncorrected misstatements, disagreements with management, management representations, management consultations with other independent accountants, and other audit findings or issues. No significant audit findings were noted.

Defined Benefit Pension Plan Audit (Attachment 1)

The Benefit Plan provides retired participants a monthly annuity. The annual required contribution is determined actuarially (Attachment 5). The study determines the Benefit Plan's funding requirement and is used by the auditor to validate the Benefit Plan's funding status. As of the last actuarial valuation date, January 1, 2017, the Benefit Plan was 94.6 percent funded and has an unfunded actuarial accrued liability of \$1,093,889. The fiscal year 2017-18 budget includes sufficient funding for the recommended contribution of \$193,170 based on a 5.5 percent rate of return.

As of December 31, 2016, the Defined Benefit Plan Financial Statement had a net position of \$19,211,156 including accruals, to provide for current and future benefits. During 2016, the Benefit Plan received contributions of \$132,515 and generated net investment income of \$1,037,967. The Benefit Plan paid \$1,165,225 in benefit payments, had administrative expenses of \$16,437 and investment expenses of \$67,364. The net decrease in the plan was \$11,180.

Defined Contribution Pension Plan Audit (Attachment 2)

The Contribution Plan provides employees a retirement savings account similar to a 401K. Funding of the plan is 19 percent of participating employee's salary, based on a

City contribution of 12.448 percent and participant contribution of 6.552 percent. As of December 31, 2016, the Contribution Plan had investments of \$9,427,934.

During 2016, the Contribution Plan received employer contributions of \$130,673, employee contributions of \$50,324, net investment income of \$418,973, and distributed \$828,586 in benefit payments.

ALTERNATIVES CONSIDERED

Annual audits are required by the State of California and City of Irvine's financial policies. The financial policies also require the City Council and Finance Commission to receive and file the reports; no other alternatives were considered.

FINANCIAL IMPACT

The annual audit fees for both plans are \$8,240 and are funded by the respective plans with Administrative Services providing staff support.

REPORT PREPARED BY Amy Roblyer, Senior Management Analyst

ATTACHMENTS

1. Defined Benefit Pension Plan Audit Report, December 31, 2016
2. Defined Contribution Pension Plan Audit Report, December 31, 2016
3. Defined Contribution Pension Plan Audit Communication Letter
4. Defined Benefit Pension Plan Audit Communication Letter
5. Sworn Police Defined Benefit Pension Plan Actuarial Report, January 1, 2017

**CITY OF IRVINE, CALIFORNIA
DEFINED BENEFIT PENSION PLAN**

**WITH REPORT ON AUDIT
BY INDEPENDENT
CERTIFIED PUBLIC ACCOUNTANTS**

DECEMBER 31, 2016

CITY OF IRVINE
DEFINED BENEFIT PENSION PLAN

TABLE OF CONTENTS

December 31, 2016

| | <u>Page Number</u> |
|--|------------------------|
| Independent Auditors' Report | 1 - 2 |
| Financial Statements: | |
| Statement of Fiduciary Net Position | 3 |
| Statement of Changes in Fiduciary Net Position | 4 |
| Notes to Financial Statements | 5 - 23 |
| Required Supplementary Information: | |
| Schedule of Changes in Net Pension Liability | 24 |
| Schedule of Contributions | 25 |
| Schedule of Investment Returns | 26 |

INDEPENDENT AUDITORS' REPORT

To the Board of Trustees of the
Defined Benefit Pension Plan
City of Irvine, California

Report on the Financial Statements

We have audited the accompanying statement of fiduciary net position of the City of Irvine, California, Defined Benefit Pension Plan (the Plan), as of December 31, 2016, and the related statement of changes in fiduciary net position for the year then ended, and the related and notes to the financial statements, which collectively comprise the basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditors consider internal control relevant to the Plan's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the net position restricted for pension benefits of the City of Irvine, California, Defined Benefit Pension Plan as of December 31, 2016, and the changes in fiduciary net position held in trust for pension benefits for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Management has omitted the management's discussion and analysis that auditing standards generally accepted in the United States of America require to be presented to supplement the financial statements. Such missing information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board, who considers it be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, and historical context. Our opinion is not affected by this missing information.

Accounting principles generally accepted in the United States of America require that the schedule of changes in net pension liability, schedule of contributions, and schedule of investment returns, identified as Required Supplementary Information (RSI) in the accompanying table of contents, be presented to supplement the basic financial statements. Such information, although not part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economical, or historical context. We have applied certain limited procedures to the RSI in accordance with auditing standards generally accepted in the United States of America, which consisted of inquires of management about the methods of preparing the information and comparing the information for consistency with management's response to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the RSI because the limited procedures do not provide us sufficient evidence to express an opinion or provide any assurance.

White Nelson Dick Evans LLP

Irvine, California
June 16, 2017

CITY OF IRVINE
DEFINED BENEFIT PENSION PLAN

STATEMENT OF FIDUCIARY NET POSITION

December 31, 2016

ASSETS:

Cash equivalents \$ 166,490

Investments:

Investments in pooled, common, and collective funds 18,864,689

Mutual funds 174,622

Total Investments 19,039,311

Receivables:

Interest receivable 87

Employer contributions receivable 3,559

Participant contributions receivable 1,709

Total Receivables 5,355

TOTAL ASSETS 19,211,156

LIABILITIES:

Accrued Liabilities:

Investment management fees 18,823

NET POSITION RESTRICTED FOR PENSION BENEFITS \$ 19,192,333

See accompanying notes to financial statements.

CITY OF IRVINE
DEFINED BENEFIT PENSION PLAN

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

For the year ended December 31, 2016

ADDITIONS:

Net Investment Income:

| | |
|---|------------------|
| Net appreciation in fair value of investments | \$ 1,099,875 |
| Interest | 5,456 |
| | <u>1,105,331</u> |
| Less: Investment expenses | <u>(67,364)</u> |
| Net Investment Income | <u>1,037,967</u> |

Contributions:

| | |
|----------------------------|----------------|
| Employer contributions | 91,834 |
| Participants contributions | 40,681 |
| | <u>132,515</u> |

Total Contributions

TOTAL ADDITIONS

1,170,482

DEDUCTIONS:

| | |
|-------------------------|------------------|
| Benefit payments | 1,165,225 |
| Administrative expenses | 16,437 |
| | <u>1,181,662</u> |

TOTAL DEDUCTIONS

NET CHANGE IN NET POSITION

(11,180)

NET POSITION RESTRICTED FOR PENSION BENEFITS,
BEGINNING OF YEAR

19,203,513

NET POSITION RESTRICTED FOR PENSION BENEFITS,
END OF YEAR

\$ 19,192,333

See accompanying notes to financial statements.

CITY OF IRVINE
DEFINED BENEFIT PENSION PLAN
NOTES TO FINANCIAL STATEMENTS

December 31, 2016

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND PLAN ASSET MATTERS:

A. Basis of Accounting:

The Plan's financial statements are prepared in accordance with the pronouncements issued by the Governmental Accounting Standards Board using the accrual basis of accounting. Contributions are recognized as revenue in the period in which employee services are performed and Plan expenses, other than pension benefits, are recorded when the corresponding liabilities are incurred, regardless of when payment is made. Pension benefits are recorded when due and payable in accordance with the terms of the Plan.

B. Plan Administration:

The Plan is administered by the City and the Defined Benefit Pension Plan Trustees (Trustees). Wells Fargo Bank (Custodian) is the custodian of the Plan's assets. The Custodian makes benefit and termination payments as authorized by the administrative staff, which is designated by the Trustees. Administrative expenses of the Plan are paid out of the Plan assets.

C. Investment Valuation and Income Recognition:

The Plan's investments are stated at fair value at December 31, 2016. Fair value is the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. See Note 7 for discussion of fair value measurements for the Plan's mutual funds.

Purchases and sales of investments are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date. Realized gains and/or losses are reported the day after the trade date.

Net realized and unrealized appreciation (depreciation) is recorded in the accompanying statement of changes in fiduciary net position in net appreciation in fair value of investments. The calculation of realized gains and losses is independent of the calculation of the net appreciation in the fair value of investments. Realized gains and losses on investments that had been held in more than one reporting period and sold in the current period were included in the net appreciation (depreciation) in fair value reported in the prior period(s) and the current period.

Brokerage fees are added to the acquisition costs of assets purchased and subtracted from the proceeds of assets sold.

CITY OF IRVINE
DEFINED BENEFIT PENSION PLAN
NOTES TO FINANCIAL STATEMENTS
(CONTINUED)

December 31, 2016

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND PLAN ASSET MATTERS
(CONTINUED):

D. New Accounting Pronouncements:

GASB Current Year Standards

In 2016, the Plan implemented GASB Statement No. 72, *“Fair Value Measurement and Application”*. GASB Statement No. 72 requires the Plan to use valuation techniques that are appropriate under the circumstances and are either a market approach, a cost approach, or income approach. GASB Statement No. 72 establishes a hierarchy of inputs used to measure fair value consisting of three levels. Level 1 inputs are quoted prices in active markets for identical assets or liabilities. Level 2 inputs are inputs, other than quoted prices included within Level 1, which are observable for the asset or liability, either directly or indirectly. Level 3 inputs are unobservable inputs and typically reflect Plan’s management’s estimates of assumptions that market participants would use in pricing the asset or liability. GASB Statement No. 72 also contains note disclosure requirements regarding the hierarchy of valuation inputs and valuation techniques that are used for the fair value measurements. There was no material impact on the Plan’s financial statements as a result of the implementation of GASB Statement No. 72.

GASB Statement No. 73, *“Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68”*, was required to be implemented in the current fiscal year, except for those provisions that address employer and governmental nonemployer contributing entities for pensions that are not within the scope of GASB Statement No. 68, which are effective for periods beginning after June 15, 2016, and did not impact the financial statements.

GASB Statement No. 76, *“The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments”*, was required to be implemented in the current fiscal year, and did not impact the financial statements.

GASB Statement No. 79, *“Certain External Investment Pools and Pool Participants”*, was required to be implemented in the current fiscal year, except for certain provisions on portfolio quality, custodial credit risk, and shadow pricing, which are effective for periods beginning after December 15, 2015, and did not impact the financial statements.

GASB Statement No. 82, *“Pension Issues an Amendment of GASB Statement No. 67, No. 68, and No. 73”*, changed the measurement of covered payroll reported in required supplementary information, and did not impact the financial statements.

CITY OF IRVINE
DEFINED BENEFIT PENSION PLAN
NOTES TO FINANCIAL STATEMENTS
(CONTINUED)

December 31, 2016

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND PLAN ASSET MATTERS
(CONTINUED):

D. New Accounting Pronouncements:

GASB Pending Accounting Standards

GASB has issued the following statements, which may impact the Plan's financial reporting requirements in the future:

- GASB 73 - "*Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68*", contains provisions that address employer and governmental nonemployer contributing entities for pensions that are not within the scope of GASB 68, effective for periods beginning after June 15, 2016.
- GASB 74 - "*Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*", effective for periods beginning after June 15, 2016.
- GASB 75 - "*Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*", effective for periods beginning after June 15, 2017.
- GASB 79 - "*Certain External Investment Pools and Pool Participants*", contains certain provisions on portfolio quality, custodial credit risk, and shadow pricing, effective for periods beginning after December 15, 2015.
- GASB 81 - "*Irrevocable Split-Interest Agreements*", effective for periods beginning after December 15, 2016.
- GASB 82 - "*Pension Issues*", effective for periods beginning after June 15, 2016, except for certain provisions on selection of assumptions, which are effective in the first reporting period in which the measurement date of the pension liability is on or after June 15, 2017.
- GASB 84 - "*Fiduciary Activities*", effective for periods beginning after December 15, 2018.
- GASB 85 - "*Omnibus 2017*", effective for periods beginning after June 15, 2017.

CITY OF IRVINE
DEFINED BENEFIT PENSION PLAN

NOTES TO FINANCIAL STATEMENTS
(CONTINUED)

December 31, 2016

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND PLAN ASSET MATTERS
(CONTINUED):

E. Use of Estimates:

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires the Trustees to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

2. PLAN DESCRIPTION:

The following description of the City of Irvine, California (City), Defined Benefit Pension Plan (Plan) provides only general information. Participants should refer to the Plan document for a more complete description of the Plan's provisions.

Prior to February 2, 2002, the City provided pension benefits for all of its sworn employees (i.e., police officers) through the Plan. The Plan is a single-employer defined benefit pension plan established by City resolution. The Plan is reported as a pension trust fund in the City's basic financial statements.

On February 2, 2002, the City contracted with California Public Employees' Retirement System (CalPERS) to provide retirement benefits for sworn employees. As part of the implementation process for this new retirement system, each sworn employee received an opportunity to elect to participate in the CalPERS plan or remain in the Plan. Out of 154 employees eligible to participate in the new CalPERS plan, 148 elected to participate and 6 elected to remain in the Plan. The Plan was then closed to new participants.

As of December 31, 2016, employee membership data related to the Plan was as follows:

| | |
|---|------------------|
| Retirees and beneficiaries currently receiving benefits and terminated employees entitled to benefits, but not yet receiving them | 33 |
| Active Plan Participants: | |
| Fully vested | <u>3</u> |
| Total | <u><u>36</u></u> |

CITY OF IRVINE
DEFINED BENEFIT PENSION PLAN
NOTES TO FINANCIAL STATEMENTS
(CONTINUED)

December 31, 2016

2. PLAN DESCRIPTION (CONTINUED):

The Plan provides pension, death, and disability benefits to certain sworn employees of the City. It is subject to the rules and regulations set forth by the State Controller's Office and Sections 7501-7504 of the California Government Code. The Plan provides for 50% vesting upon completion of a probationary period by the participant. Thereafter, participants continue vesting at the rate of 5% per additional year of service and become fully vested upon completion of 10 years of service. The Plan provides monthly benefits at retirement age based upon length of service and amount of compensation. The benefit at retirement ranges from 2 1/2% at age 50 of the single highest year's salary for each year of service under the Plan to a maximum benefit of 3% at age 55.

Participants may elect to retire beginning at age 50 with a minimum of 5 years' credited service. Nondisability retirement prior to age 50 is not permitted under the Plan. Contributions to the Plan are funded by both the City and Plan participants. Effective July 1, 1988, the Plan was amended to provide a maximum 2% annual cost of living adjustment for participants who elect to receive monthly benefits. Participants who terminate after completing probation are entitled to receive their vested benefits.

The Plan is administered in accordance with the provisions of the Plan document adopted on April 1, 1975, and subsequently restated January 1, 1984, July 1, 1996, January 1, 2004, and January 1, 2012. The Plan document was also subsequently amended October 30, 2013 and November 3, 2015. Article 10 of the Plan document provides for Plan termination. It states that the City expects to continue the Plan and the corresponding trust indefinitely, but reserves the right to terminate the Plan at any time without the consent of any participant or beneficiary. If the Plan is fully or partially terminated, all participants shall be fully vested in their accrued benefits as of the date of termination to the extent then funded.

3. CONTRIBUTIONS:

Consistent with the City's funding policy, the City is obligated by the Plan document to make contributions that, together with the assets, will be adequate to finance the Plan's benefits on an actuarial basis. Effective May 15, 2015, employer contributions were changed to a flat amount of \$3,648 per pay period for each participant. This amount increased to \$5,268 per pay period beginning March 31, 2016.

Participant contribution was 9% of pensionable-base compensation. Beginning August 11, 2014, as part of an agreement to cost share in the City's required contribution, participants contributed an additional 3% over a two-year period. The participants' total contribution has increased to 12% of pensionable-base compensation.

CITY OF IRVINE
DEFINED BENEFIT PENSION PLAN

NOTES TO FINANCIAL STATEMENTS
(CONTINUED)

December 31, 2016

3. CONTRIBUTIONS (CONTINUED):

An actuarial valuation is performed annually to determine the actuarial implication of the Plan's funding policy. The actuarial valuation was performed as of January 1, 2016. Based on that valuation, the annual funding requirement rate was determined to be 29.14% of covered payroll.

The costs of the Plan are derived by making certain assumptions as to the rates of investment return and mortality, which are assumed to hold for many years into the future. Since actual experience may differ somewhat from the assumptions, the costs determined by the valuation must be regarded as estimates of the true costs of the Plan.

4. FUNDED STATUS:

The funded status of the Plan as of January 1, 2016, is as follows:

| Actuarial Valuation Date | Actuarial Value of Assets (a) | Actuarial Accrued Liability (AAL) - Entry Age (b) | Unfunded AAL (UAAL) (b-a) | Funded Ratio (a/b) | Covered Payroll (c) | UAAL as a % of Covered Payroll [(b-a)/c] |
|--------------------------------|--|--|------------------------------------|--------------------------|---------------------------|--|
| 1/1/2014 | \$ 19,267,179 | \$ 20,289,365 | \$ 1,022,186 | 95.0% | \$ 305,509 | 334.58% |
| 1/1/2015 | 20,188,450 | 20,354,907 | 166,457 | 99.2% | 326,348 | 51.01% |
| 1/1/2016 | 19,793,197 | 20,131,860 | 338,663 | 98.3% | 333,602 | 101.52% |

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment and mortality. Amounts determined regarding the funded status of the Plan and the annual required contributions of the City are subject to continual revision, as actual results are compared with past expectations and new estimates are made about the future.

Additional information used for funding purposes is as follows:

| | |
|-------------------------|--|
| Valuation Date: | January 1, 2016 |
| Actuarial Cost Method: | Entry age normal |
| Amortization Method: | 10 year, level percentage of projected payroll, open period |
| Asset Valuation Method: | Average of expected actuarial value of assets and market value of assets |

CITY OF IRVINE
DEFINED BENEFIT PENSION PLAN

NOTES TO FINANCIAL STATEMENTS
(CONTINUED)

December 31, 2016

4. FUNDED STATUS (CONTINUED):

Additional Information (Continued):

Actuarial Assumptions:

Investment return/discount rate 5.50% for funding purposes
Paragraph 43 of Statement No. 67 provides for an alternative method to be used other than the projection of the pension plan's fiduciary net position based on projected contributions, benefit payments, and investment earnings. The City's current contribution policy requires the City to contribute the normal cost plus the 10-year open amortization of the unfunded liabilities in the fiscal year following the annual valuation. The unfunded liability as of percent of actuarial asset values as of January 1, 2016, was 1.7%. Based on actuarial theory if the actuarial assumptions are met, the Plan's fiduciary net position will remain positive.

Projected salary increases 5.00%

| | Age | | | |
|---------------------------------|--------|--------|--------|--------|
| | 25 | 40 | 55 | 65 |
| Post-Retirement Mortality Rates | 0.464 | 1.238 | 6.131 | 15.592 |
| Preretirement Mortality Rates | 0.500 | 1.200 | 2.200 | 2.200 |
| Disability Rates | 5.000 | 30.000 | 30.000 | 30.000 |
| Termination Rates | 40.000 | 17.500 | - | - |

Retirement - The expected age of retirement is based off the following table:

| Age | Percent Retiring |
|-----|------------------|
| 50 | 50% |
| 51 | 20% |
| 52 | 20% |
| 53 | 20% |
| 54 | 20% |
| 55 | 100% |

CITY OF IRVINE
DEFINED BENEFIT PENSION PLAN
NOTES TO FINANCIAL STATEMENTS
(CONTINUED)

December 31, 2016

5. NET PENSION LIABILITY:

The following table is an estimate based on information provided to the actuary, which does not include accruals recorded for contributions receivable and investment management fees on the financial statements. The components of the net pension liability at December 31, 2016, were as follows:

| | |
|---|-------------------------|
| Total Pension Liability (5.50%) | \$ 20,303,670 |
| Plan Fiduciary Net Position | <u>(19,192,333)</u> |
| Net Pension Liability | <u>\$ 1,111,337</u> |
| Plan Fiduciary Net Position as a Percentage of Total Pension Liability | 94.53% |

The following presents the net pension liability, calculated using the discount rate of 5.50%, as well as what the net pension liability would be if it were calculated using a discount rate that is one percentage point lower (4.50%) or one percentage point higher (6.50%) than the current rate:

| | <u>1% Decrease (4.50%)</u> | <u>Current Rate (5.50%)</u> | <u>1% Increase (6.50%)</u> |
|-----------------------|------------------------------------|-------------------------------------|------------------------------------|
| Net Pension Liability | \$ 3,361,428 | \$ 1,111,337 | \$ (804,292) |

Additional information used for determination of the total pension liability as of December 31, 2016, is as follows:

| | |
|-------------------------|--|
| Valuation Date: | January 1, 2017 |
| Actuarial Cost Method: | Entry age normal |
| Amortization Method: | 10 year, level percentage of projected payroll, open period |
| Asset Valuation Method: | Average of expected actuarial value of assets and market value of assets |

CITY OF IRVINE
DEFINED BENEFIT PENSION PLAN

NOTES TO FINANCIAL STATEMENTS
(CONTINUED)

December 31, 2016

5. NET PENSION LIABILITY (CONTINUED):

Additional Information (Continued):

Actuarial Assumptions:

Investment return/discount rate 5.50% for funding purposes
Paragraph 43 of Statement No. 67 provides for an alternative method to be used other than the projection of the pension plan's fiduciary net position based on projected contributions, benefit payments, and investment earnings. The City's current contribution policy requires the City to contribute the normal cost plus the 10-year open amortization of the unfunded liabilities in the fiscal year following the annual valuation. The unfunded liability as of percent of actuarial asset values as of January 1, 2017, was 5.4%. Based on actuarial theory if the actuarial assumptions are met, the Plan's fiduciary net position will remain positive.

Projected salary increases 5.00%

| | Age | | | | | |
|-------------------------------|-------|-------|-------|-------|-------|-------|
| | 20 | 25 | 30 | 35 | 40 | 45 |
| Preretirement Mortality Rates | 0.04% | 0.05% | 0.06% | 0.09% | 0.12% | 0.22% |
| Disability Rates | 0.50% | 0.50% | 1.00% | 2.00% | 3.00% | 3.00% |
| Termination Rates | 4.00% | 4.00% | 3.50% | 3.50% | 1.75% | 0.00% |

Retirement - The expected age of retirement is based off the following table:

| Age | Percent Retiring |
|-----|------------------|
| 50 | 50% |
| 51 | 20% |
| 52 | 20% |
| 53 | 20% |
| 54 | 20% |
| 55 | 100% |

CITY OF IRVINE
DEFINED BENEFIT PENSION PLAN

NOTES TO FINANCIAL STATEMENTS
(CONTINUED)

December 31, 2016

6. INVESTMENTS:

The Plan has assets invested in cash equivalent and collective trust funds. The Plan owns units of participation in the fair value of the underlying assets of these funds. Fair values of the Plan's investments are based on quoted prices in an active market. Interest and capital gain income from the funds are automatically reinvested. Included in the investment portfolios of these funds are certain derivative securities in the form of structured notes and asset-backed securities. The exposure of the funds and the Plan's exposure to credit, market, or legal risk are not available.

Investments

As of December 31, 2016, the Plan's assets were invested as follows:

| | <u>Units</u> | <u>Fair Value</u> |
|--|--------------|----------------------|
| Cash Equivalent Fund: | | |
| Wells Fargo Short-Term Investment Fund F | 166,490 | \$ 166,490 |
| Pooled Funds: | | |
| Wells Fargo Core Bond Fund CIT F | 8,102,405 | 12,557,629 |
| Wells Fargo/Blackrock International Equity Index CIT F | 789,132 | 988,798 |
| Wells Fargo/Blackrock Large-Cap Growth Index CIT F | 1,019,476 | 2,249,389 |
| Wells Fargo/Blackrock Large-Cap Value Index CIT F | 1,245,812 | 2,255,465 |
| Wells Fargo/Blackrock Russell 2000 Index CIT F | 378,738 | 813,408 |
| Mutual Funds - Closed-End Funds Equity: | | |
| Vanguard Emerging Markets | 178,311 | 174,622 |
| Total | | <u>\$ 19,205,801</u> |

During 2016, the Plan's investments (including investments bought, sold, and held during the year) appreciated in net value as follows:

| | <u>Net Change in Fair Value</u> |
|--|-------------------------------------|
| Wells Fargo Core Bond Fund CIT F | \$ 354,753 |
| Wells Fargo/Blackrock International Equity Index CIT F | 19,764 |
| Wells Fargo/Blackrock Large-Cap Growth Index CIT F | 162,777 |
| Wells Fargo/Blackrock Large-Cap Value Index CIT F | 373,771 |
| Wells Fargo/Blackrock Russell 2000 Index CIT F | 172,084 |
| Vanguard Emerging Markets | 16,726 |
| Total | <u>\$ 1,099,875</u> |

CITY OF IRVINE
DEFINED BENEFIT PENSION PLAN
NOTES TO FINANCIAL STATEMENTS
(CONTINUED)

December 31, 2016

6. INVESTMENTS (CONTINUED):

Investment Policy

The Board of Trustees (the Board) is responsible for:

- Establishing reasonable investment objectives for the Plan,
- Expressing the Plan's risk tolerance level,
- Allocating assets to be managed in the various Plan portfolios,
- Communicating on a structured, ongoing basis with those responsible for investment results,
- Monitoring and evaluating performance results to assure that objectives are being met and policy guidelines are being followed,
- Reviewing the investment objectives and policy guidelines annually and making revisions as needed,
- Taking appropriate action if objectives are not being met or if policy guidelines are not being followed, and
- Delegating, as appropriate, administrative duties relating to the investment of Plan assets.

The Board may receive recommendations from the Investment Committee on any of these duties.

The Investment Consultant is responsible for:

- Participating with the Board in the periodic review of the statement of investment policy and objectives,
- Preparing periodic performance evaluation reports and, to the extent requested by the Board, participating with the Board in reviews of the manager's investment strategy and the Plan's investment performance, and
- Updating the Board on material changes in the regulatory environment that affects the investment objectives and guidelines.

The Trustees/Custodian for the Plan are responsible for:

- Fulfilling all the fiduciary duties required of a trustee/custodian and other pertinent state and federal laws,
- Receiving all contributions and paying all benefits as directed by the administrative staff designated by the Board, and
- Providing the Board with written statements detailing the assets of the Plan at current market and book values and accounting for all transactions.

CITY OF IRVINE
 DEFINED BENEFIT PENSION PLAN
 NOTES TO FINANCIAL STATEMENTS
 (CONTINUED)

December 31, 2016

6. INVESTMENTS (CONTINUED):

Asset Allocation Policy

The asset allocation policy developed herein is based on an evaluation of the Plan’s ability to assume modest investment risk in light of its financial and benefit-related goals and objectives, the Plan’s liability structure and the few remaining active participants after the implementation of CalPERS pension alternative.

The Plan’s cash flow needs can vary significantly based on the anticipated number of elections for lump-sum payments versus annuity payments, as well as the number and amount of disability benefits being paid. The Board recognizes that it is difficult to currently assess these variables and that each can have significant impact on liabilities that will need to be paid.

The Board, for purposes of range setting this policy, has determined that all Plan assets will be invested in accordance with the following investment guidelines:

| Investment Type | Range | Target |
|---------------------------|--------|--------|
| Fixed Income/GICs | 65-75% | 70% |
| Equity | 25-35% | 30% |
| Domestic Large-Cap Stocks | 9-30% | 19% |
| Domestic Small-Cap Stocks | 2-8% | 4.50% |
| International Stocks | 3-10% | 6.50% |
| Cash* | 0-100% | 0% |

* To accommodate the payment of withdrawals and benefits.

- The target balance of investments is expected, over a market cycle of four to six years, to provide a return in the range of 5-7%.
- The Board believes these guidelines to be appropriate in view of liabilities and the current market/economic environment. While these guidelines are meant to be long term in nature, they will be changed when warranted by further reviews of these conditions.
- The Board acknowledges that guidelines will be further defined as managers or funds are reviewed and/or selected and provided instruction.

CITY OF IRVINE
DEFINED BENEFIT PENSION PLAN
NOTES TO FINANCIAL STATEMENTS
(CONTINUED)

December 31, 2016

6. INVESTMENTS (CONTINUED):

Investment Guidelines

General Constraints

The general constraints to be observed by the Trustees and any manager are as follows:

- Assets of the Plan shall be invested in a manner consistent with the fiduciary standards of Employee Retirement Income Security Act of 1974 and other applicable state and federal laws, and
- Good execution by broker/dealers in terms of price and commission is expected.

Types of Assets

The following types of assets are expressly prohibited:

- Speculative, nonhedging transactions involving stock options, futures, or similar investments
- Commodities
- Letter stock, private placements, or direct placements
- Intrastate stock offerings
- Real estate
- Closed-end investment trusts
- Purchase of securities on margin or lending or borrowing money
- Short sales or substantially similar transactions
- Exotic derivatives that would materially change the duration, leverage, or risk characteristics of the portfolio

Exceptions to these guidelines may be considered for pooled investment vehicles, which have been evaluated and approved by the Board. However, these vehicles should have investment guidelines consistent with the current policy to the extent possible.

Quality Standards

Fixed-Income securities are to be limited to investment-grade, publicly traded bonds. Investment-grade bonds are considered to have a minimum quality rating of Baa3 (Moody's) or BBB- (Standard & Poor's). The average quality of the portfolio must be A or better. Pooled fixed-income investment funds must invest at least 80% of the current market value of the fund in investment-grade securities. Not more than 5% of the market value of the fixed-income investments shall be held in the debt or equity securities of any one issuer, with the exception of the U.S. government and its agencies.

CITY OF IRVINE
DEFINED BENEFIT PENSION PLAN
NOTES TO FINANCIAL STATEMENTS
(CONTINUED)

December 31, 2016

6. INVESTMENTS (CONTINUED):

Investment Guidelines (Continued)

Quality Standards (Continued)

Equity securities shall be limited to publicly traded common and preferred stocks (both U.S. and non-U.S.) and convertible securities. Investments shall be limited to marketable securities. Not more than 15% of the current market value of equity investments shall be invested in convertible securities or securities traded on a foreign securities market. Investments may be made in pooled funds, which follow guidelines that are substantially similar or more conservative than those set forth above.

Securities offered by insurance companies must have a company rating of A or better, as rated by A.M. Best, and a minimum claims-paying ability rating equivalent of A+ from Standard & Poor's, Moody's, or Duff & Phelps.

Performance Measurement, Goals, and Objectives

The Trustees expect the Plan's investments to achieve returns consistent with like investments and have set the following performance objectives:

Total Plan

To exceed over a market cycle (four to six years) the annualized rate of return of:

- Inflation, as measured by the consumer price index,
- The rate of return utilized as the actuarial assumed rate of return, or
- The policy benchmark (Benchmark) composed of 70% of the Barclays Capital U.S. Aggregate Bond Index, 19% of the S&P 500 Index, 4.5% of the Russell 2000 Index, and 6.5% of the Morgan Stanley Capital International All Country World Index ex-U.S.A., which reflects the target asset allocation to fixed income and equities.

The risk level of the total plan should be consistent with the risk of the Benchmark as measured by historical volatility over rolling three- and five-year periods. Manager return and risk performance is expected to be in adherence with the investment philosophy and policy guidelines set forth herein and will be measured against the Benchmark over rolling three- and five-year periods.

CITY OF IRVINE
DEFINED BENEFIT PENSION PLAN
NOTES TO FINANCIAL STATEMENTS
(CONTINUED)

December 31, 2016

6. INVESTMENTS (CONTINUED):

Performance Measurement, Goals, and Objectives (Continued)

Short-Term Investments

Short-term or cash investments are primarily intended to provide conservative, highly marketable securities for the liquidity needs of the Plan, such as disbursements, and future long-term investments. Short-term investments include high-quality debt securities that offer low risk, such as money market funds, U.S. government and agency obligations, commercial paper, certificates of deposit, and repurchase agreements. The investment objective of the short-term investment segment is to seek to produce a return, net of fees that meets or exceeds, over rolling three- and five-year periods, the Citigroup 91-Day U.S. Treasury Bill Index.

Fixed-Income Investments

Fixed-income investments are intended to provide a hedge against deflation and a stable component of return and minimize the overall volatility of the portfolio. Assets in this segment are comprised primarily of bonds (e.g., corporate, government, asset-backed, mortgage-backed) but may also include commercial paper and U.S. government/agency issues, stable value collective funds or open-end investment trusts, insurance company issued guaranteed investment contracts, and the State of California Local Agency Investment Fund. The investment objective of the fixed-income segment is to seek to produce a return, net of fees, that meets or exceeds, over rolling three- and five-year periods, the Barclays Capital U.S. Aggregate Bond Index and the median of an appropriate peer universe of managed funds, while experiencing a similar level of risk over the periods.

Equity Investments

Equity investments are intended to provide long-term capital growth that exceeds inflation. It is recognized that equity investments carry greater market price variability and risk than other asset classes. To assure prudent diversification and to avoid excessive risk, the Plan's equity investments will adhere to the asset allocation parameters set forth in the Asset Allocation section. The investment objective of each equity segment is noted below:

• **Domestic Large-Cap Value**

This asset class invests primarily in companies with market capitalizations in excess of \$5 billion. Securities in this asset class will normally have a below-average price-to-earnings ratio, price-to-book ratio, and earnings growth ratio when compared to a diversified large cap index. The investment objective is to seek to produce a return, net of fees that meets or exceeds, over rolling three- and five-year periods, the Russell 1000 Value Index and the median of an appropriate peer universe of managed funds, while experiencing a similar level of risk over the periods.

CITY OF IRVINE
DEFINED BENEFIT PENSION PLAN
NOTES TO FINANCIAL STATEMENTS
(CONTINUED)

December 31, 2016

6. INVESTMENTS (CONTINUED):

Performance Measurement, Goals, and Objectives (Continued)

Equity Investments (Continued)

• **Domestic Large-Cap Growth**

This asset class invests primarily in companies with market capitalizations in excess of \$5 billion. Securities in this asset class will normally have above-average price-to-earnings ratio, price-to-book ratio, and earnings growth ratio when compared to a diversified large cap index. The investment objective is to seek to produce a return, net of fees that meets or exceeds, over rolling three- and five-year periods, the Russell 1000 Growth Index and the median of an appropriate peer universe of managed funds, while experiencing a similar level of risk over the periods.

• **Domestic Small-Cap Blend**

This asset class invests primarily in companies with market capitalizations of \$1.5 billion or less. Securities in this asset class will normally have an average price-to-earnings ratio, price-to-book ratio, and earnings growth ratio when compared to a diversified small cap index. The investment objective of the small cap blend equity segment is to seek to produce a return, net of fees, that meets or exceeds, over rolling three- and five-year periods, the Russell 2000 Index and the median of an appropriate peer universe of managed funds, while experiencing a similar level of risk over the periods.

• **International Equities**

This asset class invests primarily in companies based outside the United States and will normally diversify assets among numerous developed markets, such as those in Australia, Japan, Great Britain, Italy, France, and Germany. Emerging market exposure, to a lesser extent, is acceptable, such as in India, China, Brazil, Mexico, Russia, and Thailand. The investment objective of the international equity segment is to seek to produce a return, net of fees, that meets or exceeds, over rolling three- and five-year periods, the Morgan Stanley Capital International All Country World Index ex-U.S.A. and the median of an appropriate peer universe of managed funds, while experiencing a similar level of risk over the periods.

CITY OF IRVINE
DEFINED BENEFIT PENSION PLAN
NOTES TO FINANCIAL STATEMENTS
(CONTINUED)

December 31, 2016

6. INVESTMENTS (CONTINUED):

Performance Measurement, Goals, and Objectives (Continued)

Rate of Return

For the year ended December 31, 2016, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 5.91%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

7. FAIR VALUE MEASUREMENTS:

A fair value hierarchy has been established that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy are described as follows:

Level 1: Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Plan has the ability to access.

Level 2: Inputs to the valuation methodology include:

- Quoted prices for similar assets or liabilities in active markets;
- Quoted prices for identical or similar assets or liabilities in inactive markets;
- Inputs other than quoted prices that are observable for the asset or liability; or
- Inputs that are derived principally from or corroborated by observable market data by correlation or other means.

If the asset or liability has a specified (contractual) term, the Level 2 input must be observable for substantially the full term of the asset or liability.

Level 3: Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The asset's or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs.

CITY OF IRVINE
 DEFINED BENEFIT PENSION PLAN
 NOTES TO FINANCIAL STATEMENTS
 (CONTINUED)

December 31, 2016

7. FAIR VALUE MEASUREMENTS (CONTINUED):

The following is a description of the valuation methodologies used for assets measured at fair value. There have been no changes in the methodologies used at December 31, 2016.

Common Stocks, Corporate Bonds, and U.S. Government Securities: Valued at the closing price reported on the active market on which the individual securities are traded.

Mutual Funds: Valued at the daily closing price as reported by the fund. Mutual funds held by the Plan are open-end mutual funds that are registered with the Securities and Exchange Commission. These funds are required to publish their daily net asset value and to transact at that price. The mutual funds held by the Plan are deemed to be actively traded.

The preceding methods may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while the Plan believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

The following table sets forth by level, within the fair value hierarchy, the Plan's assets, measured on a recurring basis, at fair value as of December 31, 2016:

| | <u>Level 1</u> | <u>Level 2</u> | <u>Level 3</u> | <u>Total</u> |
|---|-------------------|----------------|----------------|----------------------|
| Mutual Funds | <u>\$ 174,622</u> | <u>\$ -</u> | <u>\$ -</u> | \$ 174,622 |
| Investments Not Subject to Fair Value Hierarchy: Pooled Funds | | | | <u>18,864,689</u> |
| Total Investments at Fair Value | | | | <u>\$ 19,039,311</u> |

CITY OF IRVINE
DEFINED BENEFIT PENSION PLAN

NOTES TO FINANCIAL STATEMENTS
(CONTINUED)

December 31, 2016

8. TAX STATUS:

The Plan has obtained a determination letter from the Internal Revenue Service dated February 6, 1986, stating that it is qualified under the provisions of the Internal Revenue Code of 1986 (IRC), as amended, and is not subject to federal income taxes. The Plan has been amended since receiving the determination letter; however, the Trustees and Plan administrator believe that the Plan is designed and is currently being operated in compliance with the applicable requirements of the IRC and continues to be tax exempt. Therefore, no provision for income taxes has been included in the Plan's financial statements.

Accounting principles generally accepted in the United States of America require Plan management to evaluate tax positions taken by the Plan and recognize a tax liability if the Plan has taken an uncertain position that more likely than not would not be sustained upon examination by the Internal Revenue Service. The Plan administrator has analyzed the tax positions taken by the Plan, and it has concluded that as of December 31, 2016, there are no uncertain positions taken or expected to be taken that would require recognition of a liability or disclosure in the financial statements. The Plan is subject to routine audits by taxing jurisdictions; however, there are currently no audits for any tax periods in progress.

9. FROZEN PLAN:

The Plan's Board of Trustees adopted a resolution, effective May 15, 2006, freezing benefit accruals to the Plan. As of the effective date, all Plan participants have ceased accruing benefits and no additional participants have been added to the Plan.

10. SUBSEQUENT EVENTS:

Events occurring after December 31, 2016, have been evaluated for possible adjustments to the financial statements or disclosure as of June 16, 2017, which is the date the financial statements were available to be issued.

REQUIRED SUPPLEMENTARY INFORMATION

CITY OF IRVINE
DEFINED BENEFIT PENSION PLAN

SCHEDULE OF CHANGES IN NET PENSION LIABILITY
(DOLLAR AMOUNTS IN THOUSANDS)

LAST THREE YEARS

| | <u>2016</u> | <u>2015</u> | <u>2014</u> |
|---|-----------------|----------------|----------------|
| TOTAL PENSION LIABILITY: | | | |
| Service cost | \$ 81 | \$ 137 | \$ 128 |
| Interest | 1,078 | 1,091 | 1,088 |
| Changes of benefit terms | - | - | - |
| Difference between expected and actual experience | 178 | (280) | (5) |
| Changes of assumptions | - | - | - |
| Benefit payments / refunds | <u>(1,165)</u> | <u>(1,171)</u> | <u>(1,145)</u> |
| Net Change in Total Pension Liability | 172 | (223) | 66 |
| PENSION LIABILITY - BEGINNING | <u>20,132</u> | <u>20,355</u> | <u>20,289</u> |
| TOTAL PENSION LIABILITY - ENDING (a) | <u>20,304</u> | <u>20,132</u> | <u>20,355</u> |
| PLAN FIDUCIARY NET POSITION: | | | |
| Contributions - employer | 92 | 130 | 243 |
| Contributions - employee | 41 | 32 | 20 |
| Net investment income | 1,038 | (6) | 1,301 |
| Benefit payments / refunds | (1,165) | (1,171) | (1,145) |
| Administrative expenses | <u>(17)</u> | <u>(17)</u> | <u>(40)</u> |
| Net Change in Plan Fiduciary Net Pension | (11) | (1,032) | 379 |
| PLAN FIDUCIARY NET PENSION - BEGINNING | <u>19,203</u> | <u>20,235</u> | <u>19,856</u> |
| PLAN FIDUCIARY NET PENSION - ENDING (b) | <u>19,192</u> | <u>19,203</u> | <u>20,235</u> |
| TOTAL PENSION LIABILITY - ENDING (a) - (b) | <u>\$ 1,112</u> | <u>\$ 929</u> | <u>\$ 120</u> |
| Plan Fiduciary Net Position as a Percentage of the Total Pension Liability | 94.5% | 95.4% | 99.4% |
| Covered-Employee Payroll | 351 | 334 | 326 |
| Net Pension Liability as a Percentage of Covered-Employee Payroll | 316.8% | 278.1% | 36.8% |

CITY OF IRVINE
DEFINED BENEFIT PENSION PLAN

SCHEDULE OF CONTRIBUTIONS
(DOLLAR AMOUNTS IN THOUSANDS)

LAST THREE YEARS

| | <u>2016</u> | <u>2015</u> | <u>2014</u> |
|---|---------------|-------------|-------------|
| Annual determined contribution | \$ 88 | \$ 130 | \$ 243 |
| Contributions in relation to the actuarially determined contribution | <u>92</u> | <u>130</u> | <u>243</u> |
| Contribution deficiency (excess) | <u>\$ (4)</u> | <u>\$ -</u> | <u>\$ -</u> |
| Covered-employee payroll | \$ 351 | \$ 334 | \$ 326 |
| Contributions as a percentage of covered-employee payroll | 26.2% | 38.9% | 74.5% |

Additional information used for the annual determined contribution is as follows:

| | |
|-------------------------|---|
| Valuation Date: | January 1, 2016 |
| Actuarial Cost Method: | Entry age normal |
| Amortization Method: | 10 year, level percentage of projected payroll, open period |
| Asset Valuation Method: | Average of expected actuarial value of assets and market value of assets |

| | |
|----------------------------|------|
| Actuarial Assumptions: | |
| Investment return | 5.5% |
| Projected salary increases | 5.0% |

CITY OF IRVINE
DEFINED BENEFIT PENSION PLAN
SCHEDULE OF INVESTMENT RETURNS
LAST THREE YEARS

| | <u>2016</u> | <u>2015</u> | <u>2014</u> |
|--|-------------|-------------|-------------|
| Annual money-weighted rate of return, net of investment expense | 5.91% | 0.37% | 7.16% |

**CITY OF IRVINE, CALIFORNIA
DEFINED CONTRIBUTION PENSION PLAN**

**WITH REPORT ON AUDIT
BY INDEPENDENT
CERTIFIED PUBLIC ACCOUNTANTS**

DECEMBER 31, 2016

ATTACHMENT 2

CITY OF IRVINE
DEFINED CONTRIBUTION PENSION PLAN

TABLE OF CONTENTS

December 31, 2016

| | <u>Page Number</u> |
|--|------------------------|
| Independent Auditors' Report | 1 - 2 |
| Financial Statements: | |
| Statement of Fiduciary Net Position | 3 |
| Statement of Changes in Fiduciary Net Position | 4 |
| Notes to Financial Statements | 5 - 15 |

INDEPENDENT AUDITORS' REPORT

To the Board of Trustees of the
Defined Contribution Pension Plan
City of Irvine, California

Report on Financial Statements

We have audited the accompanying statement of fiduciary net position of the City of Irvine, California, Defined Contribution Pension Plan (the Plan) as of December 31, 2016, and the related statement of changes in fiduciary net position for the year then ended, and the related and notes to the financial statements, which collectively comprise the basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditors consider internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the net position restricted for pension benefits of the City of Irvine, California, Defined Contribution Pension Plan as of December 31, 2016, and the changes in fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matter

Required Supplementary Information

Management has omitted the management's discussion and analysis that auditing standards generally accepted in the United States of America require to be presented to supplement the financial statements. Such missing information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board, who considers it be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, and historical context. Our opinion is not affected by this missing information.

White Nelson Dickel Evans LLP

Irvine, California
June 16, 2017

CITY OF IRVINE
 DEFINED CONTRIBUTION PENSION PLAN
 STATEMENT OF FIDUCIARY NET POSITION

December 31, 2016

ASSETS:

Receivables:

| | |
|--------------------------------------|---------------|
| Employer contributions receivable | \$ 3,731 |
| Participant contributions receivable | 1,964 |
| Notes receivable from participants | <u>51,223</u> |

| | |
|-------------------|---------------|
| Total Receivables | <u>56,918</u> |
|-------------------|---------------|

Investments:

| | |
|--------------------------------|----------------|
| Pooled funds | 4,423,267 |
| Mutual funds - equity | 3,396,363 |
| Mutual funds - corporate bonds | 648,556 |
| Mutual funds - balanced | 201,430 |
| Wells Fargo funds - balanced | <u>758,318</u> |

| | |
|-------------------|------------------|
| Total Investments | <u>9,427,934</u> |
|-------------------|------------------|

| | |
|--------------|------------------|
| TOTAL ASSETS | <u>9,484,852</u> |
|--------------|------------------|

LIABILITIES:

Accrued liabilities:

| | |
|---------------------|--------------|
| Forfeitures payable | 296 |
| Accounts payable | <u>5,970</u> |

| | |
|-------------------|--------------|
| TOTAL LIABILITIES | <u>6,266</u> |
|-------------------|--------------|

| | |
|--|----------------------------|
| NET POSITION RESTRICTED FOR PENSION BENEFITS | <u><u>\$ 9,478,586</u></u> |
|--|----------------------------|

See accompanying notes to financial statements.

CITY OF IRVINE
DEFINED CONTRIBUTION PENSION PLAN

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

For the year ended December 31, 2016

ADDITIONS:

Net Investment Income:

| | |
|---|------------|
| Net appreciation in fair value of investments | \$ 360,327 |
| Dividends | 80,911 |
| | 441,238 |
| Less: Investment expenses | (22,265) |
| | 418,973 |

| | |
|-----------------------|---------|
| Net Investment Income | 418,973 |
|-----------------------|---------|

| | |
|---|-------|
| Interest income on notes receivable from participants | 2,976 |
|---|-------|

Contributions:

| | |
|---------------------------|---------|
| Employer contributions | 130,673 |
| Participant contributions | 50,324 |
| | 180,997 |

| | |
|---------------------|---------|
| Total Contributions | 180,997 |
|---------------------|---------|

| | |
|-----------------|---------|
| TOTAL ADDITIONS | 602,946 |
|-----------------|---------|

DEDUCTIONS:

| | |
|-------------------------|---------|
| Benefits payments | 828,586 |
| Forfeitures to the City | 59 |
| Administrative expenses | 33,673 |
| | 862,318 |

| | |
|------------------|---------|
| TOTAL DEDUCTIONS | 862,318 |
|------------------|---------|

| | |
|----------------------------|-----------|
| NET CHANGE IN NET POSITION | (259,372) |
|----------------------------|-----------|

| | |
|--|-----------|
| NET POSITION RESTRICTED FOR PENSION BENEFITS, BEGINNING OF YEAR | 9,737,958 |
| | 9,737,958 |

| | |
|--|--------------|
| NET POSITION RESTRICTED FOR PENSION BENEFITS, END OF YEAR | \$ 9,478,586 |
| | 9,478,586 |

See accompanying notes to financial statements.

CITY OF IRVINE
DEFINED CONTRIBUTION PENSION PLAN

NOTES TO FINANCIAL STATEMENTS

December 31, 2016

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND PLAN ASSET MATTERS:

A. Basis of Accounting:

The Plan's financial statements are prepared using the accrual basis of accounting. Employer contributions are recognized as revenues in the period in which employee services are performed, and employee contributions are recognized as revenues in the period for which the employee is making the contribution. Benefit payments, administration expenses, and forfeitures are recorded when the corresponding liabilities are included, regardless of when payment is made.

B. Plan Administration:

The City is responsible for the administration of the Plan. The City makes decisions regarding the investment options available to the Plan's participants. All other duties have been delegated to certain City administrative staff or a third-party trustee. City administrative staffs are responsible for authorizing Plan participation, making required Plan contributions, authorizing Plan benefit payments, and maintaining Plan accounting records. The third-party trustee is responsible for monitoring compliance with applicable laws and regulations, maintaining participants' account information, allocating Plan income and expenses to participants' accounts, processing benefit payment requests, determining forfeiture amounts, maintaining loan activity and participant account balances, and providing activity reports to the participants and the City.

C. Investment Valuation and Income Recognition:

The Plan's investments are stated at fair value at December 31, 2016. Fair value is the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. See Note 6 for discussion of fair value measurements for the Plan's mutual funds.

Purchases and sales of investments are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date. Realized gains and/or losses are reported the day after the trade date.

CITY OF IRVINE
DEFINED CONTRIBUTION PENSION PLAN

NOTES TO FINANCIAL STATEMENTS
(CONTINUED)

December 31, 2016

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND PLAN ASSET MATTERS
(CONTINUED):

C. Investment Valuation and Income Recognition (Continued):

Net realized and unrealized appreciation (depreciation) is recorded in the accompanying statement of changes in fiduciary net position in net appreciation in fair value of investments. The calculation of realized gains and losses is independent of the calculation of the net appreciation in the fair value of investments. Realized gains and losses on investments that had been held in more than one reporting period and sold in the current period were included in the net appreciation (depreciation) in fair value reported in the prior period(s) and the current period.

Brokerage fees are added to the acquisition costs of assets purchased and subtracted from the proceeds of assets sold.

D. Tax Status:

The Plan obtained its latest determination letter on November 22, 2013, in which the Internal Revenue Service stated that the Plan, as then designed, was in compliance with the applicable requirements of the Internal Revenue Code. The Plan has been amended since receiving the determination letter. However, the City, Wells Fargo Bank, and the Plan's tax counsel believe that the Plan is currently designed and being operated in compliance with the applicable requirements of the Internal Revenue Code. Therefore, they believe that the Plan was qualified and the related trust was tax-exempt as of December 31, 2016.

E. New Accounting Pronouncements:

GASB Current Year Standards

In 2016, the Plan implemented GASB Statement No. 72, "*Fair Value Measurement and Application*". GASB Statement No. 72 requires the Plan to use valuation techniques that are appropriate under the circumstances and are either a market approach, a cost approach, or income approach. GASB Statement No. 72 establishes a hierarchy of inputs used to measure fair value consisting of three levels. Level 1 inputs are quoted prices in active markets for identical assets or liabilities. Level 2 inputs are inputs, other than quoted prices included within Level 1, which are observable for the asset or liability, either directly or indirectly. Level 3 inputs are unobservable inputs and typically reflect Plan's management's estimates of assumptions that market participants would use in pricing the asset or liability. GASB Statement No. 72 also contains note disclosure requirements regarding the hierarchy of valuation inputs and valuation techniques that are used for the fair value measurements. There was no material impact on the Plan's financial statements as a result of the implementation of GASB Statement No. 72.

CITY OF IRVINE
DEFINED CONTRIBUTION PENSION PLAN

NOTES TO FINANCIAL STATEMENTS
(CONTINUED)

December 31, 2016

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND PLAN ASSET MATTERS
(CONTINUED):

E. New Accounting Pronouncements (Continued):

GASB Current Year Standards (Continued)

GASB Statement No. 73, *“Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68”*, was required to be implemented in the current fiscal year, except for those provisions that address employer and governmental nonemployer contributing entities for pensions that are not within the scope of GASB Statement No. 68, which are effective for periods beginning after June 15, 2016, and did not impact the financial statements.

GASB Statement No. 76, *“The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments”*, was required to be implemented in the current fiscal year, and did not impact the financial statements.

GASB Statement No. 79, *“Certain External Investment Pools and Pool Participants”*, was required to be implemented in the current fiscal year, except for certain provisions on portfolio quality, custodial credit risk, and shadow pricing, which are effective for periods beginning after December 15, 2015, and did not impact the financial statements.

GASB Statement No. 82, *“Pension Issues an Amendment of GASB Statement No. 67, No. 68, and No. 73”*, changed the measurement of covered payroll reported in required supplementary information, and did not impact the financial statements.

GASB Pending Accounting Standards

GASB has issued the following statements, which may impact the Plan’s financial reporting requirements in the future:

- GASB 73 - *“Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68”*, contains provisions that address employer and governmental nonemployer contributing entities for pensions that are not within the scope of GASB 68, effective for periods beginning after June 15, 2016.

CITY OF IRVINE
DEFINED CONTRIBUTION PENSION PLAN

NOTES TO FINANCIAL STATEMENTS
(CONTINUED)

December 31, 2016

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND PLAN ASSET MATTERS
(CONTINUED):

E. New Accounting Pronouncements (Continued):

GASB Pending Accounting Standards (Continued)

- GASB 74 - *“Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans”*, effective for periods beginning after June 15, 2016.
- GASB 75 - *“Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions”*, effective for periods beginning after June 15, 2017.
- GASB 79 - *“Certain External Investment Pools and Pool Participants”*, contains certain provisions on portfolio quality, custodial credit risk, and shadow pricing, effective for periods beginning after December 15, 2015.
- GASB 81 - *“Irrevocable Split-Interest Agreements”*, effective for periods beginning after December 15, 2016.
- GASB 82 - *“Pension Issues”*, effective for periods beginning after June 15, 2016, except for certain provisions on selection of assumptions, which are effective in the first reporting period in which the measurement date of the pension liability is on or after June 15, 2017.
- GASB 84 - *“Fiduciary Activities”*, effective for periods beginning after December 15, 2018.
- GASB 85 - *“Omnibus 2017”*, effective for periods beginning after June 15, 2017.

F. Notes Receivable from Participants:

Notes receivable from participants are measured at their unpaid principal balance plus any accrued but unpaid interest. Related fees are recorded as administrative expenses and are expensed when they are incurred. No allowance for credit losses has been recorded as of December 31, 2016. Delinquent notes receivable are reclassified as distributions based upon terms of the Plan document.

G. Payment of Benefits:

Benefits are recorded when paid.

CITY OF IRVINE
DEFINED CONTRIBUTION PENSION PLAN

NOTES TO FINANCIAL STATEMENTS
(CONTINUED)

December 31, 2016

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND PLAN ASSET MATTERS
(CONTINUED):

H. Accounting Estimates:

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

2. PLAN DESCRIPTION:

The following description of the City of Irvine, California (the City), Defined Contribution Pension Plan (the Plan) provides only general information. Participants should refer to the Plan document for a more complete description of the Plan's provisions.

A. General:

The City provides pension benefits to those full-time general employees (nonsworn), who elected to not participate in the California Public Employees' Retirement System in 2003, through a single-employer defined contribution plan established by City resolution. Such employees are eligible to participate in the Plan from the date of employment. The Plan is closed to new participants. As of December 31, 2016, the Plan had a membership of 53, consisting of 8 active members and 45 terminated members. The Plan is reported as a pension trust fund in the City's basic financial statements. Section II of the Plan document assigns the authority to amend or terminate benefit provisions to the City Council.

B. Contributions:

The City and the participants contributed 12.448% and 6.552%, respectively, of the participant's base compensation to the Plan. Participants direct the investment of the contributions into various investment options offered by the Plan. Contributions are subject to certain limitations.

C. Participant Accounts:

Each participant's account is credited with the participant's contribution and allocated with employer contributions and Plan earnings (losses). The benefit to which a participant is entitled is the benefit that could be provided from the participant's vested account.

CITY OF IRVINE
DEFINED CONTRIBUTION PENSION PLAN

NOTES TO FINANCIAL STATEMENTS
(CONTINUED)

December 31, 2016

2. PLAN DESCRIPTION (CONTINUED):

D. Vesting:

Vesting refers to the nonforfeitable portion of the contributions. A Plan participant has the right to 100% of contributions made on their behalf and related earnings upon their death, permanent and total disability, or upon attainment of the normal retirement age (59 1/2) under the Plan. If employment terminates prior to normal retirement age for reasons other than death or permanent and total disability, the participant will achieve 50% vesting upon successful completion of a six-month probationary period or 55% vesting upon successful completion of a one-year probationary period. Following the probationary period, the participant will retain 5% vesting for each Plan year in which the participant attains 1,000 hours of credited service until the completion of the fifth year when full vesting will occur.

E. Payment of Benefits:

On termination of employment with the City due to death, disability, or retirement after age 59 1/2, a participant may elect to receive either a lump-sum amount equal to the value of the participant's vested interest in his or her account or a series of payments within the participant's lifetime. For terminations of employment due to other reasons, a participant may retain his or her vested interest in the Plan or receive the value of the vested interest in his or her account as a lump-sum distribution.

F. Forfeited Accounts:

At December 31, 2016, forfeited nonvested accounts totaled \$296. These accounts will be used to reduce future City contributions, reinstate closed accounts, and pay for Plan-related expenses (for which the City is responsible) at the discretion of the City. During 2016, \$59 of investment earnings were added to the forfeited nonvested account and \$5,650 was used to pay for Plan-related expenses (for which the City is responsible).

G. Participant Loans:

Participants may borrow up to 50% of his or her vested account balance or \$50,000, whichever is less, with the minimum loan amount of \$1,000. Loan terms provide for up to 5 years to repay general loans and 10 years to repay residential real estate loans, with interest fixed at the prime rate at the time the loan is initiated and a maximum of three concurrent loans outstanding. A loan that is not repaid in accordance with the provisions of the loan agreement will be treated as a default whereby the amount of the loan will be treated as a Plan distribution. Loans must be repaid through payroll deductions. At December 31, 2016, outstanding notes receivable from participants totaled \$51,223.

CITY OF IRVINE
DEFINED CONTRIBUTION PENSION PLAN

NOTES TO FINANCIAL STATEMENTS
(CONTINUED)

December 31, 2016

3. CONCENTRATIONS, RISKS, AND UNCERTAINTIES:

The Plan invests in various investment securities. Investment securities are exposed to various risks, such as interest rate, market, and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect participants' account balances and the amounts reported in the statement of fiduciary net position.

4. PLAN TERMINATION:

The Plan is administered in accordance with the provisions of the Plan document, which provides for Plan termination. It states that the City expects to continue this Plan and the corresponding trust indefinitely, but reserves the right to fully or partially terminate the Plan at any time without the consent of any participant or beneficiary. If this Plan is fully or partially terminated, all participants shall be fully vested in their accrued benefits as of the date of termination to the extent then funded.

5. INVESTMENTS:

Investment Policy

The City sponsors the Plan and acts as a fiduciary to the Plan's investments. The funds will be reviewed at least once a year and all funds in the Plan will be monitored for their adherence to the following investment standards.

Qualitative Analysis - Each fund will be monitored on a consistent basis for adherence to the following qualitative standards:

1. Investment Discipline: Each fund will be monitored for adherence to its stated investment disciplines. If it is judged that a fund is subject to significant style drift, then the fund will be put on a watch list and may eventually be deleted from the Plan.
2. Fund Management: Fund management should remain consistent. A change in one or more key fund managers will require that the fund be put on a watch list to assure that fund characteristics and performance will not significantly change under the new management.

Qualitative Analysis - Each fund will be assigned a letter grade based upon its investment performance as measured against its appropriate market index and peer group average (where applicable) using a weighted average of a one-year, three-year, and five-year performance. If the five-year history is not available, then the three-year and one-year history will be used. If the three-year history is unavailable, then the one-year history is used exclusively, and the fact that short-term relative performance can vary greatly is noted. Under most circumstances, drawing significant conclusion from short-term performance should be avoided.

CITY OF IRVINE
DEFINED CONTRIBUTION PENSION PLAN

NOTES TO FINANCIAL STATEMENTS
(CONTINUED)

December 31, 2016

5. INVESTMENTS (CONTINUED):

Investment Policy (Continued)

Watch List - While it is recognized that a fund may underperform quantitative standards for extended periods of time due to persistent market cycles, funds with a “C” rating will be placed on a watch list. The purpose of the watch list is to identify those funds where relative performance has exhibited a negative trend and/or the qualitative assessment indicates meaningful changes in people, process, or philosophy, changes that may or may not be accompanied by underperformance. The watch list review process attempts to clarify the factors causing underperformance as early as possible to determine whether corrective action is necessary, without becoming overly sensitive to the vagaries of short-term performance. During the review process, the following is assessed:

1. Investment Returns: What contributed to the underperformance? Style definition or execution (stock selection and/or portfolio construction). Does it appear to be a short- or long-term trend?
2. Investment Disciplines: Has there been a change in the process by which the manager implements the style, before or after the underperformance? If changes have occurred, are they significant, consistent with the philosophy, and do they appear reasonable in the light or market conditions?
3. Fund Management: Has there been a change in responsibilities or positions of the key people managing the portfolio and/or issued at the organizational level?

Probation - While it is recognized that a fund may underperform quantitative standards for extended periods of time due to persistent market cycles, funds with a “D” rating will be placed on probation. The purpose of probation is to formally identify those funds where there is sufficient justification to remove them from the Plan if relative performance does not exhibit meaningful improvement and/or issues identified during the review process that are causing the underperformance are not resolved. A fund search for potential replacements is likely to be initiated for funds with a “D” rating.

Fund Replacement - The Investment Committee has sole discretion to replace a fund. In the event a fund is slated for replacement, the Investment Committee will choose a replacement fund after reviewing the organization, investment process, investment objectives, investment style, return performance, and risk characteristics. Once a fund has been selected, the Investment Committee will coordinate the communication efforts to assist with the transition for Plan participants with respect to the new fund introduction.

CITY OF IRVINE
DEFINED CONTRIBUTION PENSION PLAN

NOTES TO FINANCIAL STATEMENTS
(CONTINUED)

December 31, 2016

5. INVESTMENTS (CONTINUED):

Investments

Investments as of December 31, 2016, are as follows:

| | Fair Value |
|--|--------------|
| Pooled Funds: | |
| Wells Fargo Stable Return | \$ 3,789,046 |
| Wells Fargo/Blackrock S&P 500 | 634,221 |
| | 4,423,267 |
| Mutual Funds - Equity: | |
| Columbia Large Disciplined Core Quantitative K | 1,080,599 |
| Columbia Diversified Equity Income K | 278,241 |
| Eagle Mid-Cap Growth Fund | 786,875 |
| MSF Growth Fund | 303,600 |
| Oppenheimer Discovery Fund | 539,939 |
| RBC Small-Cap Core | 65,150 |
| Templeton Foreign Fund | 183,771 |
| William Blair International Growth Fund | 158,188 |
| | 3,396,363 |
| Mutual Funds - Corporate Bonds: | |
| Columbia Total Return Bond K | 215,634 |
| Metropolitan West Total Return | 432,922 |
| | 648,556 |
| Mutual Funds - Balanced: | |
| Columbia Balanced Fund K | 201,430 |
| Wells Fargo Funds Balanced: | |
| Wells Fargo Advanced Dow Jones Target Today #258 | 1,846 |
| Wells Fargo Advanced Dow Jones Target 2010 #259 | 34,984 |
| Wells Fargo Advanced Dow Jones Target 2020 #260 | 120,763 |
| Wells Fargo Advanced Dow Jones Target 2030 #261 | 355,857 |
| Wells Fargo Advanced Dow Jones Target 2040 #262 | 191,623 |
| Wells Fargo Advanced Dow Jones Target 2050 #3717 | 53,245 |
| | 758,318 |
| Total Investments | \$ 9,427,934 |

CITY OF IRVINE
DEFINED CONTRIBUTION PENSION PLAN

NOTES TO FINANCIAL STATEMENTS
(CONTINUED)

December 31, 2016

6. FAIR VALUE MEASUREMENTS:

A fair value hierarchy has been established that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy are described as follows:

Level 1: Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Plan has the ability to access.

Level 2: Inputs to the valuation methodology include:

- Quoted prices for similar assets or liabilities in active markets;
- Quoted prices for identical or similar assets or liabilities in inactive markets;
- Inputs other than quoted prices that are observable for the asset or liability; or
- Inputs that are derived principally from or corroborated by observable market data by correlation or other means.

If the asset or liability has a specified (contractual) term, the Level 2 input must be observable for substantially the full term of the asset or liability.

Level 3: Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The asset's or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs.

The following is a description of the valuation methodology used for assets measured at fair value. There have been no changes in the methodology used as of December 31, 2016.

Mutual Funds: Valued at the daily closing price as reported by the fund. Mutual funds held by the Plan are open-end mutual funds that are registered with the Securities and Exchange Commission. These funds are required to publish their daily net asset value and to transact at that price. The mutual funds held by the Plan are deemed to be actively traded.

The preceding method may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while the Plan believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

CITY OF IRVINE
DEFINED CONTRIBUTION PENSION PLAN

NOTES TO FINANCIAL STATEMENTS
(CONTINUED)

December 31, 2016

6. FAIR VALUE MEASUREMENTS (CONTINUED):

The following table sets forth by level, within the fair value hierarchy, the Plan's assets, measured on a recurring basis, at fair value as of December 31, 2016:

| | <u>Level 1</u> | <u>Level 2</u> | <u>Level 3</u> | <u>Total</u> |
|---|---------------------|----------------|----------------|-------------------------|
| Mutual Funds | <u>\$ 5,004,667</u> | <u>\$ -</u> | <u>\$ -</u> | \$ 5,004,667 |
| Investments Not Subject to Fair Value Hierarchy: Pooled Funds | | | | <u>4,423,267</u> |
| Total Investments at Fair Value | | | | <u>\$ 9,427,934</u> |

7. SUBSEQUENT EVENTS:

Events occurring after December 31, 2016, have been evaluated for possible adjustments to the financial statements or disclosure as of June 16, 2017, which is the date these financial statements were available to be issued.

To the Board of Trustees of the
Defined Contribution Pension Plan
City of Irvine, California

We have audited the financial statements of the City of Irvine's Defined Contribution Pension Plan (the Plan) as of and for the year ended December 31, 2016. Professional standards require that we provide you with information about our responsibilities under generally accepted auditing standards, as well as certain information related to the planned scope and timing of our audit. We have communicated such information in our engagement letter dated May 25, 2016. Professional standards also require that we communicate to you the following information related to our audit.

Significant Audit Findings

Qualitative Aspects of Accounting Practices

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by the Plan are described in Note 1 to the financial statements. As discussed in Note 1E to the financial statements, the Plan implemented Governmental Accounting Standards Board (GASB) Statement No. 72, "*Fair Value Measurement and Application*," in the current year. GASB Statement No. 72 requires the Plan to use valuation techniques, which are appropriate under the circumstances and are either a market approach, a cost approach, or income approach. GASB Statement No. 72 establishes a hierarchy of inputs used to measure fair value consisting of three levels. Level 1 inputs are quoted prices in active markets for identical assets or liabilities. Level 2 inputs are inputs, other than quoted prices included within Level 1, which are observable for the asset or liability, either directly or indirectly. Level 3 inputs are unobservable inputs, and typically reflect management's estimates of assumptions that market participants would use in pricing the asset or liability. GASB Statement No. 72 also contains note disclosure requirements regarding the hierarchy of valuation inputs and valuation techniques that were used for the fair value measurements. There was no material impact on the Plan's financial statements as a result of the implementation of GASB Statement No. 72.

No other accounting policies were adopted and the application of other existing policies was not changed during the year. We noted no transactions entered into by the Plan during the year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected.

Significant Audit Findings (Continued)

Qualitative Aspects of Accounting Practices (Continued)

The most sensitive estimate affecting the Plan's financial statements is as follows:

- a. Management's estimate of the fair value, the price that would be received to sell an asset in an orderly transaction between market participants, of investments is based on market values provided by outside sources.

We evaluated the key factors and assumptions used to develop this estimate in determining that it was reasonable in relation to the financial statements taken as a whole.

Certain financial statement disclosures are particularly sensitive because of their significance to financial statement users. The most sensitive disclosure affecting the financial statements was reported in Note 6 regarding the fair value measurements of the Plan's investments.

The financial statement disclosures are neutral, consistent, and clear.

Difficulties Encountered in Performing the Audit

We encountered no significant difficulties in dealing with management in performing and completing our audit.

Corrected and Uncorrected Misstatements

Professional standards require us to accumulate all known and likely misstatements identified during the audit, other than those that are clearly trivial, and communicate them to the appropriate level of management. Based on the results of our audit procedures, we did not propose any corrections to the financial statements that, in our judgment, had a significant effect on the Plan's financial reporting process.

Management Representations

We have requested certain representations from management that are included in the management representation letter dated June 16, 2017.

Other Audit Findings or Issues

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as the Plan's auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.

Other Matters

Management has omitted the management's discussion and analysis that auditing standards generally accepted in the United States of America require to be presented to supplement the financial statements. Such missing information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board, who considers it be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, and historical context. Our opinion is not affected by this missing information.

Restriction of Use

This information is intended solely for the use of the Board of Trustees and management of the Plan and is not intended to be, and should not be, used by anyone other than these specified parties.

White Nelson Dick Evans LLP

Irvine, California
June 16, 2017

To the Board of Trustees of the
Defined Benefit Pension Plan
City of Irvine, California

We have audited the financial statements of the City of Irvine's Defined Benefit Pension Plan (the Plan) as of and for the year ended December 31, 2016. Professional standards require that we provide you with information about our responsibilities under generally accepted auditing standards, as well as certain information related to the planned scope and timing of our audit. We have communicated such information in our engagement letter dated May 25, 2016. Professional standards also require that we communicate to you the following information related to our audit.

Significant Audit Findings

Qualitative Aspects of Accounting Practices

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by the Plan are described in Note 1 to the financial statements. As discussed in Note 1D to the financial statements, the Plan implemented Governmental Accounting Standards Board (GASB) Statement No. 72, "Fair Value Measurement and Application," in the current year. GASB Statement No. 72 requires the Plan to use valuation techniques, which are appropriate under the circumstances and are either a market approach, a cost approach or income approach. GASB Statement No. 72 establishes a hierarchy of inputs used to measure fair value consisting of three levels. Level 1 inputs are quoted prices in active markets for identical assets or liabilities. Level 2 inputs are inputs, other than quoted prices included within Level 1, which are observable for the asset or liability, either directly or indirectly. Level 3 inputs are unobservable inputs, and typically reflect management's estimates of assumptions that market participants would use in pricing the asset or liability. GASB Statement No. 72 also contains note disclosure requirements regarding the hierarchy of valuation inputs and valuation techniques that were used for the fair value measurements. There was no material impact on the Plan's financial statements as a result of the implementation of GASB Statement No. 72.

No other accounting policies were adopted and the application of other existing policies was not changed during the year. We noted no transactions entered into by the Plan during the year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected.

Significant Audit Findings (Continued)

Qualitative Aspects of Accounting Practices (Continued)

The most sensitive estimates affecting the Plan's financial statements are as follows:

- a. Management's estimate of the fair value, the price that would be received to sell an asset in an orderly transaction between market participants, of investments is based on market values provided by outside sources.
- b. The annual required contributions and net pension liability for the Plan are based on actuarial valuations provided by outside resources.

We evaluated the key factors and assumptions used to develop these estimates in determining that they were reasonable in relation to the financial statements taken as a whole.

Certain financial statement disclosures are particularly sensitive because of their significance to financial statement users. The most sensitive disclosures affecting the financial statements were reported in Note 4 regarding the funded status of the Plan, Note 5 regarding the net pension liability of the Plan, and Note 7 regarding the fair value measurements of the Plan's investments.

The financial statement disclosures are neutral, consistent, and clear.

Difficulties Encountered in Performing the Audit

We encountered no significant difficulties in dealing with management in performing and completing our audit.

Corrected and Uncorrected Misstatements

Professional standards require us to accumulate all known and likely misstatements identified during the audit, other than those that are clearly trivial, and communicate them to the appropriate level of management. Based on the results of our audit procedures, we did not propose any corrections to the financial statements that, in our judgment, had a significant effect on the Plan's financial reporting process.

Management Representations

We have requested certain representations from management that are included in the management representation letter dated June 16, 2017.

Other Audit Findings or Issues

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as the Plan's auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.

Other Matters

Management has omitted the management's discussion and analysis that auditing standards generally accepted in the United States of America require to be presented to supplement the financial statements. Such missing information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board, who considers it be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, and historical context. Our opinion is not affected by this missing information.

We applied certain limited procedures to the schedule of changes in the net pension liability, the schedule of contributions, and the schedule of investment returns related to the Plan, which are required supplementary information (RSI) that supplements the basic financial statements. Our procedures consisted of inquiries of management regarding the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We did not audit the RSI and do not express an opinion or provide any assurance on the RSI.

Restriction of Use

This information is intended solely for the use of the Board of Trustees and management of the Plan and is not intended to be, and should not be, used by anyone other than these specified parties.

White Nelson Dickel Evans LLP

Irvine, California
June 16, 2017



ALAN C. PENNINGTON, F.S.A.
DIRECT LINE: (615) 665-5363
EMAIL: alan.pennington@bpsm.com

March 20, 2017

Ms. Amy Roblyer
Senior Management Analyst – Fiscal Services
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606-5208

Dear Amy:

The attached report summarizes the results of the actuarial valuation as of January 1, 2017. The report sets forth the annual estimated cost for the 2017 plan year.

We trust this report will be helpful in the formulation of policy with respect to the operation and financing of the plan.

The opportunity to serve the City is appreciated, and we will be pleased to supplement this report in any way, as you request.

The actuarial valuation summarized in this report has been performed utilizing generally accepted actuarial principles and is based on actuarial assumptions, each of which we consider to be reasonable taking into account the experience of the plan and which, in combination, represent our best estimate of the anticipated experience of the Plan. It is our opinion that the results fully and fairly disclose the actuarial position of the plan on the valuation date.

Sincerely,

Alan C. Pennington, F.S.A.

Alan C. Pennington, F.S.A.

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City of Irvine Sworn Police Defined Benefit Pension Plan

Actuarial Valuation and Report

January 1, 2017

Table of Contents

| | |
|--|-----------|
| Summary of Report | 1 |
| Yearly Comparison of Selected Plan Information | 2 |
| Basis for Valuation | 3 |
| Summary of Plan Provisions..... | 3 |
| Summary of Actuarial Assumptions..... | 5 |
| Plan Assets | 7 |
| Summary of Operation | 7 |
| Actuarial Computations | 8 |
| Determination of Funding Requirements | 8 |
| Employee Data and Benefits | 9 |
| Participant Data Reconciliation..... | 9 |
| GASB Disclosure | 10 |
| Statement of Fiduciary Net Position..... | 10 |
| Statement of Changes in Fiduciary Net Position..... | 11 |
| Determination of Net Pension Liability | 12 |
| Sensitivity of Net Pension Liability to Discount Rate | 12 |
| Schedule of Changes in Net Pension Liability | 13 |
| Schedule of Contributions..... | 14 |
| Schedule of Investment Returns..... | 14 |
| Schedule of Changes in NPL, Deferrals, & Pension Expense | 15 |
| Pension Expense & Deferred Outflows/Inflows of Resources | 16 |
| Additional Information Regarding GASB Disclosure | 17 |
| Certification of GASB Disclosure | 17 |

Appendix 18

 30 Year Contribution and Asset Projection 18

 Benefit Listing for Inactive Participants 19

 Benefit Listing for Active Participants 20

Summary of Report

An actuarial valuation of the City of Irvine Sworn Police Defined Benefit Pension Plan was performed as of January 1, 2017 to determine the funding level requirement of the plan. Determinations for other purposes, such as judging benefit security upon plan termination, may be significantly different from the results shown in this report. This report provides actuarial advice and does not constitute legal, accounting, tax, or investment advice.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of the assignment, we did not perform an analysis of the potential range of such future measurements.

On the basis of the valuation, it has been determined that the annual funding requirement for the 2017 plan year for the plan as described in the Basis of Valuation section of this report, is as follows:

| | <u>Dollar Amount</u> | <u>% of Payroll</u> |
|---|----------------------|---------------------|
| Employer Recommended Contribution at 4.5% | \$491,291 | 139.90% |
| Employer Recommended Contribution at 5.5% | \$193,170 | 55.01% |
| Employer Recommended Contribution at 6.5% | \$0 | 0.00% |

The following summarizes comparative statistics from the current and previous valuations:

| | Valuation Date | | |
|-----------------------------------|-----------------------|-------------------|-------------------|
| | 01/01/2017 | 01/01/2016 | % Increase |
| Number of Employees | 3 | 3 | 0.00% |
| Total Covered Payroll | \$351,166 | \$333,602 | 5.26% |
| Average Salary | 117,055 | 111,201 | 5.26% |
| Average Age | 50.3 | 49.3 | 2.03% |
| Average Past Service | 21.9 | 20.9 | 4.78% |
| Employer Normal Cost | \$81,280 | \$81,299 | (0.02%) |
| Employer Recommended Contribution | \$193,170 | \$88,274 | 118.83% |

Yearly Comparison of Selected Plan Information

| | Plan Year Beginning | |
|-----------------------------------|----------------------------|-------------------|
| | 01/01/2017 | 01/01/2016 |
| Number of Participants | | |
| Active | 3 | 3 |
| Terminated Vested | 2 | 3 |
| Disabled | 24 | 24 |
| Retired | 7 | 6 |
| Annual Covered Payroll | \$ 351,166 | \$ 333,602 |
| Average Annual Earnings | 117,055 | 111,201 |
| Accrued Liability (AL) | \$ 20,303,670 | \$ 20,131,860 |
| Actuarial Value of Assets (AVA) | 19,209,782 | 19,793,197 |
| Market Asset Value | 19,205,887 | 19,222,937 |
| Unfunded Accrued Liability | 1,093,889 | 338,663 |
| Security Ratio (AVA/AL) | 94.61% | 98.32% |
| Annual Funding Level | | |
| Employer Normal Cost | \$ 81,280 | \$ 81,299 |
| Employer Recommended Contribution | 193,170 | 88,274 |
| Percent of Covered Payroll | 55.01% | 29.14% |
| Employer Contribution (Actual) | N/A | \$ 88,274 |

Basis for Valuation

Summary of Plan Provisions

Basic Benefit

2.5% of highest annual pay times Years of Service

Normal Retirement

Age 50, assuming the Participant has at least 5 Years of Service

Early Retirement

Vesting – After completing the Employer defined probationary period, vesting is based upon the following schedule:

| <u>Years of Service</u> | <u>Vested Percentage</u> |
|-------------------------|--------------------------|
| Less than 1 | 50% |
| 1-2 | 55% |
| 2-3 | 60% |
| 3-4 | 65% |
| 4-5 | 70% |
| 5-6 | 75% |
| 6-7 | 80% |
| 7-8 | 85% |
| 8-9 | 90% |
| 9-10 | 95% |
| 10 or more | 100% |

Benefit – Normal Benefit times the Vesting Percentage and actuarially reduced from age 50

Deferred Benefits

For retirement after the age of 50, the benefit is calculated as the highest annual pay times Years of Service time the percentage below, based on age of retirement.

| <u>Age of Retirement</u> | <u>Percentage</u> |
|--------------------------|-------------------|
| 50 | 2.5% |
| 51 | 2.6% |
| 52 | 2.7% |
| 53 | 2.8% |
| 54 | 2.9% |
| 55 | 3.0% |

Vesting Service

All plan years in which a Participant works at least 1,000 hours count towards Vesting Service

Cost of Living Adjustments

On January 1 of each year, all participants being paid a monthly benefit that are eligible receive a 2% cost of living adjustment (COLA)

No COLA is assumed in the calculation of lump sum payments

Eligibility

Effective February 28, 2002, the Plan shall not accept new participants

Any employee working as a Sworn Police Employee was eligible to enter the Plan

Disability Benefit

Participants may receive a disability benefit prior to their Normal Retirement Age equal to 50% of highest annual pay

Death Benefit

Death Prior to Normal Retirement Age – The Participant’s spouse or beneficiary will receive the actuarial equivalent value of the Participant’s accrued benefit payable at the date the Participant would have reached their Normal Retirement Age

Death After Normal Retirement Age – The Participant’s spouse or beneficiary will receive the actuarial equivalent value of the Participant’s accrued benefit payable the first of the month following the Participant’s death

Employee Contributions

The current report reflects employee contributions of 9%

Normal Forms of Benefit

Unmarried Participant – An annuity payable for the life of the Participant

Married Participant – An annuity payable in the form of an actuarially equivalent annuity payable for the life of the Participant followed by monthly payment of 50% of that prior benefit to the spouse or beneficiary until their death.

Summary of Actuarial Assumptions

Post-Retirement Mortality Rates

1983 Group Annuity Mortality Table - Male

Pre-Retirement Mortality Rates

Experience Based

| Age | Rate |
|-----|-------|
| 20 | 0.04% |
| 25 | 0.05% |
| 30 | 0.06% |
| 35 | 0.09% |
| 40 | 0.12% |
| 45+ | 0.22% |

Mortality Improvements

Most members of this plan are disabled. As such, mortality projections have been considered and deemed inappropriate for the group as a whole.

Disability Rates

| Age | Rate |
|-----|-------|
| 20 | 0.50% |
| 25 | 0.50% |
| 30 | 1.00% |
| 35 | 2.00% |
| 40+ | 3.00% |

Termination Rates

| Age | Rate |
|-----|-------|
| 20 | 4.00% |
| 25 | 4.00% |
| 30 | 3.50% |
| 35 | 3.50% |
| 40 | 1.75% |
| 45+ | 0.00% |

Salary scale

Annual Increase of 5%

Rate of Investment Return / Discount Rate

5.50% for funding purposes

Paragraph 43 of Statement No. 67 provides for an alternative method to be used other than the projection of the pension plan's fiduciary net position based on projected contributions, benefit payments and investment earnings. The City's current contribution policy requires the City to contribute the normal cost plus the 10-year open amortization of the unfunded liabilities in the fiscal year following the annual valuation. The unfunded liability as of percent of actuarial asset values as of January 1, 2017 was 5.4%. Based on actuarial theory if the actuarial assumptions are met, the plan's fiduciary net position will remain positive.

Asset Valuation Method

Average of Expected Actuarial Value of Assets and Market Value of Assets (adopted 1/1/2010 – previously Market Value of Assets)

Actuarial Valuation Method

Entry Age Normal with 10 year amortization of the unfunded liability (adopted 1/1/2010 – previously Aggregate)

Retirement Rates

Experience Based

| <u>Age</u> | <u>Rate</u> |
|------------|-------------|
| 50 | 50% |
| 51 | 20% |
| 52 | 20% |
| 53 | 20% |
| 54 | 20% |
| 55 | 100% |

Plan Assets

Summary of Operation

| | 2016 | 2015 |
|---|---------------|---------------|
| Market Value of Assets, January 1 | \$ 19,222,937 | \$ 20,284,158 |
| Income | | |
| Employer Contributions | \$ 88,274 | \$ 129,900 |
| Employee Contributions | 38,973 | 32,008 |
| Investment Income | 1,105,332 | 70,320 |
| Total Income | \$ 1,232,579 | \$ 232,228 |
| Expenses | | |
| Benefit Payments | 1,165,225 | 1,170,501 |
| Expenses | 84,404 | 122,948 |
| Total Expenses | \$ 1,249,629 | \$ 1,293,449 |
| Market Value of Assets, December 31 | \$ 19,205,887 | \$ 19,222,937 |
| Accrued Contributions | - | - |
| Market Value of Assets, December 31 with Accrued Contributions | \$ 19,205,887 | \$ 19,222,937 |
| Annual Rate of Return | 5.92% | 0.36% |

| | January 1, 2017 |
|---|------------------------|
| Market Value of Assets, January 1, 2017 | \$ 19,205,887 |
| Market Value of Assets, January 1, 2016 | \$ 19,222,937 |
| Transactions | |
| Contributions | 127,247 |
| Benefit Payments | (1,165,225) |
| Expected Income | 1,028,717 |
| Expected Actuarial Value of Assets, January 1, 2017 | \$ 19,213,676 |
| Actuarial Value of Assets, January 1, 2017 (Average of MV and Expected AVA) | \$ 19,209,782 |

Actuarial Computations

Determination of Funding Requirements

| | Rate of Return | | |
|---|-------------------|-------------------|-------------------|
| | 4.5% | 5.5% | 6.5% |
| Accrued Liability | | | |
| Active | \$ 3,926,901 | \$ 3,440,607 | \$ 3,038,523 |
| Terminated Vested | 559,420 | 518,709 | 483,022 |
| Retired and Disabled | <u>18,080,994</u> | <u>16,344,354</u> | <u>14,880,050</u> |
| A) Total Accrued Liability | \$ 22,567,315 | \$ 20,303,670 | \$ 18,401,595 |
| B) Actuarial Value of Assets | <u>19,209,782</u> | <u>19,209,782</u> | <u>19,209,782</u> |
| C) Unfunded Accrued Liability (A - B) | \$ 3,357,534 | \$ 1,093,889 | \$ (808,187) |
| D) Amortization of Unfunded Accrued Liability (10 year amortization) | 406,049 | 137,558 | (105,561) |
| E) Normal Cost | \$ 105,465 | \$ 81,280 | \$ 63,214 |
| F) Total Beginning-of-Year Contribution (D + E, min 0) | \$ 511,514 | \$ 218,838 | \$ 0 |
| G) Interest (assuming contributions spread evenly over the year) | 11,382 | 5,937 | - |
| H) Minimum Required Contribution (F + G) | <u>\$ 522,896</u> | <u>\$ 224,775</u> | <u>\$ -</u> |
| I) Estimated Employee Contributions | <u>31,605</u> | <u>31,605</u> | <u>31,605</u> |
| J) Estimated Required Employer Contributions (H - I) | \$ 491,291 | \$ 193,170 | \$ - |

Employee Data and Benefits

Participant Data Reconciliation

| | Active | Disabled | Deferred Vested | Retired | Total |
|----------------------------------|---------------|-----------------|----------------------------|----------------|--------------|
| January 1, 2016 Valuation | 3 | 24 | 3 | 6 | 36 |
| New Hires | | | | | |
| Nonvested Terminations | | | | | |
| Vested Terminations | | | | | |
| Deceased | | | | | |
| Period Certain Expired | | | | | |
| New Beneficiaries | | | | | |
| Retired | | | (1) | 1 | |
| Disabled | | | | | |
| Rehired | | | | | |
| Data Adjustments | | | | | |
| January 1, 2017 Valuation | 3 | 24 | 2 | 7 | 36 |

*Note – In cases where a QDRO exists, both the member and alternate payee are included in the above counts.

GASB Disclosure

Statement of Fiduciary Net Position

| | <u>December 31, 2016</u> |
|---|----------------------------|
| Assets | |
| Cash Equivalents | <u>\$166,490</u> |
| Total Cash | 166,490 |
| Receivables: | |
| Contributions | 0 |
| Investment Income | 0 |
| Other | <u>86</u> |
| Total Receivables | 86 |
| Investments: | |
| Mutual Funds | 174,622 |
| Pooled, Common and Collective Funds | 18,864,689 |
| Real Estate | 0 |
| Other | <u>0</u> |
| Total Investments: | <u>19,039,311</u> |
| Total Assets | 19,205,887 |
| Liabilities | |
| Payables: | |
| Investment Management Fees | 0 |
| Other | <u>0</u> |
| Total Liabilities | 0 |
| Net Position Restricted for Pensions | <u><u>\$19,205,887</u></u> |

Statement of Changes in Fiduciary Net Position

| | December 31, 2016 |
|---|-------------------|
| Additions | |
| Contributions: | |
| Employer | \$88,274 |
| Employee | 38,973 |
| Total Contributions | 127,247 |
| Investment Income | 1,105,332 |
| Other | 0 |
| Total Additions | 1,232,579 |
| Deductions | |
| Benefit Payments / Refunds | 1,165,225 |
| Administrative Expenses | 84,404 |
| Other | 0 |
| Total Deductions | 1,249,629 |
| Net Increase in Net Position | (17,050) |
| Net Position Restricted for Pensions | |
| Beginning of Year | 19,222,937 |
| End of Year | \$19,205,887 |

Determination of Net Pension Liability

| | December 31, 2016 |
|--|-------------------|
| Total Pension Liability (5.50%) | 20,303,670 |
| Plan Fiduciary Net Position | (19,205,887) |
| Net Pension Liability | \$1,097,783 |
| | |
| Plan Fiduciary Net Position as a Percentage of Total Pension Liability | 94.59% |

Sensitivity of Net Pension Liability to Discount Rate

| | 1% Decrease | Current Rate | 1% Increase |
|-----------------------|-------------|--------------|-------------|
| | (4.50%) | (5.50%) | (6.50%) |
| Net Pension Liability | \$3,361,428 | \$1,097,783 | (\$804,292) |

Schedule of Changes in Net Pension Liability

(dollar amounts in thousands)

| | <u>2014</u> | <u>2015</u> | <u>2016</u> | <u>2017</u> | <u>2018</u> | <u>2019</u> | <u>2020</u> | <u>2021</u> | <u>2022</u> | <u>2023</u> |
|---|-----------------|------------------|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Total Pension Liability | | | | | | | | | | |
| Service cost | \$128 | \$137 | \$81 | | | | | | | |
| Interest | \$1,088 | \$1,091 | \$1,078 | | | | | | | |
| Changes of benefit terms | \$0 | \$0 | \$0 | | | | | | | |
| Differences between expected and actual experience | (\$5) | (\$280) | \$178 | | | | | | | |
| Changes of assumptions | \$0 | \$0 | \$0 | | | | | | | |
| Benefit Payments / Refunds | (\$1,145) | (\$1,171) | (\$1,165) | | | | | | | |
| Net Change in Total Pension Liability | \$66 | (\$223) | \$172 | | | | | | | |
| Total Pension Liability - beginning | \$20,289 | \$20,355 | \$20,132 | | | | | | | |
| Total Pension Liability - ending (a) | \$20,355 | \$20,132 | \$20,304 | | | | | | | |
| Plan Fiduciary Net Position | | | | | | | | | | |
| Contributions - employer | \$243 | \$130 | \$88 | | | | | | | |
| Contributions - employee | \$20 | \$32 | \$39 | | | | | | | |
| Net investment income | \$1,391 | \$71 | \$1,105 | | | | | | | |
| Benefit Payments / Refunds | (\$1,145) | (\$1,171) | (\$1,165) | | | | | | | |
| Administrative expenses | (\$129) | (\$123) | (\$84) | | | | | | | |
| Other | \$0 | \$0 | \$0 | | | | | | | |
| Net Change in Plan Fiduciary Net Position | \$380 | (\$1,061) | (\$17) | | | | | | | |
| Plan Fiduciary Net Position - beginning | \$19,904 | \$20,284 | \$19,223 | | | | | | | |
| Plan Fiduciary Net Position - ending (b) | \$20,284 | \$19,223 | \$19,206 | | | | | | | |
| Net Pension Liability - ending (a) - (b) | \$71 | \$909 | \$1,098 | | | | | | | |
| Plan Fiduciary Net Position as a % of the Total Pension Liability | 99.7% | 95.5% | 94.6% | | | | | | | |
| Covered-employee payroll | \$326 | \$334 | \$351 | | | | | | | |
| Net Pension Liability as a % of covered-employee payroll | 22% | 272% | 313% | | | | | | | |

Schedule of Contributions

(dollar amounts in thousands)

| | fiscal year ending December 31 | | | | | | | | | |
|--|--------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | <u>2014</u> | <u>2015</u> | <u>2016</u> | <u>2017</u> | <u>2018</u> | <u>2019</u> | <u>2020</u> | <u>2021</u> | <u>2022</u> | <u>2023</u> |
| Actuarially determined contribution | \$243 | \$130 | \$88 | | | | | | | |
| Contributions in relation to the actuarially determined contribution | 243 | 130 | 88 | | | | | | | |
| Contribution deficiency (excess) | <u>\$0</u> | <u>\$0</u> | <u>\$0</u> | | | | | | | |
| | | | | | | | | | | |
| Covered-employee payroll | \$326 | \$334 | \$351 | | | | | | | |
| Contributions as a percentage of covered-employee payroll | 74% | 39% | 25% | | | | | | | |

Schedule of Investment Returns

| | fiscal year ending December 31 | | | | | | | | | |
|---|--------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | <u>2014</u> | <u>2015</u> | <u>2016</u> | <u>2017</u> | <u>2018</u> | <u>2019</u> | <u>2020</u> | <u>2021</u> | <u>2022</u> | <u>2023</u> |
| Annual money-weighted rate of return, net of investment expense | 7.16% | 0.37% | 5.91% | | | | | | | |

Schedule of Changes in NPL, Deferrals, & Pension Expense

| | Increase (Decrease) | | | Deferred Pension Outflows of Resources | Deferred Pension Inflows of Resources | Pension Expense |
|--|-----------------------------------|-----------------------------|---------------------------------------|---|--|--------------------|
| | Total Pension Liability (a) | Plan Net Position (b) | Net Pension Liability (a) - (b) | | | |
| Balances--at 12/31/15 | <u>\$ 20,131,860</u> | <u>\$ 19,222,937</u> | <u>\$ 908,923</u> | <u>\$ 911,281</u> | <u>\$ 192,237</u> | |
| Changes for the Year: | | | | | | |
| Service cost | 81,299 | | 81,299 | | | 81,299 |
| Interest expense | 1,077,444 | | 1,077,444 | | | 1,077,444 |
| Benefit changes | | | | | | |
| Experience losses (gains) | 178,292 | | 178,292 | - | - | 178,292 |
| Changes of assumptions | - | | - | - | - | - |
| Contributions--Employer | | 88,274 | (88,274) | | | |
| Contributions--Members | | 38,973 | (38,973) | | | (38,973) |
| Net investment income | | 1,105,332 | (1,105,332) | | | |
| Expected return on plan investments | | | | | | (1,028,717) |
| Current expense of asset gain/loss | | | | | | 124,112 |
| Non expensed asset gain/loss | | | | - | 61,292 | |
| Refunds of contributions | - | - | - | | | |
| Benefits paid | (1,165,225) | (1,165,225) | - | | | |
| Plan administrative expenses | | (84,404) | 84,404 | | | 84,404 |
| Recognition of Prior Post-measurement Contribution | | | | (97,223) | | |
| Post-measurement Contribution | | | | 193,170 | | |
| Other changes | | - | - | | | |
| Amortization of or change in beginning balances | | | | (203,514) | (64,079) | |
| Net Changes | <u>171,810</u> | <u>(17,050)</u> | <u>188,860</u> | <u>(107,567)</u> | <u>(2,787)</u> | <u>477,861</u> |
| Balances--at 12/31/16 | <u>\$ 20,303,670</u> | <u>\$ 19,205,887</u> | <u>\$ 1,097,783</u> | <u>\$ 803,713</u> | <u>\$ 189,450</u> | <u>\$ 477,861</u> |

Pension Expense & Deferred Outflows/Inflows of Resources

For the year ended December 31, 2016, the recognized pension expense is \$477,861. At December 31, 2016, the City of Irvine Sworn Police Defined Benefit Pension Plan reported deferred outflows of resources and deferred inflows of resources in relation to pensions from the following sources:

| | <u>As of December 31, 2015</u> | | Recognized in <u>Pension Expense</u> | <u>As of December 31, 2016</u> | | |
|--|---|--|---|---|--|------------------------------------|
| | <u>Deferred Outflows of Resources</u> | <u>Deferred Inflows of Resources</u> | | <u>Deferred Outflows of Resources</u> | <u>Deferred Inflows of Resources</u> | <u>Remaining Amort. Period</u> |
| Experience losses (gains) | | | | | | |
| - 12/31/2016 | 178,292 | - | 178,292 | - | - | 0.000 years |
| subtotal | 178,292 | - | 178,292 | - | - | |
| Net difference between projected and actual earnings on investments | | | | | | |
| - 12/31/2014 | - | 192,237 | (64,079) | - | 128,158 | 2.000 years |
| - 12/31/2015 | 814,058 | - | 203,514 | 610,543 | - | 3.000 years |
| - 12/31/2016 | - | 76,615 | (15,323) | - | 61,292 | 4.000 years |
| subtotal | 814,058 | 268,852 | 124,112 | 610,543 | 189,450 | |
| Total | <u>\$ 992,350</u> | <u>\$ 268,852</u> | <u>\$ 302,404</u> | <u>\$ 610,543</u> | <u>\$ 189,450</u> | |

Actual investment earnings above (or below) projected earnings are amortized over 5 years. Plan experience and changes of assumptions are amortized over the average remaining service period of actives and inactive (0 years of future service is assumed for inactive for this calculation).

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

| Year ended December 31: | |
|--------------------------------|----------|
| 2017 | 124,112 |
| 2018 | 124,112 |
| 2019 | 188,191 |
| 2020 | (15,323) |
| 2021 | - |
| Thereafter | - |

In addition, Governmental Accounting Standards Board Statement 71 ("GASB 71") requires contributions between the measurement date (January 1, 2017) and the disclosure date (December 31, 2017) for GASB 68 be reported as a deferred outflow of resources.

Additional Information Regarding GASB Disclosure

1. Assumptions for GASB are the same as those for funding (please see Summary of Actuarial Assumptions above).
2. The City continues to pursue a conservative policy regarding contributions to ensure that all benefits are properly funded.
3. Amortization of unfunded accrued liability was over a 10 year amortization for the January 1, 2017 valuation.

Certification of GASB Disclosure

Actuarial computations under Statements 25, 27, 67, and 68 are for purposes of fulfilling employer governmental accounting requirements. The calculations reported herein have been made on a basis consistent with our understanding of the statements. The undersigned is an actuary at BPS&M with professional actuarial credentials, and has met the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions herein.

Bryan, Pendleton, Swats & McAllister, LLC

By: Alan C. Pennington, F.S.A. Date: March 20, 2017
Alan C. Pennington, F.S.A.

Appendix

30 Year Contribution and Asset Projection

| Plan Year | Projected Benefit Payments | 4.5% Return | | 5.5% Return | | 6.5% Return | |
|-----------|----------------------------|-------------------------|------------------|-------------------------|------------------|-------------------------|------------------|
| | | Projected Contributions | Projected Assets | Projected Contributions | Projected Assets | Projected Contributions | Projected Assets |
| 2017 | 1,342,724 | 224,776 | 19,205,887 | 224,776 | 19,205,887 | 224,776 | 19,205,887 |
| 2018 | 1,366,926 | 210,794 | 18,927,326 | 198,743 | 19,113,930 | 186,690 | 19,300,560 |
| 2019 | 1,386,159 | 227,325 | 18,597,197 | 190,701 | 18,965,318 | 153,838 | 19,337,106 |
| 2020 | 1,402,020 | 244,444 | 18,249,451 | 183,663 | 18,780,517 | 121,938 | 19,322,277 |
| 2021 | 1,414,158 | 261,883 | 17,887,341 | 177,396 | 18,562,032 | 90,827 | 19,257,196 |
| 2022 | 1,477,276 | 270,460 | 17,514,356 | 162,734 | 18,312,626 | 51,402 | 19,143,251 |
| 2023 | 1,485,126 | 270,520 | 17,068,831 | 140,059 | 17,969,612 | 4,129 | 18,916,077 |
| 2024 | 1,488,370 | 287,110 | 16,595,296 | 134,477 | 17,576,381 | - | 18,617,251 |
| 2025 | 1,486,935 | 304,060 | 16,114,093 | 129,862 | 17,152,454 | - | 18,291,391 |
| 2026 | 1,480,771 | 321,356 | 15,630,031 | 126,216 | 16,701,947 | - | 17,945,833 |
| 2027 | 1,485,282 | 188,925 | 15,148,167 | - | 16,229,247 | - | 17,584,174 |
| 2028 | 1,465,944 | 199,611 | 14,504,631 | - | 15,596,275 | - | 17,194,351 |
| 2029 | 1,442,533 | 197,358 | 13,862,827 | - | 14,948,352 | - | 16,799,146 |
| 2030 | 1,415,105 | 194,543 | 13,213,771 | - | 14,288,840 | - | 16,402,414 |
| 2031 | 1,383,796 | 191,257 | 12,560,668 | - | 13,621,226 | - | 16,008,198 |
| 2032 | 1,348,809 | 187,504 | 11,906,823 | - | 12,949,053 | - | 15,620,670 |
| 2033 | 1,310,409 | 181,576 | 11,255,483 | - | 12,275,846 | - | 15,244,059 |
| 2034 | 1,268,913 | 175,150 | 10,608,028 | - | 11,605,055 | - | 14,882,596 |
| 2035 | 1,224,675 | 168,313 | 9,967,288 | - | 10,939,993 | - | 14,540,462 |
| 2036 | 1,178,068 | 160,935 | 9,335,947 | - | 10,283,790 | - | 14,221,742 |
| 2037 | 1,129,472 | 153,347 | 8,716,298 | - | 9,639,367 | - | 13,930,403 |
| 2038 | 1,079,257 | 145,133 | 8,110,685 | - | 9,009,416 | - | 13,670,277 |
| 2039 | 1,027,796 | 136,929 | 7,520,756 | - | 8,396,394 | - | 13,445,064 |
| 2040 | 975,472 | 128,811 | 6,948,499 | - | 7,802,513 | - | 13,258,320 |
| 2041 | 922,606 | 120,806 | 6,395,680 | - | 7,229,713 | - | 13,113,434 |
| 2042 | 869,485 | 112,944 | 5,863,844 | - | 6,679,709 | - | 13,013,689 |
| 2043 | 816,399 | 105,252 | 5,354,341 | - | 6,154,018 | - | 12,962,281 |
| 2044 | 763,615 | 97,755 | 4,868,315 | - | 5,653,939 | - | 12,962,314 |
| 2045 | 711,403 | 90,476 | 4,406,711 | - | 5,180,572 | - | 13,016,822 |
| 2046 | 660,010 | 83,438 | 3,970,269 | - | 4,734,798 | - | 13,128,756 |
| 2047 | 609,647 | 76,658 | 3,559,529 | - | 4,317,294 | - | 13,301,002 |

Benefit Listing for Inactive Participants

| Participant | Monthly Benefit | Annual Annuity Purchased | COLA Eligible? | Benefit Form | J&S % | Current Age | Spouse Age |
|-------------|-----------------|--------------------------|----------------|-----------------------|-------|-------------|------------|
| DefVested 1 | 143.05 | | Y | Life Annuity | | 49.29 | |
| DefVested 2 | 4,079.58 | | Y | Life Annuity | | 69.82 | |
| Retiree 1 | 751.55 | | N | Life Annuity | | 65.99 | |
| Retiree 2 | 3,710.37 | | Y | Life Annuity | | 55.40 | |
| Retiree 3 | 367.24 | 9,646.92 | Y | Life Annuity | | 69.03 | |
| Retiree 4 | 958.53 | 25,179.96 | Y | Life Annuity | | 70.47 | |
| Retiree 5 | 5,566.35 | | Y | Joint & Survivor | 50% | 64.69 | 61.47 |
| Retiree 6 | 865.31 | | N | Life Annuity | | 61.47 | |
| Retiree 7 | 7,378.22 | | Y | Joint & Survivor | 50% | 72.92 | 66.70 |
| Retiree 8 | 3,382.61 | | Y | Life Annuity | | 52.84 | |
| Retiree 9 | 4,764.70 | | Y | Life Annuity | | 61.85 | |
| Retiree 10 | 804.54 | | Y | 5 Year Certain & Life | | 51.02 | |
| Retiree 11 | 1,303.12 | | N | Life Annuity | | 56.05 | |
| Retiree 12 | 3,429.20 | | Y | Life Annuity | | 57.71 | |
| Retiree 13 | 3,871.47 | | Y | Life Annuity | | 50.90 | |
| Retiree 14 | 3,672.83 | | Y | Life Annuity | | 68.21 | |
| Retiree 15 | 3,501.46 | | Y | Life Annuity | | 69.28 | |
| Retiree 16 | 7,037.03 | | Y | Life Annuity | | 71.05 | |
| Retiree 17 | 3,250.79 | | Y | Life Annuity | | 41.08 | |
| Retiree 18 | 3,897.61 | | Y | Life Annuity | | 53.38 | |
| Retiree 19 | 3,031.78 | | Y | Life Annuity | | 55.33 | |
| Retiree 20 | 3,465.12 | | Y | Life Annuity | | 61.74 | |
| Retiree 21 | 1,181.43 | 29,174.16 | Y | Joint & Survivor | 100% | 72.79 | 71.25 |
| Retiree 22 | 3,451.79 | | Y | Life Annuity | | 64.95 | |
| Retiree 23 | 2,872.03 | 75,445.56 | Y | Joint & Survivor | 50% | 74.33 | 72.63 |
| Retiree 24 | 4,466.13 | | Y | Life Annuity | | 67.81 | |
| Retiree 25 | 4,491.88 | | Y | Life Annuity | | 48.68 | |
| Retiree 26 | 1,308.53 | 34,374.00 | Y | Life Annuity | | 74.96 | |
| Retiree 27 | 3,791.94 | | Y | Life Annuity | | 54.96 | |
| Retiree 28 | 5,205.05 | | Y | Joint & Survivor | 50% | 63.87 | 64.76 |
| Retiree 29 | 3,354.20 | | Y | Life Annuity | | 56.57 | |
| Retiree 30 | 3,553.68 | | Y | Life Annuity | | 61.52 | |
| Retiree 31 | 1,137.06 | | N | Life Annuity | | 69.60 | |

Benefit Listing for Active Participants

| Participant | Current Age | Normal Retirement Date | Accrued Monthly Benefit | Present Value under Valuation Assumptions * | Present Value under Lump Sum Assumptions ** |
|--------------------|--------------------|-------------------------------|--------------------------------|--|--|
| Active 1 | 50.22 | 01/01/2017 | 6,865.63 | 1,455,626 | 913,236 |
| Active 2 | 45.05 | 01/01/2022 | 4,936.93 | 789,649 | 448,784 |
| Active 3 | 55.51 | 01/01/2017 | 4,855.83 | 907,646 | 598,354 |
| | | | | 3,152,921 | 1,960,374 |

* The “Present Value under Valuation Assumptions” does not include potential death and disability benefits and was calculated using the following assumptions:

- 1) Mortality Table: 1983 Group Annuity Mortality Table – Male
- 2) Interest Rate: 5.5%
- 3) Includes 2% COLA for eligible participants

** The “Present Value under Lump Sum Assumptions” does not include potential death and disability benefits and was calculated using the following assumptions:

- 1) Mortality Table: UP-1984 Mortality Table
- 2) Interest Rate: 7.5%
- 3) Does not include a 2% COLA

2.4



REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: AUGUST 8, 2017

TITLE: AMENDMENT FOR LEGAL ENTITY NAME CHANGE TO THE
OUTSOURCED INFORMATION TECHNOLOGY SERVICES CONTRACT



Director of Administrative Services



City Manager

RECOMMENDED ACTIONS

Approve the First Amendment to the Outsourced Information Technology Services contract changing the legal entity to Enterprise Services, LLC from HP Enterprise Services, LLC.

EXECUTIVE SUMMARY

On September 27, 2016, the City Council awarded a contract for IT services to Hewlett Packard Enterprise Services, LLC (HPE). Subsequently, HPE separated its Enterprise Services business and merged it with Computer Sciences Corporation under the new DXC Technology parent company. Amendment Number 1 is needed to update the City's contract to reflect the new legal entity name, Enterprise Services, LLC (ES). All of the terms, conditions and provisions of the original agreement are unchanged and remain in full force and effect. The attached amendment is unrelated to the consultants' performance issues being addressed separately.

COMMISSION/BOARD/COMMITTEE RECOMMENDATION

Not applicable.

ANALYSIS

On September 28, 2016, the City of Irvine executed a contract for IT services with HPE for a three-year term, for a total value of not-to-exceed \$13,291,834. On April 3, 2017, HPE announced separating its Enterprise Services business and merging it with Computer Sciences Corporation under the new DXC Technology parent company. Amendment Number 1 (Attachment) reflects the name change to Enterprise Services, LLC. All other terms and conditions of the original agreement remain in full force and effect.

ALTERNATIVES CONSIDERED

The City Council could decline to approve Amendment 1, however this is not recommended as the name of the legal entity has changed.

FINANCIAL IMPACT

There is no financial impact to this action since the amendment is solely a legal entity name change and no other changes to the terms or conditions of the original contract are being amended

REPORT PREPARED BY Khaled Tawfik, Chief Information Officer
 Amy Roblyer, Senior Management Analyst

ATTACHMENT Amendment Number 1

**AMENDMENT NUMBER 1
TO “AGREEMENT FOR CONTRACT SERVICES”**

THIS AMENDMENT NUMBER 1 TO AGREEMENT FOR CONTRACT SERVICES (the “First Amendment”) is made and entered into as of _____, 2017 by and between the City of Irvine, a municipal corporation (“City”) and Enterprise Services LLC, a limited liability company (“Contractor”), for the purpose of amending the written “Agreement for Contract Services” entered into between City and Contractor as of September 28, 2016, City of Irvine contract number 9562 (the “Agreement”).

1. Contractor’s legal entity is changed from “HP Enterprise Services, LLC” to “Enterprise Services LLC” in accordance with EXHIBIT I, attached hereto.
2. Except as set forth in this First Amendment, all terms, conditions and provisions of the Agreement are unchanged and remain in full force and effect.

(Signatures follow on next page)

IN WITNESS WHEREOF, the parties hereto have caused this First Amendment to the Agreement to be executed by their respective duly authorized agents as of the date first set forth above.

CITY OF IRVINE

ENTERPRISE SERVICES LLC

By: _____
Kristin Griffith
Its: Director of Administrative Services

By: _____
Its: Member

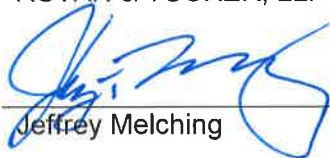
By: _____
Sean Joyce
Its: City Manager

By: _____
Donald P. Wagner
Its: Mayor

Attest:

By: _____
Molly McLaughlin
City Clerk

APPROVED AS TO FORM:
RUTAN & TUCKER, LLP



Jeffrey Melching

Delaware

Page 1

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF AMENDMENT OF "HP ENTERPRISE SERVICES, LLC", CHANGING ITS NAME FROM "HP ENTERPRISE SERVICES, LLC" TO "ENTERPRISE SERVICES LLC", FILED IN THIS OFFICE ON THE TWENTY-FIRST DAY OF DECEMBER, A.D. 2016, AT 7:05 O`CLOCK P.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE EFFECTIVE DATE OF THE AFORESAID CERTIFICATE OF AMENDMENT IS THE FIRST DAY OF JANUARY, A.D. 2017.



2387022 8100
SR# 20167210289

You may verify this certificate online at corp.delaware.gov/authver.shtml



Jeffrey W. Bullock, Secretary of State

Authentication: 203593272
Date: 12-28-16

State of Delaware
Secretary of State
Division of Corporations
Delivered 07:05 PM 12/21/2016
FILED 07:05 PM 12/21/2016
SR 20167210289 - File Number 2387022

**CERTIFICATE OF AMENDMENT
TO THE
CERTIFICATE OF FORMATION
OF
HP ENTERPRISE SERVICE, LLC**

HP Enterprise Services, LLC, a Delaware limited liability company (the "Limited Liability Company"), does hereby certify as follows:

FIRST: The Certificate of Formation of the Limited Liability Company is hereby amended as follows:

The name of the Limited Liability Company is Enterprise Services LLC.

SECOND: The foregoing amendment was duly adopted in accordance with Section 18-202 of the Delaware Limited Liability Company Act.

THIRD: The effective date will be January 1, 2017.

IN WITNESS WHEREOF, the undersigned has executed this Certificate of Amendment on December 19, 2016.

HP ENTERPRISE SERVICES, LLC

By: *Rishi Varma*
Rishi Varma, Secretary

2.5



REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: AUGUST 8, 2017

TITLE: ASSIGNMENT AND ASSUMPTION OF FIVE POINT OFFICE VENTURE I LLC TO BE A PARTY TO THE APPROVED AMENDED AND RESTATED DEVELOPMENT AGREEMENT (00470035-PDA)

Director of Community Development

City Manager

RECOMMENDED ACTION

Adopt – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE CALIFORNIA APPROVING THE ASSIGNMENT AND ASSUMPTION OF CERTAIN OBLIGATIONS UNDER THE APPROVED AMENDED AND RESTATED DEVELOPMENT AGREEMENT (00470035-PDA) BY AND BETWEEN THE CITY OF IRVINE, CITY OF IRVINE AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY AND O.C. PROPERTY COMPANY LLC TO FIVE POINT OFFICE VENTURE I LLC FOR THE GREAT PARK NEIGHBORHOODS DEVELOPMENT DISTRICT 3 CORPORATE CAMPUS PROJECT LOCATED IN PLANNING AREA 51

EXECUTIVE SUMMARY

On September 8, 2009, the City Council approved an Amended and Restated Development Agreement (“ARDA”) (Attachment 1) between the City of Irvine, City of Irvine as Successor Agency to the Dissolved Irvine Redevelopment Agency and Heritage Fields El Toro LLC, (“Heritage Fields”). The ARDA is a statutory development agreement which, among other things, vests the entitlement approvals for the Heritage Fields/Great Park Neighborhoods development located within Planning Area 51.

Under the ARDA, the developer may assign its rights and obligations to a buyer of all or a portion of the developable land in Planning Area 51, so long as it obtains the City’s and Successor Agency’s consent prior to any such assignments. The City and Successor Agency approved such an assignment in 2015, when Heritage Fields sold a portion of its land to O.C. Property Company LLC (a Broadcom affiliate) in connection with the contemplated development of a corporate campus along Marine Way just outside the boundaries of the Orange County Great Park (“Broadcom Campus”).

O.C. Property Company recently notified the City that it is under contract to re-sell the Broadcom Campus to a Five Point Communities affiliate -- Five Point Office Venture I LLC. As part of the transaction, Broadcom will lease back from Five Point Office

Venture I, LLC two of the four buildings under construction. City and Successor Agency approval of a Partial Assignment and Assumption of a Development Agreement and Site Specific Approvals is required. The partial assignment will allow (and oblige) Five Point Office Venture to perform under the ARDA and associated site specific approvals.

COMMISSION/ADVISORY BOARD RECOMMENDATION

Not applicable.

ANALYSIS

On June 9, 2017, City staff received a proposed Partial Assignment and Assumption of the Development Agreement and Site Specific Approvals for the Broadcom Campus.

The following summary outlines the entities involved and the sequence of events leading up to this assignment request:

- The ARDA originally executed between Heritage Fields, the City of Irvine and the Irvine Redevelopment Agency was approved by City Council on September 8, 2009.
- In July 2014, the Planning Commission approved Vesting Tentative Parcel Map 2014-211 (00604519-PTP) and a Master Plan (00604018-PMP), which allows for the development of the Broadcom Campus.
- In March 2015, Heritage Fields and O.C. Property Company LLC entered into a Partial Assignment and Assumption of a Development Agreement and Site Specific Approvals to facilitate O.C. Property Company's purchase of the Broadcom Campus from Heritage Fields.
- Recently, O.C. Property Company LLC and Five Point Office Venture I, LLC have agreed to a transaction whereby O.C. Property Company LLC will re-sell the Broadcom Campus and transfer the rights and obligations under the ARDA to Five Point Office Venture I, LLC. Similar to the March 2015 transfer, the proposed transfer requires the consent of the City and the Successor Agency.

Under the ARDA, O.C. Property Company LLC may assign its rights and obligations in connection with the transfer of the Broadcom Campus to Five Point Office Venture I, LLC. After the sale is completed, Five Point Office Venture I, LLC shall be liable for the performance of the designated obligations under the ARDA, with respect to the portion of the Heritage Fields property so transferred.

Financial Condition and Development Experience of Five Point Office Venture I, LLC

As the leading developer of the Great Park Neighborhoods project in Planning Area 51 and assignee, Five Point Office Venture I, LLC, an affiliated company of Five Point Communities (master developer) possesses reasonable ownership structure, sufficient management and development experience to assume ownership and responsibility for

the Broadcom Campus project. While primarily a home builder, the assignee has the financial means and has demonstrated extensive development experience to carry out the development of the project as described in the ARDA and project site approvals.

Current Status of the Broadcom Campus

In July 2014, the Planning Commission approved Vesting Tentative Parcel Map 2014-211 (00604519-PTP) and a Master Plan (00604018-PMP) to allow for the development of the Broadcom Campus. The project site is developed with a total of four buildings and associated parking. Development consists as follows:

- (i) Parcel 1, commonly referred to as 15101 Alton Parkway, containing approximately 3.5 acres and improved with a five-story building containing approximately 287,726 square feet of gross floor area;
- (ii) Parcel 4, commonly referred to as 15131 Alton Parkway, containing approximately 3.4 acres and improved with a four-story building containing approximately 189,064 square feet of gross floor area;
- (iii) Parcel 5, commonly referred to as 15161 Alton Parkway, containing approximately 3.2 acres and improved with a four-story building containing approximately 189,064 square feet of gross floor area;
- (iv) Parcel 7, commonly referred to as 15191 Alton Parkway, containing approximately 4.4 acres and improved with a five-story building containing approximately 373,167 square feet of gross floor area;
- (v) Parcels 2, 3, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16 and 17 are undeveloped and, as of today, consist of surface parking and landscaping; and
- (vi) Fee title to the vehicular and pedestrian bridges and related improvements constructed on the property and extending over Marine Way pursuant to that certain Irrevocable Offer of Dedication and Agreement Regarding Marine Way Bridge Ownership and Maintenance executed by O.C. Property Company LLC, and recorded in the Official Records of Orange County, California (the "Official Records") on March 10, 2015.

A total of 1,039,021 square feet of research and development intensity exists on the project site, and a total of 960,979 square feet of research and development intensity still remains for future buildout of the project site.

ALTERNATIVES CONSIDERED

The City Council could choose not to adopt the resolution. If that occurs, the transaction between O.C. Property Company, LLC and Five Point Office Venture I, LLC cannot be completed, and OC Property Company, LLC would remain responsible to comply with

all obligations related to the Broadcom Campus under the ARDA and associated entitlement approvals.

FINANCIAL IMPACT

There is no financial impact anticipated to the City, as this is a transaction between two private developers.

REPORT PREPARED BY Hernan DeSantos, Senior Planner

ATTACHMENTS

- Attachment 1: Amended Restated Development Agreement (00470035-PDA)
- Attachment 2: Partial Assignment and Assumption of Development Agreement
and Site Specific Approvals
- Attachment 3: City Council Resolution 17-XX

cc: Darlene Nicandro, Interim Manager of Planning Services
 Jennifer Bohlen, Five Point Communities Management Inc.
 Gregory B. Caligari, Cox Castle Nicholson (gcaligari@coxcastle.com)
 Emily Webb, Rutan and Tucker (EWebb@rutan.com)

Recorded in Official Records, Orange County
Tom Daly, Clerk-Recorder

RECORDING REQUESTED BY
AND WHEN RECORDED MAIL TO:



NO FEE

2010000700065 03:57pm 12/27/10

CITY OF IRVINE
One Civic Center Plaza
P.O. Box 19575
Irvine, CA 92623-9575
Attention: City Clerk

93 401 A12 232
0.00 0.00 0.00 0.00 693.00 0.00 0.00 0.00

(Space Above For Recorder's Use Only)

This Development Agreement is recorded at the request
and for the benefit of the City of Irvine and is exempt
from the payment of a recording fee pursuant to
Government Code § 27383

AMENDED AND RESTATED DEVELOPMENT AGREEMENT

Between

THE CITY OF IRVINE AND THE IRVINE REDEVELOPMENT AGENCY

And

HERITAGE FIELDS EL TORO, LLC

TABLE OF CONTENTS

| | <u>Page</u> |
|---|--------------------|
| 1. DEFINITIONS..... | 5 |
| 2. EFFECT OF AGREEMENTS | 17 |
| 2.1 Effect Of Amended And Restated Development..... | 17 |
| 2.2 Effect Of Original Development Agreement..... | 17 |
| 2.3 Term..... | 18 |
| 2.4 Termination Upon Sale Of Individual Lots To Public And Completion Of Construction..... | 18 |
| 3. DEVELOPMENT OF THE PROPERTY..... | 19 |
| 3.1 Applicable Regulations; Vested Right To Develop..... | 19 |
| 3.2 Tentative Subdivision Maps | 20 |
| 3.3 Financing And Conveyance Maps | 20 |
| 3.4 Processing Of Applications And Permits | 20 |
| 3.5 Other Governmental Permits | 21 |
| 3.6 Subsequent General Plan Amendments And Zone Changes | 21 |
| 3.7 Assurances To Heritage Fields | 21 |
| 3.8 Reservations Of Authority | 22 |
| 3.9 Uses of City Property..... | 24 |
| 3.10 Homeless Assistance Provider Accommodations..... | 28 |
| 3.11 Density Bonus..... | 28 |
| 3.12 Traffic | 28 |
| 3.13 RDA Obligations | 31 |
| 3.14 Cooperation in Land Use Planning For Edge Conditions..... | 31 |
| 4. ARDA Overlay Plan | 31 |
| 4.1 ARDA Overlay Plan | 31 |
| 4.2 Priority Of ARDA Overlay Plan..... | 31 |
| 4.3 Changes in Land Use, Circulation Access and Mitigation Requirements | 32 |
| 5. FEES | 32 |
| 5.1 Development Fees..... | 32 |
| 5.2 Other Fees And Charges | 32 |
| 6. NORTH IRVINE TRANSPORTATION INFRASTRUCTURE | 32 |
| 6.1 NITM Ordinance..... | 32 |
| 6.2 Concurrent Agreement(s) With North Irvine Adjacent Lands Owner..... | 33 |
| 6.3 Waiver Of Objections Due To Allocation And Apportionment Of NITM Fees | 33 |
| 6.4 Limitation On Heritage Fields' Obligation To Pay NITM Fees For City Property | 33 |

| | <u>Page</u> |
|------|---|
| 6.5 | Commitment Regarding Payment Of NITM Fee Established For Each Future Development Area..... 34 |
| 6.6 | Notice Of NITM Program To Heritage Fields And Purchasers Of The Property..... 34 |
| 6.7 | Commitment Regarding Sale Price For Right-Of-Way Land Owned By Heritage Fields Specified In NITM Program 34 |
| 6.8 | NITM Account..... 34 |
| 6.9 | Independent Nature Of Obligations 34 |
| 6.10 | City Covenant To Obtain NITM Or Fair Share Fees From North Irvine Adjacent Lands..... 35 |
| 6.11 | City Covenant To Obtain NITM Or Fair Share Fees From All Property Owners In The North Irvine Adjacent Lands..... 35 |
| 6.12 | City Covenant To Use NITM Fees And NITM Account For NITM Program..... 35 |
| 6.13 | Certificate of NITM Compliance..... 35 |
| 6.14 | Satisfaction Of Mitigation Obligations Or Other Traffic Conditions 36 |
| 6.15 | Independence Of Obligations 36 |
| 7. | CONSTRUCTION AND MAINTENANCE OF PUBLIC IMPROVEMENTS; FINANCING OF SAME..... 36 |
| 7.1 | Heritage Fields' Obligations to Construct and Fund Construction..... 36 |
| 7.2 | Authorized Services 38 |
| 7.3 | Additional Backbone Infrastructure..... 38 |
| 7.4 | Value Limitation 38 |
| 7.5 | Capacity Allocation on the Project 39 |
| 7.6 | Application of Special Taxes 40 |
| 7.7 | Formation of the CFD 42 |
| 7.8 | Issuance of Non-Subordinate Bonds..... 44 |
| 7.9 | Apportionment; Application to County Property 46 |
| 7.10 | Waiver of Challenge to Special Tax Requirement 46 |
| 8. | PROPERTY-WIDE ACTIVITIES 47 |
| 8.1 | Master Subdivision Map 47 |
| 8.2 | Property-Wide Permits..... 47 |
| 8.3 | City Cooperation..... 48 |
| 9. | DEDICATIONS AND CONVEYANCES OF PROPERTY INTERESTS 48 |
| 9.1 | Police Site 48 |
| 9.2 | ARDA Transfer Site and Exchange Properties..... 49 |
| 9.3 | Park Dedications 50 |
| 9.4 | Dedication Of School Site To IUSD..... 51 |
| 9.5 | Dedication Of Streets To City..... 51 |
| 9.6 | Modifications To Property Boundaries..... 51 |
| 9.7 | Administrative Changes To Reflect Property Ownership Changes..... 51 |
| 9.8 | Rights of Way Reservation 51 |
| 9.9 | Assignment Of LIFOCs 51 |

| | <u>Page</u> |
|------|--|
| 9.10 | Recordation of Restrictive Covenant..... 52 |
| 10. | PUBLIC BENEFIT FEE..... 52 |
| 10.1 | Public Benefit Fee..... 52 |
| 10.1 | Waivers Regarding Public Benefit Fee..... 52 |
| 11. | UTILITIES..... 52 |
| 11.1 | Utility Easements..... 52 |
| 11.2 | Water Rights..... 53 |
| 12. | CC&Rs..... 53 |
| 13. | RUNWAY HARDSCAPE..... 53 |
| 14. | DEFAULT, REMEDIES, AND TERMINATION..... 53 |
| 14.1 | Notice And Opportunity To Cure..... 53 |
| 14.2 | Default Remedies..... 54 |
| 14.3 | Limitations on Defaults..... 54 |
| 14.4 | Parties' Exclusive Remedies..... 55 |
| 14.5 | Force Majeure/Supervening Events..... 56 |
| 14.6 | Dispute Resolution..... 57 |
| 14.7 | Arbitration of Disputes..... 58 |
| 15. | ANNUAL REVIEW..... 59 |
| 15.1 | Timing Of Annual Review..... 59 |
| 15.2 | Standards For Annual Review..... 59 |
| 15.3 | Certificate Of Compliance..... 60 |
| 16. | MORTGAGEE RIGHTS..... 60 |
| 16.1 | Encumbrances On The Property..... 60 |
| 16.2 | Mortgagee Protection..... 60 |
| 16.3 | Mortgagee Not Obligated..... 60 |
| 16.4 | Notice Of Default To Mortgagee; Right Of Mortgagee To Cure..... 61 |
| 17. | ASSIGNMENT..... 61 |
| 17.1 | Right To Assign..... 61 |
| 17.2 | Assignee Subject To Terms Of Agreement..... 61 |
| 17.3 | Release Upon Transfer..... 61 |
| 18. | INSURANCE AND INDEMNITY..... 62 |
| 18.1 | Insurance..... 62 |
| 18.2 | Indemnity By Heritage Fields..... 63 |
| 18.3 | Indemnity By City..... 63 |
| 19. | THIRD-PARTY LEGAL CHALLENGE..... 63 |
| 20. | MISCELLANEOUS..... 64 |

| | <u>Page</u> |
|-------|--|
| 20.1 | Covenants..... 64 |
| 20.2 | Entire Agreement, Waivers And Amendments 64 |
| 20.3 | Legal Expenses 64 |
| 20.4 | Constructive Notice And Acceptance 64 |
| 20.5 | No Third-Party Beneficiaries..... 65 |
| 20.6 | Relationship Of Parties 65 |
| 20.7 | Severability 65 |
| 20.8 | Further Actions And Instruments..... 65 |
| 20.9 | Estoppel Certificate..... 65 |
| 20.10 | Applicable Law; Venue 65 |
| 20.11 | Non-Liability Of Officers, Employees and Other Parties..... 66 |
| 20.12 | Notices 66 |
| 20.13 | Representation As To Ownership 67 |
| 20.14 | Authority To Execute..... 67 |
| 20.15 | Execution Of Agreement; Counterparts..... 67 |
| 20.16 | Exhibits 68 |

AMENDED AND RESTATED DEVELOPMENT AGREEMENT

This AMENDED AND RESTATED DEVELOPMENT AGREEMENT (“**Amended and Restated Development Agreement**”) is entered into this 27 day of December, 2010, by and between the CITY OF IRVINE, a California charter city (the “**City**”) and Heritage Fields El Toro LLC, a Delaware limited liability company (“**Heritage Fields**”). This AGREEMENT (“**RDA Agreement**”) is also entered into by and between the Irvine Redevelopment Agency, a redevelopment agency formed pursuant to Health and Safety Code Sections 33000 *et seq.* (“**RDA**”) and Heritage Fields. This Amended and Restated Development Agreement and RDA Agreement are collectively referred to as the “**Amended and Restated Agreement.**” The City, Heritage Fields and RDA are collectively referred to herein as the “**Parties**” and individually as a “**Party.**”

RECITALS

All capitalized terms used in the Recitals shall have the meanings given to such terms in Section 1 of this Amended and Restated Agreement.

A. To strengthen the public planning process, encourage private participation in comprehensive planning, and reduce the economic risk of development, the Legislature of the State of California adopted the “**Development Agreement Statute,**” Sections 65864 *et seq.*, of the California Government Code. The Development Agreement Statute authorizes the City to enter into an agreement with any person having a legal or equitable interest in real property, to provide for the development of such property and to vest certain development rights therein. Pursuant to the authorization set forth in the Development Agreement Statute, the City adopted its Resolution No. 82-68 on July 13, 1982, establishing procedures for the consideration and approval of development agreements (“**City Development Agreement Regulations**”).

B. In accordance with the Development Agreement Statute, the City Development Agreement Regulations and applicable law, on July 8, 2003, the City Council of the City of Irvine (“**City Council**”) adopted Ordinance No. 03-19 approving a draft version of a development agreement (the “**2003 Agreement Draft Version**”) in anticipation of entering into an actual development agreement with the eventual purchaser(s) of the former Marine Corps Air Station, El Toro (“**MCAS El Toro**”).

C. On July 1, 2004, the City’s Planning Commission held a public hearing on the 2003 Agreement Draft Version, made certain findings and determinations with respect thereto and recommended to the City Council that such version be approved. On October 12, 2004, the City Council also held a public hearing on a revised draft version of a development agreement, considered the recommendations of the Planning Commission, found that the revised draft version of a development agreement (the “**2004 Agreement Draft Version**”) was consistent with the City’s General Plan, and adopted Ordinance No. 04-13 approving the 2004 Agreement Draft Version. The City again

prepared the 2004 Agreement Draft Version in anticipation of entering into a development agreement with the eventual purchaser(s) of the former MCAS El Toro.

D. Subsequently, the City determined to further revise the 2004 Agreement Draft Version to address, among other issues, completion of the bidding process for the acquisition of the former MCAS El Toro by a single bidder. On May 5, 2005, the City's Planning Commission held a public hearing on the proposed development, made certain findings and determinations with respect thereto, and recommended to the City Council that a further revised draft of a development agreement ("**Original Development Agreement**") be approved. On May 10, 2005, the City Council also held a public hearing on the Original Development Agreement, considered the recommendations of the Planning Commission, and found that the Original Development Agreement was consistent with the General Plan. In accordance with the Development Agreement Statute, the City Development Agreement Regulations, and applicable law, on May 24, 2005, the City Council adopted Ordinance No. 05-10 approving the Original Development Agreement.

E. On or about July 12, 2005, Heritage Fields LLC ("**HF**") purchased, or leased with a right to future conveyance, approximately 3,705 acres from the United States Department of the Navy ("**DON**"), which constituted a significant portion of the former MCAS El Toro ("**Property**"). The Property is depicted on Exhibit "A" attached hereto.

F. Concurrently with HF's acquisition of the Property and pursuant to the Development Agreement Statute and the City Development Agreement Regulations, the City and HF executed the Original Development Agreement dated July 12, 2005, substantially as approved by Ordinance No. 05-10, and as adopted by the City Council on May 24, 2005, which became effective on July 12, 2005 and was recorded with the Orange County Recorder's office as Document No. 2005000538136 on July 12, 2005.

G. On or about July 12, 2005, HF transferred certain real property consisting of approximately 1,117 acres in fee title or as a lease in expectation of a fee title (as described below) to the City for purposes of creating a great metropolitan park known as the Orange County Great Park (the "**Great Park**"). The portion of the Property initially conveyed to the City in July 2005 (either in fee title or as a lease in furtherance of conveyance of fee title) is hereinafter referred to as the "**Initial City Park Property**" and is depicted on Exhibit "B" attached hereto. Since July 12, 2005, the Parties have agreed to consider, pursuant to Section 8.1.4 of the Original Development Agreement, certain boundary adjustments to the properties conveyed and retained, to account for, among other things, changes in rights of way configurations, which will result in some portions of the Property currently owned by the City being re-conveyed to Heritage Fields (the "**Initial Heritage Fields Exchange Properties**") and other portions of the Property currently owned by Heritage Fields being conveyed to the City (the "**Initial City Exchange Properties**"). The Initial Heritage Fields Exchange Properties contains not less than 44 acres and are shown as Property Identification Areas ("**PIAs**") 7, 8, 31, 34, and 36 on Exhibit "I." The Initial City Exchange Properties contain approximately not less than 44 acres and are shown as PIAs 9, 32, 33 and 35 on Exhibit "I." The Initial Heritage Fields Exchange Properties and the Initial City Exchange Properties are

collectively referred to as the “**Exchange Properties**,” as further depicted on Exhibit “C.” The Parties acknowledge that some portions of the Initial City Park Property and Exchange Properties are currently held by the Parties as a lease in furtherance of conveyance (“**LIFOC**”), as depicted on Exhibit “N.” and that fee title to such portions of the Initial City Park Property and Exchange Properties will be conveyed ultimately to the Party by the DON. The Parties will execute appropriate property exchange documents and approvals necessary to effectuate such adjustments. The Initial City Park Property, the Initial City Exchange Properties and, upon the conveyance of the same to the City, the ARDA Transfer Site (as defined below) are collectively referred to herein as the “**Great Park Property.**”

H. On or about July 12, 2005, HF also conveyed approximately 294 acres to the City for non-Great Park purposes (the “**Original Non-Park Property**”), as depicted on Exhibit “D.” Heritage Fields has also promised to convey to the City approximately five and one-half (5 ½) acres (the “**Police Site**”), as generally depicted on Exhibit “F.” The Original Non-Park Property and the Police Site shall be collectively referred to herein as the “**Non-Park Property**”).

I. In consideration of the covenants and agreements of the City set forth in this Amended and Restated Agreement, Heritage Fields has also agreed to commit to and execute the transfer of approximately 130.5 acres to the City, as more fully described and subject to the conditions in Section 9.2 below (hereinafter, the “**ARDA Transfer**”). The real property to be transferred to the City pursuant to the ARDA Transfer is hereinafter referred to as the “**ARDA Transfer Site**” and such property is generally depicted on Exhibit “G.” and is more fully described as PIAs 28 and 30 on Exhibit “I.” but may be subject to adjustment in accordance with Section 9.2 below. Upon transfer, the ARDA Transfer Site will become a part of the Great Park Property.

J. The Great Park Property and the Non-Park Property are collectively referred to as the “**City Property.**”

K. The portions of the Property which have been or will be retained by Heritage Fields or conveyed to Heritage Fields as part of the Initial Heritage Fields Exchange Properties will contain approximately 2,157 acres, in the aggregate, and are collectively referred to as the “**Heritage Fields Property**” as depicted on Exhibits “H,” “H-1” and “H-2,” and more fully described as PIAs 1, 5, 7, 8, 16, 21, 22, 23, 26, 27, 31, 34, 36, 38, 39, 41, 42, 45, and 48 on Exhibit “I.”

L. On or about December 22, 2005, HF conveyed all of the Property it owned at that time to Heritage Fields. Heritage Fields is the successor-in-interest to HF for all purposes under the Original Development Agreement.

M. Subsequent to the Parties’ execution of the Original Development Agreement: (i) Heritage Fields and the City entered into that certain Master Implementation Agreement dated June 27, 2006 (the “**MIA**”); (ii) the City initiated, and on October 24, 2006 approved, a General Plan Amendment and Zone Change Ordinance No. 06-18 (the “**2006 GPA/ZC**”); (iii) the City approved Tentative Parcel Map No. 2006-271, which

when recorded will constitute a Financing and Conveyance Map; (iv) Heritage Fields sought and obtained certain Agency Permits; (v) the City initiated, and on April 10, 2007 adopted, an amendment to its Affordable Housing Ordinance (Section 2-3 of the Zoning Code) pursuant to which the City updated such ordinance so that it is in compliance with the State of California's density bonus law; (vi) Heritage Fields prepared and the City approved on May 17, 2007 a Master Subdivision Map, Vesting Tentative Tract Map No. 17008, (as amended, the "MSM"); (vii) Heritage Fields timely paid to the City the aggregate amount of \$200,000,000.00 in Development Agreement Fees, which payments satisfy Heritage Fields Development Agreement Fee obligations; (viii) Heritage Fields prepared, and the City approved certain amendments to Tentative Parcel Map No. 2006-271; (ix) the City approved on September 27, 2007 Orange County Great Park Master Plan 00434337-PMP (the "**Great Park Master Plan**"); (x) Heritage Fields prepared and the City approved on October 16, 2008 certain amendments to the MSM, together with a Master Landscape and Trails Plan, certain modifications to the Orange County Great Park Master Streetscape Design Guidelines approved by City's Planning Commission on October 16, 2008 (including subsequent refinements mutually approved by Heritage Fields and the Director of Community Development and as further supplemented and/or amended from time to time mutually by Heritage Fields and the City, the "**Streetscape Guidelines**"), Vesting Tentative Tract Map No. 17283, and Master Plan No. 00470483-PMP; (xi) the County approved that certain San Diego Creek Flood Control Master Plan Update dated October 2, 2008 and designated County case number EC29320 (City case number 00457521-EMC); (xii) the County approved that certain Planning Area 51 Marshburn Watershed Update dated October 2, 2008 and designated County case number ED 29320 (City case number 00464843-EMC); (xiii) Heritage Fields prepared and the City's Planning Commission approved on November 6, 2008 the Master Affordable Housing Plan ("**MAHP**") for the Heritage Fields Property; (xiv) the IRWD SAMP dated March 17, 2009 was approved; and (xv) the County approved the Conceptual Project Water Quality Management Plan (WCMP), Updating the Integrated Master Plan of Drainage, Water Quality and Habitat Mitigation dated April 23, 2009.

N. The City and Heritage Fields have agreed to amend the Original Development Agreement and enter into this Amended and Restated Agreement to address, among other things, changing the assumptions and conditions for development of the Heritage Fields Property and the Parties' desire to revise development plans for the Heritage Fields Property to benefit Heritage Fields and the City and the desire to add the RDA as a Party. The Original Development Agreement and this Amended and Restated Agreement are intended to be, and shall be construed as, a development agreement within the meaning of the Development Agreement Statute. This Amended and Restated Agreement will eliminate uncertainty in planning for and secure the orderly development of the Heritage Fields Property, ensure a desirable and functional community environment, provide effective and efficient development of public facilities, infrastructure, and services appropriate for the development of the Heritage Fields Property, assure attainment of the maximum effective utilization of resources within the City, and provide other significant public benefits to the City and its residents by otherwise achieving the goals and purposes of the Development Agreement Statute. In exchange for these benefits to the City, Heritage Fields desires to receive, or if vested by the Original Development Agreement, continue to receive, the assurance that it may proceed with the development of the

Heritage Fields Property in accordance with the terms and conditions of this Amended and Restated Agreement, the Existing Land Use Regulations (defined below), and the ARDA Overlay Plan (defined below).

O. The City and Heritage Fields have agreed to amend both the MIA and that certain Agreement Regarding Hardscape Recycling dated May 3, 2006 (“**Tri-Party Agreement**”), and to memorialize said amendments in a single agreement, of near or even date herewith, entitled “Amended and Restated Master Implementation Agreement” (“**Amended MIA**”).

P. The City has determined that the development described in the ARDA Overlay Plan (defined below), the Existing Land Use Regulations (defined below) and this Amended and Restated Agreement is consistent with the goals and policies of the City’s General Plan and that the ARDA Overlay Plan imposes appropriate standards and requirements with respect to the development of the Heritage Fields Property to maintain the overall quality of life and the environment within the City.

Q. On July 3, 2008, the City’s Planning Commission held a public hearing on this Amended and Restated Agreement, made certain findings and determinations with respect thereto, and recommended to the City Council that the Amended and Restated Agreement be approved. On September 8, 2009, the RDA made certain findings and determinations with respect thereto and adopted Resolution No. 09-02 approving this Amended and Restated Agreement. The RDA has considered the environmental impacts of the ARDA Overlay Plan and completed its environmental review of the development approved in this Amended and Restated Agreement. On August 11, 2009, the City Council held a public hearing on the Amended and Restated Agreement, considered the recommendations of the Planning Commission and found that the Amended and Restated Agreement is consistent with the General Plan. In accordance with the Development Agreement Statute, the City Development Agreement Regulations, and applicable law, on August 11, 2009, the City Council adopted for first reading Ordinance No. 09-09 approving this Amended and Restated Agreement. The second reading and adoption of Ordinance No. 09-09 occurred on August 11, 2009. The City has considered the environmental impacts of the ARDA Overlay Plan and completed its environmental review of the development approved in this Amended and Restated Agreement.

A G R E E M E N T

Based upon the foregoing Recitals, which are incorporated herein by this reference, and for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the City and Heritage Fields hereby agree as follows:

1. DEFINITIONS.

The following terms when used in this Amended and Restated Agreement shall have the meanings set forth below:

The term “**1602 Agreement**” shall have the meaning set forth in Section 8.2.1.

The term “**2003 Agreement Draft Version**” shall have the meaning set forth in Recital “B.”

The term “**2003 Project Approvals**” refers to those approvals made by the City Council in Resolution No. 03-60, Ordinance No. 03-18, Ordinance No. 03-19 and implementing approvals.

The term “**2004 Agreement Draft Version**” shall have the meaning set forth in Recital “C.”

The term “**2006 GPA/ZC**” shall have the meaning set forth in Recital “M.”

The term “**401 Certification**” shall have the meaning set forth in Section 8.2.1.

The term “**404 Permit**” shall have the meaning set forth in Section 8.2.1.

The term “**Action**” shall have the meaning set forth in Section 20.3.

The term “**Additional Backbone Infrastructure**” means those items or actions, in addition to the Backbone Infrastructure, that the City and Heritage Fields may mutually agree to pay for in the manner set forth in Section 7.

The term “**Administrative Expenses**” shall have the meaning set forth in the RMA.

The term “**ADT**” shall have the meaning specified in Section 1-2-1 of the Irvine Zoning Code; namely “The total bi-directional volume of traffic passing through a given point during a given period of time in whole days greater than one day and less than one year, excluding Saturdays, Sundays, and holidays, divided by the number of days in that time period, excluding Saturdays, Sundays, and holidays.”

The term “**Agency Permits**” shall have the meaning set forth in Section 8.2.1.

The term “**Amended and Restated Agreement**” shall have the meaning assigned to it in the initial paragraph of this document.

The term “**Amended MIA**” shall have the meaning set forth in Recital “O.”

The term “**Annual Review**” shall have the meaning set forth in Section 15.1.

The term “**ARDA Overlay Plan**” shall have the meaning as set forth in Section 4.1.

The term “**ARDA Traffic Study**” shall have the meaning set forth in Section 3.12.1.

The term “**ARDA Transfer**” shall have the meaning set forth in Recital “I.”

The term “**ARDA Transfer Site**” shall have the meaning set forth in Recital “I.”

The term “**Assumed IRWD Assessment**” shall have the meaning set forth in Section 7.5.2.

The term “**Authorized Facilities**” means Group A Facilities, Group B Facilities, and Group C Facilities.

The term “**Authorized Services – On Park**” means work performed by the City, the OCGP Corporation, or designee, to maintain, to manage, to operate, to provide services for, or to rehabilitate the facets of the Great Park Property to the extent the work is generally consistent with the Great Park plan as it existed in 2005. Work includes but is not limited to: landscape, grass and turf, open space, agriculture, water features, buildings and facilities, parking, and drainage facilities. Work may be performed on a sports park and other sports fields and athletic facilities; on lands comprising a museum district; on utilities for the Great Park Property (to the extent not paid for directly by users/vendors/operators of improvements on the Great Park Property); on public safety and other security services for the Great Park Property; on the Agua Chinon; on the Wildlife Corridor; and on administrative costs including allocated overhead. The totality of administrative costs, overhead or other similar management costs each Fiscal Year shall not, in the aggregate, exceed the amount allocated toward overhead expense in the Full Cost Allocation Plan prepared by the City on a city-wide basis and applicable to such Fiscal Year.

The term “**Authorized Services – Off Park**” means work performed by the City, the OCGP Corporation, or designee, to provide public property maintenance, management, operations, rehabilitation, services, and utilities in the CFD Area and those areas adjacent to the CFD Area that are part of the Property (excluding the Great Park Property and County Property), including but not limited to: neighborhood parks, buildings and facilities within such parks; a fly-away remote airport terminal; street right-of-way including, public roads, bike trails, parking lots, curbs and gutters, sidewalks, drainage facilities, street lighting, street sweeping and other right-of-way care; landscape median, parkway and open space maintenance operations and rehabilitation; traffic signal operations, maintenance, rehabilitation and coordination; public safety and other safety and security services; and, administrative costs including allocated overhead. The totality of administrative costs, overhead or other similar management costs each Fiscal Year shall not, in the aggregate, exceed the amount allocated toward overhead expense in the Full Cost Allocation Plan prepared by the City on a city-wide basis and applicable to such Fiscal Year. Further, the totality of the Authorized Services – Off Park each year shall not exceed seventeen percent (17%) of the Indexed GA for each particular year.

The term “**Authorized Services**” means “**Authorized Services – On Park**” and “**Authorized Services – Off Park**,” but does not include (i) work to maintain, manage, or operate either a lake or a balloon ride feature at the Orange County Great Park, (ii) work to maintain, manage, and operate a canyon feature to the extent the costs of such work exceed the costs of landscaping and maintaining the land area consumed by said canyon feature if that feature had not been constructed, or (iii) work or costs for or related to special events on the Great Park Property.

The term “**Backbone Infrastructure**” or “**Proposed Project Facilities**” shall collectively mean the Group A Facilities, and the Group B Facilities as described, respectively, in Exhibits E-1 and E-2.

The term “**Bond Costs**” means for (i) any Non-Subordinate Bond issue and (ii) all Subordinate Bonds, all debt service payments, administrative expenses, and amounts required to establish or replenish any reserve funds, or any other use of Special Taxes for such bond issue, as required by the indenture, fiscal agent agreement, or other agreement governing the terms of such bond issue.

The term “**Bosque Site**” shall mean that site identified as PIA 11a in Exhibit “I.”

The term “**CC&Rs**” shall have the meaning set forth in Section 12.

The term “**CEQA**” or “**California Environmental Quality Act**” means the California Environmental Quality Act (California Public Resources Code Section 21000 *et seq.*), as may be amended from time to time.

The term “**CFD**” shall mean the Community Facilities District allowed to be formed pursuant to the CFD Act by a Local Agency.

The term “**CFD Act**” shall mean the Mello-Roos Community Facilities Act of 1982 (California Government Code Section 53311 *et seq.*), as may be amended from time to time.

The term “**CFD Area**” shall mean the area within the geographic boundaries of the CFD.

The term “**CFD Administrator**” means an official of the City, or designee thereof, responsible for determining the Special Tax Requirement, and providing for the levy and collection of the Special Taxes.

The term “**CFD Bonds**” shall mean one or more series of bonds issued by a CFD on behalf of an Improvement Area, including Non-Subordinate Bonds and Subordinate Bonds.

The term “**CFD Petition**” shall have the meaning set forth in Section 7.7.1.

The term “**Change Proceedings**” shall have the meaning set forth in Section 7.7.7.

The term “**City**” shall have the meaning set forth in the opening paragraph of this Amended and Restated Development Agreement.

The term “**City Council**” shall have the meaning set forth in Recital “B.”

The term “**City Development Agreement Regulations**” shall mean the regulations establishing procedures and requirements for the consideration of

development agreements set forth in City's Resolution No. 82-68 and adopted by the City Council on July 13, 1982.

The term "**City's Designee**" shall mean: (i) the OCGP Corporation; or (ii) Heritage Fields, with regard to the performance of one or more of the responsibilities, obligations or undertakings of the City pursuant to this Amended and Restated Agreement and/or the Amended MIA; or (iii) the governmental or non-profit entity(ies) that the City in its sole and absolute discretion designates to receive all or some portion of City Property, or that the City in its sole and absolute discretion assigns to perform any one or more of the responsibilities, obligations or undertakings of the City under this Amended and Restated Agreement.

The term "**City Property**" shall have the meaning set forth in Recital "J."

The term "**Conceptual Overlay Plan**" shall mean the conceptual plan attached to the Original Development Agreement as Exhibit "B" for the development of the Property in accordance with the Overlay Plan (as defined in Exhibit "C" of the Original Development Agreement).

The term "**Construction Manager**" shall have the meaning set forth in Section 7.1.1.

The term "**County**" shall mean the County of Orange, a political subdivision of the State of California.

The term "**County Agreement**" shall mean that certain "Property Tax Transfer and Pre-Annexation Agreement Among the City of Irvine, the Irvine Redevelopment Agency, and the County of Orange, Regarding the Annexation and Reuse of Former MCAS El Toro", dated March 4, 2003.

The term "**Defaulting Party**" shall have the meaning set forth in Section 14.1.

The term "**Density Bonus Units**" shall have the meaning set forth in Section 3.11.1.

The term "**Development Agreement Fee**" or "**Development Agreement Fees**" shall mean the fees paid to the City by Heritage Fields pursuant to Section 4.2 of the Original Development Agreement.

The term "**Development Agreement Statute**" refers to Sections 65864 through 65869.5 of the California Government Code, as such sections may have been amended from time to time prior to the Second Effective Date.

The term "**Development Fees**" shall mean the monetary consideration charged by the City in connection with mitigating the Project-specific impacts of the Project and development of the public facilities related to development of the Project. Development Fees shall not include (i) the City's normal fees for processing, environmental assessment/review, tentative tracts/parcel map review, plan checking, site review, site

approval, administrative review, building permit (plumbing, mechanical, electrical, building), inspection and similar fees imposed to recover the City's costs associated with processing, review and inspection of applications, plans, specifications, etc. (except for the original approval of the Master Subdivision Map); (ii) fees and charges levied by any other public agency, utility, district or joint powers authority whether or not such fees are collected by the City; or (iii) any mitigation charges or public facilities included in the Proposed Project Facilities.

The term "**DON**" shall have the meaning set forth in Recital "E."

The term "**EIR**" shall mean the Orange County Great Park Environmental Impact Report certified by the City Council on May 27, 2003 (SCH No. 2002101020; Irvine City Council Resolution No. 03-60), and any and all addenda thereto.

The term "**Excess Special Tax Capacity**" shall have the meaning set forth in Section 7.5.8.

The term "**Exchange Properties**" shall have the meaning set forth in Recital "G."

The term "**Existing Land Use Regulations**" shall mean the City's General Plan, Zoning Code and all other ordinances, resolutions, rules and regulations and written adopted policies of the City governing the development and use of the Heritage Fields Property in effect as of July 12, 2005, except that the Existing Land Use Regulations shall include: (i) those entitlements and approvals issued by the City and described in Recital "M," including all conditions and requirements imposed by the City therein, as such conditions may from time to time be amended by mutual agreement of the City and Heritage Fields (other than the Great Park Master Plan and Streetscape Guidelines), (ii) amendments approved subsequently to comply with state law in effect as of July 12, 2005 (Section 2-3 of the Zoning Code); (iii) General Plan Amendment/Zone Change No. 09-89 approved concurrently with this Amended and Restated Agreement; and (iv) amendments to the General Plan approved in Ordinance No. 08-09 (Marine/Bake intersection). The Existing Land Use Regulations shall include without limitation the permitted uses of the Heritage Fields Property, the density and intensity of use, maximum height and size of proposed buildings, development fee requirements, provisions for the reservation and dedication of land for public purposes and construction standards and specifications (not including the Uniform Construction Codes pertaining to construction adopted for general application in the City).

The term "**Financing and Conveyance Map**" shall mean any final subdivision map pursuant to the Subdivision Map Act, Government Code Sections 66410 *et seq.* which divides the Heritage Fields Property into parcels or lots for financing and conveyance purposes only and which does not authorize development of any kind.

The term "**Fiscal Year**" shall mean the period starting July 1 and ending on the following June 30.

The term "**Force Majeure**" shall have the meaning set forth in Section 14.5.

The term “**General Plan**” shall mean the General Plan of the City as it existed on the Initial Effective Date, and as expressly amended by (i) the 2006 GPA/ZC (ii) General Plan Amendment/Zone Change No. 09-89 approved concurrently with this Amended and Restated Agreement; (iii) amendments approved in Ordinance No. 08-09 (Marine/Bake intersection); and (iv) amendments applicable to the Heritage Fields Property, as approved by Heritage Fields in the manner specified in Section 3.6,

The term “**Great Park**” shall have the meaning set forth in Recital “G.”

The term “**Great Park Master Plan**” shall have the meaning set forth in Recital “M.”

The term “**Great Park Property**” shall have the meaning set forth in Recital “G.”

The term “**Group A Facilities**” shall mean those certain off-property facilities described in Exhibit “E-1,” as such list of facilities may be amended by the mutual consent of the City and Heritage Fields. A narrative description of the Group A and Group B Facilities is attached hereto as Exhibit “E-3”.

The term “**Group B Facilities**” shall mean those certain on-property facilities described in Exhibit “E-2,” as such list of facilities may be amended by the mutual consent of the City and Heritage Fields. A narrative description of the Group A and Group B Facilities is attached hereto as Exhibit “E-3”.

The term “**Group C Facilities**” shall mean those facilities depicted and/or described in the approved Master Plan for the Orange County Great Park, as that master plan may be amended from time to time.

The term “**Guaranteed Amount**” shall have the meaning set forth in the RMA.

The term “**Heritage Fields**” shall have the meaning set forth in the opening paragraph of this Amended and Restated Agreement.

The term “**Heritage Fields Property**” shall have the meaning set forth in Recital “K.”

The term “**HF**” shall have the meaning set forth in Recital “E.”

The term “**Improvement Areas**” shall have the meaning set forth in Section 7.7.

The term “**Indenture**” shall have the meaning set forth in Section 7.8.5.

The term “**Index Delta**” shall have the meaning set forth in Section 7.5.5.

The term “**Indexed GA**” shall mean the annual amount set forth on Exhibit “R-1.”

The term “**Indexed SA**” means Twenty-Six Million Dollars (\$26,000,000), which amount shall increase annually by three percent (3%), commencing as of the same Fiscal Year in which the Indexed GA commences to increase as set forth on Exhibit "R-1".

The term “**Initial City Exchange Properties**” shall have the meaning set forth in Recital “G.”

The term “**Initial City Park Property**” shall have the meaning set forth in Recital “G.”

The term “**Initial Effective Date**” shall mean July 12, 2005, the date that the Original Development Agreement was recorded in the Official Records of Orange County, California.

The term “**Initial Heritage Fields Exchange Properties**” shall have the meaning set forth in Recital “G.”

The term “**Institutional Uses**” means the following uses: agriculture, information center, outdoor vendors, parks, public park facilities, pushcarts, public schools and clubs, wireless communications facilities, child care centers, community facilities, cemeteries, funeral homes/mortuaries, government facilities, conference/convention facilities, and utility buildings and facilities.

The term “**IRWD**” means the Irvine Ranch Water District.

The term “**IRWD Bonds**” shall mean bonds issued by IRWD secured by the ad valorem assessments against the Property.

The term “**IUSD**” shall mean Irvine Unified School District.

The term “**JAMS**” shall mean the commercial service dispute resolution service known as JAMS.

The term “**JCFA**” shall mean a Joint Community Facilities Agreement, as provided in Section 53316.2 of the CFD Act.

The term “**LIFO**” shall have the meaning set forth in Recital “G.”

The term “**List of NITM Improvements**” shall have the same meaning as provided in the NITM Ordinance.

The term “**Local Agency**” shall mean any public agency authorized to levy, create or issue any form of land secured financing over all or any part of the Project, including, but not limited to, the City, the RDA and IRWD.

The term “**Lot**” shall mean any of the parcels legally created as a result of any approved final subdivision parcel or tract map or recordation of a condominium plan

pursuant to the California Civil Code Section 1352 for the Property pursuant to the Subdivision Map Act, Government Code Sections 66410 *et seq.*

The term “**Lower Priority Disbursement**” shall have the meaning set forth in Section 7.6.4.

The term “**Master Subdivision Map**” or “**MSM**” shall mean Vesting Tentative Tract Map No. 17008 approved by the City on May 17, 2007, and as amended by the City on October 16, 2008, and as more fully described in Recital “M.”

The term “**Master SWPPP**” shall have the meaning set forth in Section 8.2.1.

The term “**Maximum Special Tax**” means the maximum Special Tax that can be levied in any Fiscal Year on any Assessor’s Parcel of Taxable Property.

The term “**MCAS El Toro**” shall have the meaning set forth in Recital “B.”

The term “**MIA**” shall have the meaning set forth in Recital “M.”

The term “**Mortgage**” shall mean a mortgage, deed of trust, sale and leaseback arrangement, or any other form of conveyance in which the Heritage Fields Property, or a portion thereof or interest therein, is pledged as security, and contracted for in good faith and for fair value.

The term “**Mortgagee**” shall mean the holder of a beneficial interest under a Mortgage, or any successor or assignee of any such Mortgagee.

The term “**Mortgagee Successor**” shall mean a Mortgagee or any third party who acquires fee title or any rights or interest in or with respect to the Property or any portion thereof through foreclosure, trustee’s sale, deed in lieu of foreclosure, lease termination, or otherwise from or through a Mortgagee. If a Mortgagee acquires fee title or any right or interest in or with respect to the Property or any portion thereof through foreclosure or trustee’s sale or by deed in lieu of foreclosure or trustee’s sale and such Mortgagee subsequently conveys fee title to such portion of the Property to a third party, then such third party shall be deemed a Mortgagee Successor.

The term “**Municipal Code**” shall refer to the City of Irvine Municipal Code, as the same existed as of July 12, 2005 or may be further amended from time to time consistent with this Amended and Restated Agreement, or as applicable, with the Original Development Agreement, including, but not limited to, any Zoning Code amendments referenced in Recital “M.”

The term “**NITM**” or “**NITM Program**” shall mean the North Irvine Transportation Mitigation program as set forth in Section 6.1, as the same may be amended from time to time.

The term “**NITM Account**” refers to the account in which all NITM Program funds will be deposited.

The term “**NITM Ordinance**” meaning the Ordinance found at Section 6-3-701 *et seq.* of the Irvine Municipal Code.

The term “**NITM Program Implementing Agreement**” shall have the meaning set forth in Section 6.2.

The term “**Non-Defaulting Party**” shall have the meaning set forth in Section 14.1.

The term “**Non-Park Property**” shall have the meaning set forth in Recital “H.”

The term “**Non-Participating Properties**” shall have the meaning set forth in Section 6.11.

The term “**Non-Residential Value Limitation**” shall have the meaning set forth in Section 7.4.

The term “**Non-Subordinate Bonds**” means CFD Bonds that are senior to the Subordinate Bonds in priority to the Special Taxes and that are used to finance the Proposed Project Facilities and Additional Backbone Infrastructure, if any.

The term “**North Irvine Adjacent Lands**” shall mean the lands included within City Planning Areas 1, 5, 6, 8, 9 and 40, and subject to the NITM Program.

The term “**OCGP Corporation**” shall mean the Orange County Great Park Corporation, a California non-profit corporation and division of the City.

The term “**Original Development Agreement**” shall have the meaning set forth in Recital “D.”

The term “**Original Non-Park Property**” shall have the meaning set forth in Recital “H.”

The term “**Overlapping Liens**” shall mean projected ad valorem property taxes and all direct and overlapping assessments, taxes, special taxes, and charges on the secured tax-roll of the County for each parcel/unit of Taxable Property at the time of CFD formation, excluding however, the Special Taxes assessed or levied pursuant to the CFD.

The term “**Overlay Plan**” shall mean the land use development entitlements for the Property as set forth in the column entitled “**Overlay Plan**” in the Original Development Agreement and depicted on the Conceptual Overlay Plan. The Overlay Plan and Existing Land Use Regulations governed development of the Heritage Fields Property from the Initial Effective Date to the Second Effective Date.

The terms “**Party**” or “**Parties**” shall have the meaning set forth in the opening paragraph of this Amended and Restated Development Agreement.

The term “**PIA**” shall mean the Property Identification Areas delineated by the various lettered or numbered areas appearing on the PIM and intended solely for identification of properties referenced in this Amended and Restated Agreement.

The term “**Police Site**” shall mean a site of approximately five and one-half (5½) acres, to be used primarily as a police facility, but which may permit additional accessory City personnel, devoted to public service functions, as generally shown on Exhibit “F.”

The term “**Project**” shall mean the development of the Heritage Fields Property pursuant to this Amended and Restated Agreement, the Existing Land Use Regulations and the ARDA Overlay Plan, as depicted on Exhibit “L.”

The term “**Property**” shall mean the City Property and the Heritage Fields Property collectively.

The term “**Property Identification Map**” or “**PIM**” shall mean the map showing PIAs (as defined above), as delineated by the various lettered or numbered areas, attached hereto as Exhibit “I.” intended to be used solely to define and describe the properties referenced in this Amended and Restated Agreement.

The term “**Property Owner’s Association**” or “**POA**” shall mean an Association formed among the owners of real estate located within the Heritage Fields Property, including but not limited to industrial, residential, commercial, educational and retail property.

The term “**Proposed Project Facilities**” or “**Backbone Infrastructure**” shall collectively mean the Group A Facilities and the Group B Facilities.

The term “**Pro Rata Share**” shall have the meaning set forth in the RMA.

The term “**Public Benefit Fee**” shall have the meaning set forth in Section 10.1.

The term “**Purchaser/User**” shall have the meaning set forth in Section 2.4.

The term “**RDA**” shall mean the Irvine Redevelopment Agency.

The term “**RDA Agreement**” shall have the meaning set forth in the opening paragraph of this Amended and Restated Development Agreement.

The term “**Residential Value Limitation**” shall have the meaning set forth in Section 7.4.

The term “**RMA**” shall refer to a Rate and Method of Apportionment for each Improvement Area, the form of which is set forth in Exhibit “S” attached hereto.

The term “**Roadway Capacity Utilization**” shall have the meaning set forth in Section 3.12.1.

The term “**School Site**” refers to approximately 13 acres of land area within Parcel 2 on Exhibit “A,” the precise location and boundaries of which shall be determined in accordance with Section 9.4.

The term “**Second Effective Date**” shall mean the date that is the later of (i) forty-five (45) days after the date on which the Parties execute this Amended and Restated Agreement, or (ii) the date upon which the Parties have entered into the Amended MIA.

The term “**Secondary Amount**” means the projected amount of Special Taxes needed in the next Fiscal Year to finance Authorized Services, to the extent not prohibited by the CFD Act or applicable federal law, in excess of the Guaranteed Amount up to an annual maximum of the Indexed SA, less any and all amounts collected by any Landscape and Lighting Maintenance District from the Heritage Field’s Property utilized to fund Authorized Services.

The term “**Special Tax(es)**” means the sum of the special taxes to be levied in each Fiscal Year on each Assessor’s Parcel of Taxable Property within each Improvement Area of the CFD to fund the Special Tax Requirement.

The term “**Special Tax Requirement**” shall have the meaning set forth in the RMA for each Improvement Area.

The term “**Sports Park Site**” shall mean that site identified as PIA 49 and 50 in Exhibit “I.”

The term “**Streetscape Guidelines**” shall have the meaning set forth in Recital “M.”

The term “**Subordinate Bonds**” shall have the meaning set forth in Section 7.8.8.

The term “**Tax Zones**” shall mean the different zones of taxation within each Improvement Area.

The term “**Taxable Property**” means all of the Assessor’s Parcels within the boundaries of the CFD which are not exempt from the Special Tax pursuant to applicable law or the RMA.

The term “**Teeter Plan**” shall mean an alternative method for the distribution of secured property taxes to local agencies as set forth in the Teeter Plan Bond Law of 1994, California Government Code Sections 54773 *et seq.*, and California Revenue & Taxation Code Sections 4701 *et seq.*

The term “**Term**” shall have the meaning set forth in Section 2.3.

The term “**Third-Party Legal Challenge**” shall have the meaning set forth in Section 2.2.2.

The term “**Traffic Generation**” shall have the meaning set forth in Section 3.12.1.

The term “**Tri-Party Agreement**” shall have the meaning set forth in Recital “O.”

The term “**Uniform Construction Codes**” shall have the meaning set forth in Section 3.8.4.

The term "**Value Limitation**" shall have the meaning set forth in Section 7.4.

The term “**Wildlife Corridor**” shall mean that site identified as PIAs 20, 40, 43 and 47 in Exhibit “I.”

The term “**Zoning Code**” shall refer to the City of Irvine Zoning Code, as the same existed as of July 12, 2005, (i) as amended by the 2006 GPA/ZC and (ii) as amended by any zone change relating to the Property approved concurrently with the approval of this Amended and Restated Agreement, and (iii) as may be further amended from time to time consistent with this Amended and Restated Agreement.

2. EFFECT OF AGREEMENTS.

2.1 Effect Of Amended And Restated Development. The Parties intend and direct that this Amended and Restated Agreement be the full understanding between the Parties as to their respective rights and obligations with respect to development of its portion of the Property, and that any interpretation of or dispute with respect to such rights and responsibilities be resolved by reference to this Amended and Restated Agreement.

2.2 Effect Of Original Development Agreement.

2.2.1 Lack of Enforceability; Reinstatement. Because the Parties may not be able to anticipate or expressly provide for every future contingency, the Parties hereby state their general intention that should this Amended and Restated Agreement not be effective or become ineffective, the Original Development Agreement shall govern the Parties’ relationship, and that this Amended and Restated Agreement shall be construed to effectuate that intention.

2.2.2 Effect of a Challenge. If a referendum or third-party action or legal action is instituted which might affect or challenge the validity or enforceability of the enacting ordinance or this Amended and Restated Agreement including its Exhibits, or any provision thereof, or any document implementing the provisions contained in this Amended and Restated Agreement including its Exhibits (“**Third-Party Legal Challenge**”), this Amended and Restated Agreement shall remain in full force and effect subject to (i) any injunction issued by a court of competent jurisdiction, and/or (ii) the legal effect of any voter initiated legislative action. If a Third-Party Legal Challenge results in a temporary or preliminary order enjoining the enforcement of or performance of all or any provision under this Amended and Restated Agreement, or an adverse final

adjudication or legislative action concerning the validity or enforceability of all or any portion of this Amended and Restated Agreement, and such portion of this Amended and Restated Agreement is not severable under Section 20.7, the Original Development Agreement shall remain in full force and effect, and nothing shall impair the rights accorded and vested by the Original Development Agreement.

2.2.3 City Release As To Actions Prior To Second Effective Date. The City forever discharges, releases and expressly waives as against Heritage Fields and its partners, members, attorneys and employees any and all claims, liens, demands, causes of action, excuses for nonperformance (including but not limited to claims and/or defenses of unenforceability, lack of consideration, and/or violation of public policy), losses, damages, and liabilities, known or unknown, suspected or unsuspected, liquidated or unliquidated, fixed or contingent, based in contract, tort, or other theories of direct and/or of agency liability (including but not limited to principles of *respondeat superior*) that it has now or has had in the past, arising out of or relating to the Original Development Agreement, the MIA, the Tri-Party Agreement and the currently existing and approved land use plans for the Property or any portion thereof.

2.2.4 Heritage Fields Release As To Actions Prior To Second Effective Date. Heritage Fields forever discharges, releases and expressly waives as against the City, the RDA, the OCGP Corporation, and their respective councils, boards, commissions, officers, attorneys and employees any and all claims, liens, demands, causes of action, excuses for nonperformance (including but not limited to claims and/or defenses of unenforceability, lack of consideration, and/or violation of public policy), losses, damages, and liabilities, known or unknown, suspected or unsuspected, liquidated or unliquidated, fixed or contingent, based in contract, tort or other theories of direct and/or of agency liability (including but not limited to principles of *respondeat superior*) that they have now or have had in the past, arising out of or relating to the Original Development Agreement, the MIA, the Tri-Party Agreement and the currently existing and approved land use plans for the Property or any portion thereof.

2.3 Term. The term of this Amended and Restated Agreement (as extended, the “**Term**”) shall commence on the Second Effective Date and, except for those provisions in this Amended and Restated Agreement or the Amended MIA that expressly survive the expiration of this Amended and Restated Agreement, shall continue thereafter for a period of twenty-five (25) years from and after the Second Effective Date, with two (2) additional optional extensions of five (5) years at the sole discretion of any Party, unless this Amended and Restated Agreement is terminated, modified or extended by circumstances set forth in this Amended and Restated Agreement or by mutual written consent of the Parties.

2.4 Termination Upon Sale Of Individual Lots To Public And Completion Of Construction. Notwithstanding Section 2.3, the provisions of this Amended and Restated Agreement shall terminate with respect to any individual Lot and such Lot shall be released from and shall no longer be subject to this Amended and Restated Agreement (without the execution or recordation of any further document or the taking of any further action) upon the satisfaction of both of the following conditions: (i) the Lot has been

finally subdivided and sold, leased (for a period longer than one (1) year as evidenced by a lease) or otherwise conveyed to a member of the public or any other ultimate purchaser or user (collectively, a “**Purchaser/User**”) which is not Heritage Fields; and (ii) a certificate of occupancy has been issued for the building or buildings on the Lot or a final inspection of the building(s) has been approved by the City authorizing occupancy. The City shall cooperate with Heritage Fields, at no cost to the City, in executing in recordable form any document that Heritage Fields (including any successor to the title of Heritage Fields in and to any of the previously-described Lots) may submit to confirm the termination of this Amended and Restated Agreement as to any such Lot.

3. DEVELOPMENT OF THE PROPERTY.

3.1 Applicable Regulations; Vested Right To Develop. Other than as expressly set forth herein in Section 3.8, during the Term of this Amended and Restated Agreement, the terms and conditions of development applicable to the Heritage Fields Property, including but not limited to the permitted uses of the Heritage Fields Property, the density and intensity of use, maximum height and size of proposed buildings and provisions for the reservation and dedication of land for public purposes, shall be those set forth in the Existing Land Use Regulations and the ARDA Overlay Plan.

3.1.1 Vested Right To Develop. Subject to the terms and conditions of this Amended and Restated Agreement, Heritage Fields shall have the vested right to carry out and develop the Heritage Fields Property in accordance with the Existing Land Use Regulations and the ARDA Overlay Plan. In furtherance of the foregoing, Heritage Fields retains the right to apportion the uses, intensities and densities, and ADT between itself and any subsequent owners, upon the sale, transfer, or assignment of any portion of the Heritage Fields Property, so long as such apportionment is consistent with the ARDA Overlay Plan and the Existing Land Use Regulations, and so long as the City is provided with written notice of such apportionment within ninety (90) days following any such apportionment.

3.1.2 Right To Future Approvals. Subject to the City’s exercise of its police power authority as specified in Section 3.8.5, Heritage Fields shall have a vested right: (i) to receive from the City all future development approvals for the Heritage Fields Property that are consistent with, and implement, the Existing Land Use Regulations, the ARDA Overlay Plan and this Amended and Restated Agreement; (ii) not to have such approvals be conditioned or delayed for reasons which are inconsistent with the Existing Land Use Regulations, the ARDA Overlay Plan or this Amended and Restated Agreement; and (iii) to develop the Heritage Fields Property in a manner consistent with such approvals in accordance with the Existing Land Use Regulations, the ARDA Overlay Plan and this Amended and Restated Agreement.

3.1.3 Vesting of Future Approvals. Subject to Section 3.6 below, any future development approvals for the Heritage Fields Property, including without limitation general plan amendments, zone changes, or parcel maps or tract maps (except vesting maps), shall upon approval by the City be vested in the same manner as provided

in this Amended and Restated Agreement for the Existing Land Use Regulations and the ARDA Overlay Plan.

3.1.4 Relationship of Vested Rights to Traffic Estimates. The development of the Property is estimated to create 148,910 ADT, of which 117,020 ADT is controlled by the Heritage Fields Property (including 812 ADT for the School Site). The vested rights to develop the Heritage Fields Property for the uses, densities and intensities set forth in the Overlay Plan are estimated to generate 117,020 ADT or fewer overall trips. The vested rights to develop the Heritage Fields Property for the uses, densities and intensities set forth in the ARDA Overlay Plan are also estimated to generate 117,020 ADT or fewer overall trips. The transfer or other conveyance of the Police Site, the ARDA Transfer Site or other real property conveyed or transferred to the City pursuant to this Amended and Restated Agreement shall not include the conveyance of any ADT to the City, or the re-allocation of ADT between the Heritage Fields Property and the City Property. In the event Heritage Fields proposes any significant discretionary changes that would increase the uses, densities or intensities in the ARDA Overlay Plan, Heritage Fields shall provide (i) a study demonstrating that, evaluating the proposed changes under the traffic model and appropriate trip generation, capture and reduction calculations and proposed mitigation, the proposed changes will not result in overall traffic generation exceeding 117,020 ADT, or (ii) an application for a zone change to accommodate any increased traffic above 117,020 ADT.

3.2 Tentative Subdivision Maps. With respect to applications by Heritage Fields for tentative subdivision maps for all or portions of Heritage Fields Property, the City agrees that Heritage Fields may file and process vesting tentative maps in accordance with Chapter 4.5 (commencing with Section 66498.1) of Division 2 of Title 7 of the California Government Code and the applicable provisions of the City's subdivision ordinance, as the same may be amended from time to time. The term of such tentative map(s) and the tentative maps which Heritage Fields has previously filed shall be extended automatically for the Term of this Amended and Restated Agreement.

3.3 Financing And Conveyance Maps. Heritage Fields may file one or more tentative tract maps or tentative parcel maps dividing the Heritage Fields Property into separate legal lots or parcels for financing and conveyance purposes only ("**Financing and Conveyance Map**"). A Financing and Conveyance Map shall not authorize any development, and shall not be subject to any condition, exactions, or restrictions other than monument and other conditions which the City commonly imposes on financing and conveyance maps.

3.4 Processing Of Applications And Permits. Upon satisfactory completion by Heritage Fields of all required preliminary actions and payment of appropriate processing fees, if any, the City shall promptly proceed to process, check, and make a determination on all applications for development and building approvals within the times set forth in the Permit Streamlining Act (Chapter 4.5 (Section 65920) of Division 1 of Title 7 of the California Government Code), the Subdivision Map Act (Division 2 (commencing with Section 66410) of Title 7 of the California Government Code) and other applicable provisions of law, as the same may be amended from time to time.

3.5 Other Governmental Permits. Provided that Heritage Fields pays the reasonable cost of such cooperation, the City shall cooperate with Heritage Fields in its efforts to obtain such additional permits and approvals as may be required by any other governmental or quasi-governmental agencies having jurisdiction over the applicable portion of the Property for which such permit or approval is sought, provided that such permits and approvals are consistent with the Existing Land Use Regulations, the ARDA Overlay Plan and other City approvals for development of the Property; and provided further that such approvals are consistent with applicable regulatory requirements. The City does not warrant or represent that any other governmental or quasi-governmental permits or approvals will be granted.

3.6 Subsequent General Plan Amendments And Zone Changes. Given Heritage Fields' vesting of its right to the development of the Heritage Fields Property in accordance with the Existing Land Use Regulations and the ARDA Overlay Plan, any General Plan amendments or zone changes or any other regulatory approvals (including the MAHP) with respect to development of the Property will not become effective as to the Heritage Fields Property unless consented to in writing by Heritage Fields or its successors-in-interest as to their respective portions of the Heritage Fields Property. By this paragraph the City does not represent that it will accept, process or approve any General Plan, zone change or other regulatory action; provided, however, that the City shall, subject to and consistent with its police power authority, accept, process and approve all regulatory actions required in order to effectuate the vested rights and benefits to Heritage Fields contained herein.

3.7 Assurances To Heritage Fields. The Parties acknowledge that the substantial public benefits to be provided by Heritage Fields to the City pursuant to this Amended and Restated Agreement are in consideration for and reliance upon assurances that the City will permit development of the Heritage Fields Property in accordance with the terms of this Amended and Restated Agreement. Accordingly, the City agrees that it will not attempt to restrict or limit the development of the Heritage Fields Property in conflict with the provisions of this Amended and Restated Agreement. The City acknowledges that Heritage Fields cannot at this time predict the timing or rate at which the Heritage Fields Property will be developed. The timing and rate of development depend on numerous factors such as market demand, interest rates, absorption, completion schedules and other factors which are not within the control of Heritage Fields or the City. In *Pardee Construction Co. v. City of Camarillo* (1984) 37 Cal. 3d 465, the California Supreme Court held that a construction company was not exempt from a city's growth control ordinance notwithstanding that the construction company and the city had entered into a consent judgment (tantamount to a contract under California law) establishing the company's vested rights to develop its property in accordance with the zoning. The California Supreme Court reached this result on the basis that the consent judgment failed to address the timing of development. It is the intent of the Parties to avoid the result of the *Pardee* case by acknowledging and providing in this Amended and Restated Agreement that Heritage Fields shall have the vested right to develop the Heritage Fields Property in such order and at such rate and at such time as Heritage Fields deems appropriate within the exercise of Heritage Fields' sole subjective business judgment, notwithstanding the adoption of an initiative after the

Second Effective Date by the City's electorate to the contrary. In addition to and not in limitation of the foregoing, but except as set forth in the following sentence, it is the intent of the Parties that no City moratorium or other similar limitation relating to the rate or timing of the development of the Heritage Fields Property or any portion thereof, whether adopted by initiative, referendum or otherwise, shall apply to the Heritage Fields Property to the extent that such moratorium, referendum or other similar limitation is in conflict with the express provisions of this Amended and Restated Agreement. Notwithstanding the foregoing, Heritage Fields acknowledges and agrees that nothing herein is intended or shall be construed as (i) overriding any provision set forth in this Amended and Restated Agreement and/or the Amended MIA relating to the phasing of development of the Proposed Project Facilities; (ii) overriding any provision of the Existing Land Use Regulations or the ARDA Overlay Plan relating to the phasing of development of the Project; or (iii) restricting the City from exercising the powers described in Section 3.8 of this Amended and Restated Agreement to regulate development of the Heritage Fields Property. Nothing in this Section 3.7 is intended to excuse or release Heritage Fields from any obligation set forth in this Amended and Restated Agreement and/or the Amended MIA which is required to be performed on or before a specified calendar date or event without regard to whether or not Heritage Fields proceeds with the Project.

3.8 Reservations Of Authority. Notwithstanding any provision set forth in this Amended and Restated Agreement to the contrary, the laws, rules, regulations, official policies and conditions of approval set forth in this Section 3.8 shall apply to and govern development of the Heritage Fields Property:

3.8.1 Consistent Future City Regulations. City ordinances, resolutions, regulations and official policies adopted or approved after July 12, 2005 pursuant to procedures provided by law which do not conflict with the Existing Land Use Regulations, the ARDA Overlay Plan, and this Amended and Restated Agreement shall apply to and govern development of the Property. Without limitation, any future City regulations, whether adopted by voter initiative or City Council action or otherwise, which materially increase the cost of development (except future fees adopted on a city-wide basis as referenced in Section 5.1 below), reduce the density or intensity of the Project below that permitted by the Existing Land Use Regulations and the ARDA Overlay Plan or materially limit the rate, timing or sequencing of development of the Heritage Fields Property, or otherwise materially restrict any of the permitted uses, density, improvements, and construction shall be deemed inconsistent with this Amended and Restated Agreement and shall not be applicable to the development of the Heritage Fields Property, unless Heritage Fields expressly so consents. The parties understand and agree that this Section 3.8.1 applies to the City's future adoption of ordinances, resolutions, regulations and official policies, but not to the imposition of conditions on future subdivision maps, conditional use permits, master plans, or similar discretionary approvals. The extent to which the City may impose conditions in connection with the evaluation of such subordinate discretionary applications is governed by the standards set forth in Section 3.8.5, below.

3.8.2 Overriding State And Federal Laws And Regulations. State and federal laws and regulations which override Heritage Fields' vested rights set forth in this Amended and Restated Agreement shall apply to the Property, together with any City ordinances, resolutions, regulations and official policies which are necessary to enable the City to comply with such overriding State and federal laws and regulations; provided, however, that (i) Heritage Fields does not waive its right to challenge or contest the validity of any such State, federal or local laws, regulations or official policies; and (ii) in the event that any such State or federal law or regulation (or City ordinance, resolution, regulation or official policy undertaken pursuant thereto) prevents or precludes compliance with one or more provisions of this Amended and Restated Agreement, the Parties agree to consider in good faith amending or suspending such provisions of this Amended and Restated Agreement as may be necessary to comply with such State or federal laws, provided that no Party shall be bound to approve any amendment to this Amended and Restated Agreement unless this Amended and Restated Agreement is amended in accordance with the procedures applicable to the adoption and amendment of development agreements as set forth in the Development Agreement Statute and each Party retains full discretion with respect thereto.

3.8.3 Public Health And Safety. Any City ordinance, resolution, regulation, or official policy, which is necessary to protect persons on the Heritage Fields Property in the immediate community, or both, from conditions dangerous to their health, safety, or both, shall apply to the Property notwithstanding that the application of such ordinance, resolution, regulation, or official policy or other similar limitation would result in the impairment of Heritage Fields' vested rights under this Amended and Restated Agreement. To the extent possible, any such regulations shall be applied and construed consistent with this Amended and Restated Agreement so as to provide Heritage Fields with the rights and assurances provided under this Amended and Restated Agreement.

3.8.4 Uniform Construction Codes. Provisions of the building standards set forth in the Uniform Construction Codes shall apply to the Heritage Fields Property. As used herein, the term "**Uniform Construction Codes**" collectively refers to the 2007 California Building Codes, the 2007 California Electric Code, the 2007 California Plumbing Code, the 2007 California Mechanical Code, the 2006 Uniform Solar Energy Code, the 2006 Uniform Swimming Pool, Spa and Hot Tub Code, the 1997 Uniform Housing Code, the Uniform Administrative Code and the 2007 California Fire Code (including amendments thereto by the Orange County Fire Authority), as modified and amended by official action of the City, and any modifications or amendments to any such Code adopted in the future by the City.

3.8.5 Police Power. In all respects not provided for in this Amended and Restated Agreement, the City shall retain full rights to exercise its police power to regulate the development of the Property, and any uses or developments requiring a site plan, tentative tract map, master plan, or other discretionary permit or approval as required pursuant to the Existing Land Use Regulations shall require a permit or approval pursuant to this Amended and Restated Agreement, provided, however, that the City's discretion with respect to such actions shall be exercised consistent with Heritage Fields' vested rights under this Amended and Restated Agreement as set forth in Section 3.1, and

the City acknowledges pursuant to Government Code Section 65865.2 that the conditions, terms, restrictions, and requirements for subsequent discretionary actions or permits shall not prevent development of the Heritage Fields Property for the uses and to the density or intensity of development set forth in this Amended and Restated Agreement. Nothing in this provision shall preclude the City from attaching usual and customary conditions to such discretionary approvals provided such conditions (i) are applied in the same or substantially equivalent form to other similar approvals throughout the City; (ii) do not affect the use, density, or intensity of development previously approved for the Project; (iii) are not materially inconsistent with this Amended and Restated Agreement or the MSM; and (iv) do not require Heritage Fields to intensify or build or cause to be intensified or built additional joint Backbone Infrastructure.

3.9 Uses of City Property.

3.9.1 PIAs 2, 3, 4, 6, 14, 19, 24, 25, 37 and 44. The Parties understand and acknowledge that the land in PIAs 2, 3, 4, 6, 24 and 25, and approximately 100 acres of PIA 14 (collectively, the “**County Parcels**”) will be conveyed by the City to the County pursuant to the County Agreement. As long as the City owns the County Parcels, City may use the County Parcels only for Great Park uses and uses ancillary to park uses (e.g., ancillary food uses), provided that the foregoing is not intended to modify the provisions of Section 7.9 below. The City may use the land in PIAs 19, 37 and 44 in any manner it deems appropriate and consistent with the General Plan and Zoning Code, as those documents may be amended from time to time in the City’s sole and absolute discretion, subject to the rights granted to Heritage Fields in Section 3.9.7 below.

3.9.1.1 The City agrees to cooperate and coordinate in good faith with Heritage Fields in the design of any uses on PIA 19, PIA 37 and/or PIA 44, so as to ensure consistency and compatibility with the design of the Heritage Fields Property that is adjacent to those PIAs.

3.9.2 ARDA Transfer Site. If, when, and to the extent the City develops a use or uses on the ARDA Transfer Site, the City shall, for a period of seven (7) years from and following the Second Effective Date (the “**7-Year Period**”), limit such use or uses to Great Park uses and uses ancillary to Great Park uses (e.g. ancillary food uses), public primary, intermediate and secondary school uses. Following the expiration of the 7-Year Period, the City shall, if, when, and to the extent the City develops a use or uses on the ARDA Transfer Site, limit such uses to Great Park uses and uses ancillary to Great Park uses (e.g. ancillary food uses), which, for this purpose, also includes the following ancillary uses the City may elect, in its sole and absolute discretion, to undertake: no more than one (1) hotel (provided that there are no other hotels on any portion of the Great Park Property, the parties acknowledging and agreeing that there shall be no more than one hotel, collectively, on the ARDA Transfer Site and the remaining portion of the Great Park Property), restaurants that are of the type and nature one would find in a metropolitan park (such as Balboa Park in San Diego, California), small scale retail that is of the type and nature one would find in a metropolitan park (such as Balboa Park in San Diego, California), Institutional Uses, and cemetery/mortuary/funeral homes uses. Notwithstanding the foregoing, this Section 3.9.2 is not intended to affirmatively grant

the right to the ancillary uses described herein (the City acknowledging that the City must first comply with applicable legal processes, if any, and requirements in order to entitle or otherwise implement such uses). In addition, following the expiration of the 7-Year Period, City may also use the ARDA Transfer Site for a maximum of 250 residential units, which units may, in the City's sole and absolute discretion, be all or partially affordable and shall be no more than three (3) stories in height, but this provision is not intended to affirmatively grant the right to the foregoing use (the City acknowledging that the City must first comply with applicable legal processes and requirements, if any, in order to entitle or otherwise implement such use). Affordable units, if any, constructed on the ARDA Transfer Site shall be credited toward the City's and/or the RDA's fulfillment of its affordable housing requirements under the State Redevelopment Law, but shall not count toward Heritage Fields' obligations under the (i) City's Affordable Housing Ordinance (Section 2-3 of the Zoning Code) as amended from time to time, (ii) the affordable housing plan for the Heritage Fields Property, and/or (iii) any agreement entered into between the City and Heritage Fields pursuant to Section 2-3 of the Zoning Code. Nor shall the construction of such affordable housing units, if any, on the ARDA Transfer Site contribute to or constitute a basis for granting any right to construct additional market rate units pursuant to Government Code Section 65915 *et seq.* and/or Section 2-3 of the Zoning Code. The City agrees to cooperate and coordinate in good faith with Heritage Fields in the design of any uses on ARDA Transfer Site, so as to ensure consistency and compatibility with the design of the development the "Park District" portion and the northern part of the Lifelong Learning District of the Heritage Fields Property.

3.9.3 Remaining Great Park Property. If, when, and to the extent the City develops a use or uses on that portion of the Great Park Property that does not include the ARDA Transfer Site, the City shall limit such use or uses to Great Park uses and uses ancillary to Great Park uses (e.g. ancillary food uses), which, for this purpose, also includes the following ancillary uses the City may elect, in its sole and absolute discretion, to undertake: no more than one (1) hotel (provided that there are no other hotels on any portion of the ARDA Transfer Site, the Parties acknowledging and agreeing that there shall be no more than one hotel, collectively, on the ARDA Transfer Site and the remaining portion of the Great Park Property), restaurants that are of the type and nature one would find in a metropolitan park (such as Balboa Park in San Diego, California), small scale retail that is of the type and nature one would find in a metropolitan park (such as Balboa Park in San Diego, California), and Institutional Uses; provided, however, that the City shall not allow any private educational uses (other than public primary, intermediate and/or secondary school uses) or community facilities for non-park-like uses on the Great Park Property for a period of four (4) years following the Second Effective Date (the Parties acknowledging that educational uses, other than public primary, intermediate and secondary school uses, are not permitted on the ARDA Transfer Site until after the expiration of the 7-Year Period). Notwithstanding the foregoing, this Section 3.9.3 is not intended to affirmatively grant the right to the ancillary uses described herein (the City acknowledging that the city must first comply with applicable legal processes and requirements, if any, in order to entitle or otherwise implement such uses).

3.9.4 Construction of a Park. The City acknowledges and agrees that it will construct a park on the Great Park Property substantially in compliance with the Great Park Master Plan, as it may be amended from time to time.

3.9.5 Police Site. The City agrees to restrict the use of the Police Site as specified in Section 9.1. The City agrees to cooperate and coordinate in good faith with Heritage Fields in the design of the Police Site so as to ensure consistency and compatibility with the design of the Heritage Fields Property that is adjacent to the Police Site.

3.9.6 Construction of Specific Park Features. The City shall construct all or some portion of the Sports Park Site and the Bosque Site, and make all or some portion of the Sports Park Site and Bosque Site available to the public, prior to making any other feature on the Great Park Property available to the public. Except for those portions of the Wildlife Corridor and Agua Chinon that are described as Backbone Infrastructure on Exhibits E-1 and E-2 for which Heritage Fields is responsible to construction pursuant to Section 7 below, the City shall further construct the Wildlife Corridor and the Agua Chinon features substantially as depicted on the Great Park Master Plan, in a manner that does not materially interfere with and is calculated to meet the joint infrastructure needs inherent in those features, and City shall continue to retain the land comprising the Wildlife Corridor and Agua Chinon for such uses and purposes during the Term of this Amended and Restated Agreement. The City agrees to continue to meet and confer with Heritage Fields regarding the design of the Wildlife Corridor (including the timing, duration and amount of storm water flows designed to be diverted into the Wildlife Corridor). Nothing in this paragraph is intended to (i) limit the City's ability to build or utilize City funds for the construction of non-Backbone Infrastructure within or around the City Property or any portion thereof; or (ii) release Heritage Fields from any Backbone Infrastructure funding and/or construction obligations it may have under Section 7. Further, the Parties agree to meet and confer in good faith on applicable setbacks or other development limitations from the edge of the Wildlife Corridor prior to the imposition of any such setbacks or other development limitations, provided that such setbacks or limitations shall not in any case prevent Heritage Fields from developing to the density and intensity of use described in the ARDA Overlay Plan.

3.9.7 Right of First Negotiation for Uses on City Property. Until such time as Heritage Fields has completed development and/or sale of all of the Heritage Fields Property, if and when the City intends to sell or enter into a long term ground lease for a use or uses on the City Property other than (a) Great Park uses, (b) uses ancillary to Great Park uses (the Parties acknowledging that uses ancillary to Great Park uses would not, for example, include industrial, office, medical office, large-scale retail, hotel, educational uses except as described in clause (c) below, research and development, and/or residential developments whether for rent or for sale, and hence all such uses would be subject to the right of first negotiation granted in this Section 3.9.7), and/or (c) primary, intermediate, or secondary public school uses, then the City shall (i) present the material terms of the proposed real estate transaction to Heritage Fields, (ii) provide Heritage Fields a reasonable period of time to respond to the proposed material terms, and (iii) if Heritage Fields promptly accepts the proposed material terms, the City will

continue in a negotiation with Heritage Fields until such time as those negotiations are successful, are no longer being diligently and actively pursued by Heritage Fields, or are affirmatively abandoned by Heritage Fields. If Heritage Fields does not accept the proposed material terms or if Heritage Fields affirmatively abandons or ceases to diligently and actively pursue negotiations, the City thereafter may elect to pursue said sale or long term ground lease to conclusion, through direct negotiations with any other potential purchaser(s) or user(s) of the portion of the City Property at issue or a through a public, competitive bidding process for the portion of the City Property at issue, without having to commit and/or continue to negotiate exclusively with Heritage Fields with respect to the City Property at issue; provided, however, that if the transaction is not the subject of a public competitive bidding process and the terms negotiated with a potential purchaser or user materially change from those proposed to Heritage Fields, City shall provide Heritage Fields an additional opportunity to promptly accept or refuse the negotiated terms proposed to such other purchaser or user. In the case of a public competitive bidding process (i.e., where Heritage Fields did not accept the initially proposed material terms or where Heritage Fields affirmatively abandoned or ceased to diligently and actively pursue negotiations with respect to the initially proposed material terms), (i) Heritage Fields shall be permitted to participate as a bidding party, and (ii) the City shall utilize substantially the same terms as were presented to Heritage Fields, but need not include those terms in the public competitive bidding process that are not normally and customarily included in a competitive bidding process (e.g., price). Nothing in this Section 3.9.7 is intended to limit or waive the restrictions on the ARDA Transfer Site as specified in Section 3.9.2 and/or on that portion of the Great Park Property that does not include the ARDA Transfer Site as specified in Section 3.9.3.

3.9.7.1 Limitations on Assignability. The right of first negotiation created by Section 3.9.7 (i) is assignable under this Amended and Restated Agreement only to a successor to Heritage Fields that acts as master developer of the Heritage Fields Property, and (ii) cannot be assigned by the City to more than one entity at any one time.

3.9.8 Development of City Property. City acknowledges that if pursuant to this Section 3.9, or any other means, the City or its successor in interest propose to develop (i) the Great Park Property for any uses, densities, or intensities beyond that contemplated, studied, and approved in the Great Park Master Plan and/or (ii) the remaining City Property for any uses, densities, or intensities beyond those contemplated and studied in the EIR, the City or its successor in interest shall be responsible for the additional mitigation, if any, or increment of such mitigation, if any, required by such increased development, City shall not impose such additional mitigation, on Heritage Fields, either as project mitigation or as part of the Backbone Infrastructure for which Heritage Fields is obligated to pay pursuant to Section 7 of this Amended and Restated Agreement, nor shall City deny or delay approval of any Heritage Field project application for failure to provide such additional mitigation or increment of mitigation. Notwithstanding the foregoing, if the City pays for the additional incremental cost of increasing the size of Backbone Infrastructure facilities necessary to meet its mitigation obligations pursuant to this paragraph, Heritage Fields shall construct that modified/enlarged infrastructure in the time and manner specified in the Amended MIA.

3.10 Homeless Assistance Provider Accommodations. In order to facilitate a cooperative project between Heritage Fields and the providers of lower income and transitional housing (ETHIC), the City agrees to act expeditiously and in good faith to initiate and process for City Council consideration any amendments to the General Plan and to the Zoning Code, if necessary, to expressly authorize up to 166 residential dwelling units on an appropriate location within the Heritage Fields Property. Upon approval, such amendment to the General Plan or the Zoning Code shall be deemed vested by this Amended and Restated Agreement.

3.11 Density Bonus.

3.11.1 Vested Bonus Calculation. The City agrees that because Heritage Fields has committed that 15% (544) of the total of 3,625 residential units in the ARDA Overlay Plan will be affordable housing and that 11% (399) of the total of 3,625 residential units will be classified as Very Low Income and that Heritage Fields will otherwise comply with the provisions of 2-3-10 of the Zoning Code as it existed as of April 10, 2007, Heritage Fields is and shall be, unless otherwise determined by a court of competent jurisdiction, entitled to a density bonus calculated pursuant to state law as it existed as of April 10, 2007, which calculation yields a density bonus of 1,269 market rate units (35%) ("**Density Bonus Units**").

3.11.2 Location and Mitigation. It is understood that the location of any Density Bonus Units generally described in the MAHP will be determined during the subdivision process for any tentative map that is proposed to include the Density Bonus Units. The Density Bonus Units shall be treated as a change in the intensity of development in the relevant Future Development Areas (as defined in the NITM Ordinance) pursuant to Section 6-3-706(A) of the NITM Ordinance and may result in a change in fee allocations between the parties to the NITM Agreement. To the extent the Density Bonus Units require traffic improvements not contemplated in NITM, such mitigation improvements shall be project features. Further, at such time as a location is specified for any of the Density Bonus Units in connection with a future discretionary action, an environmental analysis that fully complies with the requirements of the California Environmental Quality Act shall be conducted, and mitigation (if any) shall be imposed in a manner consistent with the requirements and limitations of the State Density Bonus Law, California Government Code Section 65915 *et seq.*

3.11.3 Affordable Housing Obligations Under the Redevelopment Law. The City understands that, because Heritage Fields is entering into this Amended and Restated Agreement on the expectation that it will have the benefit of the Density Bonus Units as market-rate units, the City agrees it will grant Heritage Fields the full density bonus as provided in Section 3.11.1 as market rate units and that any obligations to construct additional affordable units as a result will be fulfilled by the City or the RDA.

3.12 Traffic.

3.12.1 Incorporation of Project Traffic Generation in City Traffic Model and Traffic Study. The Parties acknowledge that this Amended and Restated Agreement

contains a detailed traffic study (“**ARDA Traffic Study**”), which analyzes the future traffic that will be generated by the Project other than the Density Bonus Units (“**Traffic Generation**”), and which describes the extent to which such future Traffic Generation will utilize the capacity of existing and planned future roads, freeways/tollway mainlines, freeway/tollway ramps, and intersections in the City and the surrounding area (“**Roadway Capacity Utilization**”). The City agrees that it will incorporate this Traffic Generation based on the trip generation rates utilized in ARDA Traffic Study and Roadway Capacity Utilization by the ARDA Overlay Plan as part of the City’s current ITAM traffic model and future ITAM updates, and the City will include these same items in future traffic studies which it may prepare regarding future development or roadway planning projects. At such time as the Density Bonus Units (or portions thereof) are located by Heritage Fields and an environmental analysis conducted and mitigation (if any) imposed as set forth in Section 3.11.2 above, the traffic generated from such Density Bonus Units shall be deemed to be part of the "Traffic Generation" and "Roadway Capacity Utilization" for all purposes under this Amended and Restated Agreement.

3.12.2 Reservation of Roadway Capacity Utilization by the City. The City agrees that it shall, in the manner specified in this Section 3.12, reserve the Roadway Capacity Utilization for the implementation of the ARDA Overlay Plan except as set forth in the following sentence. After construction and occupancy of each housing unit on the Heritage Fields Property, the City may reduce the Traffic Generation attributable to such unit if the City determines that actual trip generation from such unit is less than the projected trip generation used in the ARDA Traffic Study. The City agrees that Heritage Fields has, through the ownership of existing roadways in the City it acquired and the construction of improvements specified in the project design features and mitigation measures adopted as part of the ARDA Overlay Plan, fully mitigated for the impacts of the Traffic Generation of the ARDA Overlay Plan, except as specifically noted in the ARDA Traffic Study and any findings adopted by the City therewith. The City also agrees that as part of the approval of future tentative subdivision maps or subsequent discretionary actions and permits for the ARDA Overlay Plan that it will not require Heritage Fields to provide, construct, fully fund or fair-share fund additional roadway right-of-way, capacity, or improvements, except as expressly provided in Section 3.12.5 below. In addition, Heritage Fields will not be required to lower the Traffic Generation of the ARDA Overlay Plan, based upon the trip-generation rates included in the ARDA Traffic Study, in order to reduce impacts on the surrounding roadway system.

3.12.3 Future Unanticipated Changes in Traffic Generation Rates. The ARDA Traffic Study utilized the best available information to estimate the traffic generation rate and the amount of traffic that will be generated by each residential dwelling unit of and the non-residential building entitlement for the Project. The Parties acknowledge that the City may determine that a subsequent discretionary action or permit required for the Project will require additional or supplemental environmental analysis under CEQA and such analysis may determine that the City must use different traffic generation rates to accurately reflect the Project’s traffic impact to comply with CEQA. Such analysis shall not result in any reduction or increase in the Project’s traffic mitigation requirements. Notwithstanding the above, nothing in this section shall require

the City to grant any subsequent discretionary action or permit, or make any determination under CEQA, that would result in conditions dangerous to health or safety as defined in Section 3.8.3 of this Amended and Restated Agreement.

3.12.4 Future Unanticipated Traffic from Additional Development and Unanticipated Changes in Roadways; Trip Obligations. The ARDA Traffic Study includes all of the anticipated traffic from existing and anticipated future development, including development which is authorized by the general plans and zoning codes adopted by the City and other jurisdictions. The Parties acknowledge that in the future it is possible that unanticipated new projects and changes in approved development could generate new traffic not included in the ARDA Traffic Study, which could result in an unanticipated significant adverse impact caused by those projects. Mitigation for such unanticipated traffic or traffic congestion is the responsibility of those other projects, and not the responsibility of Heritage Fields as part of the implementation and construction of the ARDA Overlay Plan. The Parties also acknowledge that as a result, in this situation the Project would not be contributing to any cumulative significant adverse impact as defined under CEQA, because the Project's contribution has already been fully mitigated, and such new adverse traffic impacts would be completely caused by such unanticipated traffic, and there would be no relationship or nexus between the ARDA Overlay Plan and any other further traffic mitigation or traffic improvements beyond those provided for in Project, the ARDA Overlay Plan, or the EIR. To the extent either Heritage Fields, the City or any other entity seeks approvals for any portion of the Property that involve a volume or distribution of traffic on the Property that (i) are not contemplated in, and exceed, those contemplated in the ARDA Traffic Study; or (ii) would modify traffic mitigation measures approved for the Property, such a modification of mitigation or change in use by one Party shall not increase the mitigation or affect the uses allocated and available to the other Party. Accordingly, if Heritage Fields or the City (or other user) were to apply for a use that would generate more traffic than is currently allocated or credited to the particular property (as initially allocated pursuant to Section 3.1.4 above and as allocated further in accordance with Section 3.1.1), it would be required to provide appropriate additional mitigation over and above the Project traffic mitigations to allow for such additional trips, notwithstanding the fact that total Project traffic trips allocated to some other source (*e.g.*, Heritage Fields) have not yet been utilized.

3.12.5 Additional Mitigation Measures. The Parties agree that if there is future unanticipated traffic from additional unanticipated development, unanticipated changes in roadways, and/or future unanticipated changes in traffic generation rates or other changed conditions, the City must approve the Subsequent Discretionary Approvals under the ARDA Overlay Plan for the Property without imposing any additional mitigation measures, conditions, or requirements relating to traffic circulation, unless future litigation determines that portions of the Amended and Restated Agreement are invalid. The Parties intend and determine that NITM, as more particularly set forth in Section 6 below, is full mitigation for transportation and traffic impacts of Heritage Fields' planned development of the Project, reserving to the City only the right to require in-tract, *i.e.*, on the Heritage Fields Property, traffic improvements at the time of submittal of future tentative subdivision maps or subsequent discretionary actions. However, if, despite the Parties' agreement under NITM and their vigorous mutual

defense of any Third-Party Challenge, a final, non-appealable determination is made by a court of competent jurisdiction that the City can and must impose additional off-site traffic mitigation before approving future tentative subdivision maps or subsequent discretionary actions for the Project, and the City in good faith and pursuit of due diligence cannot obtain other funding for such additional mitigation, Heritage Fields and the City each agree to pay one-half of the remaining unfunded cost of such additional mitigation as and when the same becomes due and payable.

3.12.6 Allocation of Cumulative Mitigation for Traffic. The Parties recognize that additional traffic may cause cumulative impacts on Project traffic mitigation which go beyond those resulting from a particular use or increase in density. For example, one Party may increase traffic at a particular intersection from .87 to .89, and then a second Party will propose an increase from .89 to .91. The second Party may be subject to increased mitigation, in addition to the .02 increase from its proposal, because the combined traffic pushes the intersection into a new level of service. The Parties agree that to the extent such additional mitigation is caused by the cumulative effects of several Parties' traffic impacts, the Parties will share such additional mitigation costs in a proportionate manner.

3.13 RDA Obligations. To the extent relevant, now or in the future, the obligations of the RDA with respect to Heritage Fields' vested rights, regulation of the Property, transfers of property, designation of uses and all other provisions of this Amended and Restated Agreement shall be the same as the City. The RDA acknowledges and agrees that the obligations set forth under this Amended and Restated Agreement are consistent with the RDA's adopted Redevelopment Plan.

3.14 Cooperation in Land Use Planning For Edge Conditions. The Parties agree to meet and confer with each other from time to time to ensure consistency in their respective land use planning efforts, particularly with respect to those areas where the City Property and the Heritage Fields Property share common boundaries.

4. ARDA Overlay Plan.

4.1 ARDA Overlay Plan. Land use and development on the Heritage Fields Property shall be governed by the "**ARDA Overlay Plan**", attached hereto as Exhibit "L" and adopted as part of the approval of this Amended and Restated Agreement. The ARDA Overlay Plan supersedes the Conceptual Overlay Plan and the Overlay Plan (Table A-5) in the Original Development Agreement. Notwithstanding any other provision of this Amended and Restated Agreement, Heritage Fields shall have the right but not the obligation to build the uses specified in the ARDA Overlay Plan at the locations specified in the ARDA Overlay Plan.

4.2 Priority Of ARDA Overlay Plan. The City has determined that the ARDA Overlay Plan is consistent with the General Plan and Zoning Code. As such, the ARDA Overlay Plan shall be the primary document governing the use and development of the Heritage Fields Property. In the event of any conflict or inconsistency between the

ARDA Overlay Plan and the compliance activities required by the Agency Permits, the Agency Permits shall control.

4.3 Changes in Land Use, Circulation Access and Mitigation Requirements. The City and Heritage Fields may agree on changes to the mitigation requirements or project design features in writing without amending this Amended and Restated Agreement.

5. FEES.

5.1 Development Fees. During the Term of this Amended and Restated Agreement, the City shall not levy or require with respect to development of the Heritage Fields Property any site-specific Development Fees that are not of general application and are imposed, expressly or effectively, only on the Heritage Fields Property, except those set forth in this Amended and Restated Agreement (including but not limited to the NITM Program fees described in Section 6 and the Public Benefit Fee described in Section 10) and those in effect on July 12, 2005. It is understood that the preceding limitation on the City's imposition of Development Fees shall not limit the City from levying against the Heritage Fields Property additional Development Fees to the extent such development fees are imposed by the City on a city-wide basis and are actually applicable to and paid by a significant portion of other properties in the City.

5.2 Other Fees And Charges. Except as specifically set forth in Section 5.1, nothing set forth in this Amended and Restated Agreement is intended or shall be construed to limit or restrict the City's authority to impose new processing fees or charges, assessments, or taxes for development of the Heritage Fields Property or to increase any existing processing fees or charges which may apply to the Property, assessments or taxes, and nothing set forth herein is intended or shall be construed to limit or restrict whatever rights Heritage Fields might otherwise have to challenge any processing fee or charge either not set forth in this Amended and Restated Agreement or not in effect as of the Second Effective Date. In connection therewith, Heritage Fields agrees that it must comply with and is subject to the payment of school impact fees in accordance with Government Code §§ 65995, *et seq.* In furtherance of the foregoing, the City shall not, subsequent to the Effective Date of this Amended and Restated Agreement, impose any new fee or requirement upon the Project for the purpose of raising revenue for the provision of affordable housing not otherwise set forth in the Affordable Housing Ordinance as vested in this Agreement.

6. NORTH IRVINE TRANSPORTATION INFRASTRUCTURE.

6.1 NITM Ordinance. On or about June 10, 2003, the City adopted the NITM Ordinance establishing a fee program to be paid on all construction within the northern portion of the City (including the Property and the North Irvine Adjacent Lands) for the coordinated and phased installation of required traffic and transportation improvements (the "NITM Program"). The NITM Program is incorporated by reference and shall be considered part of this Amended and Restated Agreement. The NITM Ordinance and NITM Program as adopted by the City are included in the Existing Land Use Regulations

under the terms of this Amended and Restated Agreement. The City and Heritage Fields shall implement the NITM Program.

6.2 Concurrent Agreement(s) With North Irvine Adjacent Lands Owner. On or about June 10, 2003, the City adopted its Ordinance No. 03-20, approving the “**NITM Program Implementing Agreement**” by and between (i) the City and (ii) The Irvine Company and The Irvine Community Development Company LLC. The NITM Program Implementing Agreement is an agreement governed by the Development Agreement Statute, and provides that the owners and developers of the North Irvine Adjacent Lands will participate in the NITM Program.

6.3 Waiver Of Objections Due To Allocation And Apportionment Of NITM Fees. Heritage Fields acknowledges that the Property is subject to the terms and conditions of the NITM Program and that Heritage Fields shall participate in the NITM Program and perform the obligations required of it thereunder. Heritage Fields acknowledges that no NITM Program fees or costs are assessed or imposed upon (i) PIA 19, (ii) PIA 37, (iii) PIA 44, and (iv) the Great Park Property, excepting that portion of the Great Park Property that is the ARDA Transfer Site. Heritage Fields further acknowledges and agrees that the fees associated with each of these areas under the NITM Program will be paid by Heritage Fields in connection with the Parcel (as defined in the NITM Ordinance) in which the exempted area is located. Such fees have been reallocated to the various allowable uses on the Parcels, and shall be payable at such time as the fees for development of the various uses on the Parcels are otherwise due under the NITM Program, and Heritage Fields shall have the right to pay the fees imposed by the NITM Program under any of the alternative payment procedures set forth in the NITM Program. By the execution of this Amended and Restated Agreement, Heritage Fields waives any objection to, and covenants not to sue the City with respect to, any issue in any way relating to the adopted allocation of costs, expenses and fees contained in the NITM Program as of the Second Effective Date, by and among the various areas, including any and all portions of the Property. Heritage Fields does not waive any objection or make any covenant not to sue as to any subsequent allocations by the City that are inconsistent with the NITM Program.

6.4 Limitation On Heritage Fields’ Obligation To Pay NITM Fees For City Property. Notwithstanding any other provision of this Amended and Restated Agreement, Heritage Fields’ obligation to pay NITM fees for that portion of the City Property described in Section 6.3 is limited to the amount of NITM fees that would be payable for those portions of the City Property, had those portions of the City Property been developed in accordance with the assumptions in the 2003 Project Approvals. If, and to the extent, the amount of fees attributable to those portions of the City Property exceeds the fees that would have been payable for those portions of the City Property had those portions of the City Property been developed in accordance with the assumptions in the 2003 Project Approvals, the City shall be responsible for the resulting additional NITM fee increment at the time the same is due under the NITM Ordinance. The City agrees that it will process all NITM traffic studies and fee allocation plans required under NITM.

6.5 Commitment Regarding Payment Of NITM Fee Established For Each Future Development Area. Heritage Fields agrees that, except as set forth in Section 6.3 and Section 6.4, it shall pay the NITM fees as provided in the NITM Ordinance, including without limitation the fees required to be paid for each Future Development Area within the property owned by Heritage Fields under the terms and conditions of the NITM Ordinance. Pursuant to the NITM Ordinance, the Parties agree that Heritage Fields shall be regarded by the City as having remaining “developable land” within its Future Development Area so long as there is vacant land remaining (for which no building permit has been applied for and issued to Heritage Fields) which has been subdivided or which is reasonably likely to be subdivided and used for the construction of new buildings under the provisions of the Existing Land Use Regulations, and the ARDA Overlay Plan, regardless of whether or not Heritage Fields has applied for or the City has permitted such development.

6.6 Notice Of NITM Program To Heritage Fields And Purchasers Of The Property. Heritage Fields shall include notice of the NITM Program obligations pursuant to this Amended and Restated Agreement in each instrument conveying any portion of the Heritage Fields Property to a developer, merchant builder or corporate or institutional purchaser of a portion of the Heritage Fields Property.

6.7 Commitment Regarding Sale Price For Right-Of-Way Land Owned By Heritage Fields Specified In NITM Program. The NITM Program, as adopted by the City, specifies and refers to certain real property which is contemplated to be acquired by the City to construct the specified NITM traffic improvements. The City has indicated to Heritage Fields that if the City cannot acquire such real property through a voluntary sale from Heritage Fields at a price acceptable to the City, the City’s management would recommend to the City Council the adoption of a resolution of necessity for the acquisition of such real property by eminent domain, and pursuit of an action in eminent domain. Under this threat of condemnation by the City, Heritage Fields agrees to sell this specified land to the City upon reasonable terms and conditions at a sale price specified in the NITM Program, with the 5% escalation factor in the sale price as defined in the NITM Program.

6.8 NITM Account. The City shall maintain a separate account (the “**NITM Account**”) under its custody and control to hold all fees collected in trust for the benefit of the participants in the NITM Program. All fees collected under the NITM Program, all fees collected as conditions of approval or other fair share fees from Non-Participating Properties under Section 6.11 below, and all fair share fees collected from landowners and developers in the North Irvine Adjacent Lands under Section 6.10 below, shall be deposited in the NITM Account. All interest or other income earned by the funds in the NITM Account shall accrue and be deposited in such account. As set forth in the NITM Program, the City shall be reimbursed its reasonable costs for administering and maintaining this NITM Account.

6.9 Independent Nature Of Obligations. The obligations of Heritage Fields, the City, and the developers and landowners in the North Irvine Adjacent Lands are independent.

6.10 City Covenant To Obtain NITM Or Fair Share Fees From North Irvine Adjacent Lands. As of the date of this Amended and Restated Agreement, the City has already entered into the NITM Program Implementing Agreement referenced in Section 6.2 with The Irvine Company and the Irvine Community Development Company LLC to obtain from them the fees and improvements contemplated in the NITM Program. The failure of the City to obtain, enforce or otherwise implement such agreement shall not invalidate this Amended and Restated Agreement or the NITM Program, which shall remain in effect, and such failure shall not operate to increase or decrease the obligations of Heritage Fields under the NITM Program or under this Amended and Restated Agreement. The City covenants that, to the extent permitted by law, it shall make a good faith effort to approve and implement such NITM Program Implementing Agreement. Should such NITM Program Implementing Agreement not be implemented in whole or in part for the North Irvine Adjacent Lands, to the extent permitted by law, the City shall require the landowners and developers of the North Irvine Adjacent Lands to pay fees representing the fair share of such North Irvine Adjacent Lands for the traffic improvements that will be utilized by uses in the North Irvine Adjacent Lands, including any of the List of NITM Improvements that will be constructed or fully or partially financed under the NITM Program, and as specified by the NITM Ordinance, including without limitation the fees established by the NITM Ordinance for such property. The City further covenants that any fees collected from the North Irvine Adjacent Lands for NITM Program traffic improvements will be deposited in the NITM Account.

6.11 City Covenant To Obtain NITM Or Fair Share Fees From All Property Owners In The North Irvine Adjacent Lands. Certain properties in the North Irvine Adjacent Lands are not included in the NITM Program Implementing Agreement (“**Non-Participating Properties**”). Should any of these Non-Participating Properties seek to develop in a manner which will increase traffic from those properties, the City covenants that it shall, to the extent permitted by law, require the payment of fees representing such Non-Participating Properties’ fair share of the traffic improvements which will be used by this traffic, including any NITM Program traffic improvements. The City further covenants that any fees collected from Non-Participating Properties for NITM Program traffic improvements shall be deposited in the NITM Account.

6.12 City Covenant To Use NITM Fees And NITM Account For NITM Program. The City shall use the funds in the NITM Account, and all fees collected under the NITM Program, solely for the purposes authorized in the NITM Program. As set forth in the NITM Program, no funds may be used by the City for traffic improvements or other purposes which are not NITM Program traffic improvements, without the consent of Heritage Fields and the owner(s) of the North Irvine Adjacent Lands.

6.13 Certificate of NITM Compliance. Upon written request from Heritage Fields with respect to an identified legal parcel or lot, or parcels or lots, the City shall deliver within twenty (20) days a certificate confirming that this Amended and Restated Agreement is in full force and effect and whether or not NITM fees have been paid, or if there are any outstanding or future NITM fee obligations with respect to such parcel or parcels.

6.14 Satisfaction Of Mitigation Obligations Or Other Traffic Conditions. The City has adopted certain mitigation measures and conditions of approval for the transportation and traffic impacts of the development of the Property pursuant to the Existing Land Use Regulations and the ARDA Overlay Plan. The City has determined based upon a nexus fee study that the costs of the NITM Program are fairly apportioned to the Property included within the NITM Program as set forth in the NITM Ordinance, based upon calculations of average daily trips in a manner which has a nexus to, and is proportional to, the traffic which will be generated by all of the development contemplated in the ARDA Overlay Plan. The City hereby agrees that this Amended and Restated Agreement and the obligations to participate in the NITM Program contained in this Amended and Restated Agreement fully satisfy each and every existing mitigation and condition of approval set forth in the Master Subdivision Map. For future mitigation measures and conditions of approval for transportation and traffic impacts of Heritage Fields' planned development of the Project, the City has determined that the NITM Program will fully satisfy such obligations. The City intends to utilize the following mitigation measure and condition of approval for all development within the Property, including any future discretionary approvals adopted for the Property which the City intends to be applicable to the Property under this Amended and Restated Agreement: "Applicant (or property owner or developer) shall mitigate its traffic and transportation impacts by participation in the NITM Program established by Ordinance No. 03-20 and the Amended and Restated Development Agreement recorded on 12/27/2010, against the Property." Notwithstanding any other provision of the Amended and Restated Agreement, the Parties agree that in addition to this mitigation measure and condition of approval, the City may also add conditions to the approval of a subdivision tentative tract map for development of the Heritage Fields Property for site specific in-tract, i.e., on the Heritage Fields Property, traffic improvements that provide Project access drives, internal streets and traffic control measures within the area to be subdivided. Heritage Fields acknowledges that the City retains the discretion to judge the adequacy of traffic improvements and mitigation in the future, and that the City may exercise that discretion to update the NITM Program through future "Comprehensive Traffic Studies" as defined in and pursuant to the NITM Ordinance.

6.15 Independence Of Obligations. Heritage Fields shall be responsible for traffic mitigation, including payment of NITM fees, in connection with the development of the City Property, so long as development of that property remains within the overall traffic mitigation and ADT allocation assigned to the City. If, however, the City exceeds its mitigation measures (e.g., by substituting a use with higher peak hour generation) or its overall trip allocation, Heritage Fields will not be responsible for the additional increment of mitigation (if any) caused thereby, nor will it be responsible for the additional increment of NITM fees (if any) resulting therefrom.

7. CONSTRUCTION AND MAINTENANCE OF PUBLIC IMPROVEMENTS; FINANCING OF SAME

7.1 Heritage Fields' Obligations to Construct and Fund Construction. Heritage Fields has the obligation to construct or cause to be constructed, and to pay for the construction of, the Proposed Project Facilities, which shall not be conditioned upon

(i) the formation of the CFD, or (ii) issuance of Non-Subordinate Bonds; provided, however, (a) the obligation to construct and/or pay for the Proposed Project Facilities shall not commence to accrue until the Second Effective Date, unless a Third Party Legal Challenge has been brought before that date, in which case such obligations shall commence to accrue ten (10) days after a final adjudication or legislative action rejecting such Third-Party Legal Challenge; and (b) the status of the issuance of Non-Subordinate Bonds shall continue to be part of the Quarterly Infrastructure Meeting Items (as defined in the Amended MIA) discussed and considered as part of the meet and confer process pursuant to Section 4.2 of the Amended MIA. Construction of the Proposed Project Facilities shall be completed in accordance with the phasing and timing requirements and processes set forth in the Amended MIA. The Proposed Project Facilities shall be financed by the levy of Special Taxes, the issuance of Non-Subordinate Bonds, payments by the County to the City under Section 2.2.5 of the County Agreement toward infrastructure components that are part of the Proposed Project Facilities, contributions by Heritage Fields, as described in Sections 7.5, 7.6, 7.7, and 7.8, and possibly other sources or contributions the Parties may obtain to pay for the design and construction of the Proposed Project Facilities (for example, but without limitation, federal, state or local grants); provided, however, that, Heritage Fields shall be responsible for any costs of the Proposed Project Facilities not financed by the Special Taxes, by the Non-Subordinate Bonds, by payments from the County to the City under Section 2.2.5 of the County Agreement toward infrastructure components that are part of the Proposed Project Facilities, or by such other sources or contributions.

7.1.1 Delegation of Construction. The City acknowledges that Heritage Fields intends to delegate its duties to construct the Proposed Project Facilities to its affiliate that holds a California contractors' license ("**Construction Manager**"), and/or to delegate to IRWD, Southern California Edison ("**SCE**") or the County (or contractors engaged by, through or for IRWD, SCE or the County) construction of those portions of the Proposed Project Facilities that may be conveyed, maintained or ultimately constructed by IRWD, SCE or the County, and the City approves such delegation of duties, as more particularly described in the Amended MIA.

7.1.2 Quality Of Construction of Proposed Project Facilities. Heritage Fields agrees that it shall construct or cause the construction of the Proposed Project Facilities and the Additional Backbone Infrastructure (if any) at a level of quality, as reasonably determined by the City, that is at least equivalent to the quality of construction on similar sized master-planned projects that have been approved and/or built within the City since 2001. Such Proposed Project Facilities and Additional Backbone Infrastructure (if any) shall also be constructed in a manner consistent with the Streetscape Guidelines approved by the City's Planning Commission, and which include "green streets" standards as set forth in the Streetscape Guidelines.

7.1.3 Potential Construction of Backbone Infrastructure Initially Funded By City In Event of Third Party Legal Challenge. By mutual agreement, the Parties may elect to proceed with the construction of Backbone Infrastructure during the pendency of a Third Party Legal Challenge; provided, however, that nothing in this Section 7.1.3 shall require that Heritage Fields initially fund such Backbone Infrastructure prior to final

adjudication or legislative action rejecting such Third Party Legal Challenge; the Parties understanding that funding for such Backbone Infrastructure would not be provided by Heritage Fields and/or through Special Taxes assessed or levied through a CFD until such time as the Third Party Legal Challenge is resolved.

7.2 Authorized Services. On an annual basis, the City shall establish a budget, in its sole discretion, for the Authorized Services for the applicable Fiscal Year. The entirety of or portions of the Authorized Services, up to but not to exceed the Indexed GA, shall be paid by Heritage Fields until such time as the CFD is formed. After the formation of the CFD, the entirety of or portions of the Authorized Services shall be paid solely from the Special Taxes in accordance with the provisions of Section 7.6 below. Accordingly, after the CFD is formed, Heritage Fields shall have no obligation to pay the Indexed GA for Authorized Services separately under this Amended and Restated Agreement and rather only through its payment of Special Taxes as a landowner pursuant to the CFD. The Authorized Services shall be funded, in part, by the Indexed GA and the Secondary Amount. The City shall make available to Heritage Fields the annual budget for the Authorized Services. Prior to approval of the budget by the City, at Heritage Fields' request, the City and Heritage Fields shall meet and review the proposed budget. Until such time that the CFD is formed, the Guaranteed Amount shall be paid in two equal installments for each Fiscal Year on or before the date on which real property taxes would otherwise be delinquent (i.e., December 10 and April 10 of each Fiscal Year). The obligation of Heritage Fields to pay the Indexed GA for Authorized Services shall commence to accrue as of the Second Effective Date, unless a Third Party Legal Challenge has been brought before that date, in which case the obligation to pay shall commence to accrue ten (10) days after a final adjudication or legislative action rejecting such Third-Party Legal Challenge (as applicable, the "**Payment Commencement Date**"); provided, however, that if the City elects in its sole and absolute discretion to incur Authorized Services costs during the period between the Second Effective Date and the Payment Commencement Date ("Advanced Authorized Services"), once there has been final adjudication or legislative action rejecting any Third Party Legal Challenge, then the City may demand, and Heritage Fields shall pay to the City the amount of the Advanced Authorized Services up to the Indexed GA due, which payment shall be due on the later of (i) the Payment Commencement Date or (ii) 30 days after the delivery of such demand to Heritage Fields. The obligation of Heritage Fields to pay the Guaranteed Amount for Authorized Services for the Fiscal Year in which the CFD is formed shall be apportioned between the payment obligation under this Amended and Restated Agreement and the payment obligation from the Special Taxes such that there is no overpayment for that particular Fiscal Year.

7.3 Additional Backbone Infrastructure. If the Parties, after a good faith meet and confer process, mutually determine in writing to fund the construction of all or any part of Additional Backbone Infrastructure through the proceeds of Non-Subordinate Bonds and Special Taxes, then Heritage Fields shall have the obligation to construct or cause to be constructed such Additional Backbone Infrastructure.

7.4 Value Limitation. For each Improvement Area, the amount of the Maximum Special Taxes for the portion of the Heritage Fields Property intended to be

developed with residential units shall be established at the time of formation of the CFD in amounts determined by the City, but the amount of the Maximum Special Taxes plus the Overlapping Liens plus the Assumed IRWD Assessment shall collectively not exceed two percent (2%) of the expected base sales price (i.e. the base sale price without any optional upgrades included) of the lowest priced residential unit within each residential Land Use Class (as defined in Table 1 of the RMA) in such Improvement Area at the time of formation of the CFD, as projected in a market study prepared by a third party consultant selected by the City that assumes completion of the residential units (the “**Residential Value Limitation**”). For each Improvement Area, the amount of the Maximum Special Taxes for the portion of the Heritage Fields Property intended to be developed with non-residential improvements shall be the amount set forth in the RMA (the “**Non-Residential Value Limitation**”). The Residential Value Limitation and the Non-Residential Value Limitation are hereinafter collectively referred to as the “**Value Limitation**.” Both the Residential Value Limitation and the Non-Residential Value Limitation shall be recalculated at the time and in the manner set forth in the RMA for each Improvement Area, and, if necessary, the Maximum Special Taxes in the RMA shall be reduced so that such amounts do not exceed the respective Residential Value Limitation and Non-Residential Value Limitation, in the manner specified in the RMA.

7.5 Capacity Allocation on the Project. The Parties hereto agree and recognize that the ability to fund various capital facilities, fees, and/or the GA and the Indexed SA, through the CFD is limited by, among other things, the Value Limitation. In terms of allocating and prioritizing the leverage and/or payment of Special Taxes upon Taxable Property, the overall debt capacity of the Project up to the Value Limitation shall be allocated during the Term in the following order of priority:

7.5.1 Priority 1. Overlapping Liens at the time that the CFD is established;

7.5.2 Priority 2. A sufficient amount to pay the tax supporting IRWD Bonds based upon an assumed amount equal to 10% of the Value Limitation for the Improvement Area (“**Assumed IRWD Assessment**”).

7.5.3 Priority 3. Special Tax levy sufficient to provide the maximum annual amounts set forth on Exhibit "R-2" attached hereto.

7.5.4 Priority 4. Special Tax levy sufficient to pay debt service on one or more series of current and future Non-Subordinate Bonds and Administrative Expenses, the proceeds of which will be used to finance the Proposed Project Facilities and Additional Backbone Infrastructure, if any.

7.5.5 Priority 5. The difference between the (i) the Indexed GA set forth in Exhibit "R-1" and (ii) Guaranteed Amount set forth in Exhibit "R-2" (the difference being the “**Index Delta**”).

7.5.6 Priority 6. Special Tax levy sufficient to pay, or to reimburse amounts previously paid by Heritage Fields, for the construction of Proposed Project Facilities and Additional Backbone Infrastructure, if any.

7.5.7 Priority 7. Special Tax levy sufficient to pay the Authorized Services in excess of the Indexed GA up to a maximum of the Secondary Amount per year.

7.5.8 Priority 8. Any remaining Special Tax revenues which have not been allocated to one or more of the activities, services, or categories described above (the “**Excess Special Tax Capacity**”), shall be divided so that Heritage Fields possesses the ability to designate and/or leverage two-thirds (2/3) of said Excess Special Tax Capacity upon any and all Authorized Facilities and the City shall possess the ability to use and/or leverage one-third (1/3) of the Excess Special Tax Capacity upon any and all Authorized Facilities and all services within the CFD Area and/or those areas adjacent to the CFD Area that are part of the Property otherwise authorized under applicable law to be funded from Special Tax revenues.

7.6 Application of Special Taxes. The Parties hereto agree and recognize that all Special Taxes collected in any Fiscal Year in an Improvement Area (by payment or foreclosure), and any penalties and interest on delinquent amounts collected by foreclosure or otherwise, in any Fiscal Year, not owed to or held by the County, shall be pledged to the payment of (A) debt service on all outstanding Non-Subordinate Bonds issued for such Improvement Area due on (i) any payment dates prior to the date of collection of such Special Taxes and (ii) the next payment dates, in the calendar year commencing in such Fiscal Year, and (B) Bond Costs associated with any outstanding bonds issued for another Improvement Area of the CFD, but only if the Special Taxes were pledged to pay the Bond Costs associated with bonds issued in another Improvement Area of the CFD pursuant to the Indenture, and only in the manner, to the extent, and for the duration set forth in the Indenture, in each case only to the extent that there are insufficient funds on deposit under the Indenture to pay such debt service. After satisfying the payment of debt service on the Non-Subordinate Bonds for which the Special Taxes in such Improvement Area were pledged as set forth in (A) and (B) above in the foregoing manner, the remaining Special Taxes may be applied to finance the Authorized Facilities and Authorized Services, including Subordinate Bonds, in the priority set forth below (with all items of a higher priority being satisfied before application to items of lower priority):

7.6.1 To restore or establish any Non-Subordinate Bond reserve fund for which Special Taxes were levied.

7.6.2 To pay outstanding Administrative Expenses and to fund an account to pay for any Administrative Expenses for Non-Subordinate Bonds in the next Fiscal Year in the amount calculated as part of the Special Tax Requirement.

7.6.3 To pay the Guaranteed Amount for such Improvement Areas. The Guaranteed Amount may be used to finance the Authorized Services and debt service and related expenses on the Subordinate Bonds.

7.6.4 Subject to the City's priority of use of Special Taxes following the City's exercise of its self-help rights under Article XIII of the Amended MIA, and so long as Heritage Fields is not in material breach of this Amended and Restated Agreement or the Amended MIA beyond applicable notice and cure periods, to fund and pay for the Proposed Project Facilities in accordance with Section 7.1 either directly or in reimbursement of costs advanced by Heritage Fields, it being understood that Special Taxes may accumulate in the appropriate fund or account created for each Improvement Area (hereinafter, the "pay-as-you-go fund") to pay such Proposed Project Facilities that have not yet been constructed until actual costs of all Proposed Project Facilities are paid in full. Any shortfalls, current or past, in the payment of the Guaranteed Amount and replenishments of any bond reserve fund under any Indenture relating to the applicable Improvement Area shall be paid from the pay-as-you-go fund upon the deposit of sufficient monies. At such time that (i) the balance in the pay-as-you-go fund for all Improvement Areas, when combined with the remaining net proceeds of any bonds issued by the CFD for the financing of Proposed Project Facilities and any mutually agreed upon Additional Backbone Infrastructure, is at least as much as the projected costs of the Proposed Project Facilities and any mutually agreed upon Additional Backbone Infrastructure that have not yet been constructed (as such projected costs are determined by an independent engineer mutually selected by Heritage Fields and the City, which estimate shall include a twenty-five percent (25%) contingency), and (ii) such projected costs are equal to or less than Twenty Million Dollars (\$20,000,000), then in such Fiscal Year, the City may direct that the amount of Special Taxes collected by the City in such Improvement Area in such Fiscal Year that are not needed to be reserved to cover the projected costs be allocated, in an amount and for items specified by the City, to the lower priority set forth in Section 7.6.5 and 7.6.6 below. Because the pay-as-you-go fund in an Improvement Area may be utilized to make up delinquencies in the payment of the Guaranteed Amount or for any deficiencies in the reserve fund for such Improvement Area, the calculation in the preceding sentence shall be conducted annually, and in each subsequent year, to the extent that there is a shortfall in the amounts available to pay the Proposed Project Facilities and any mutually agreed upon Additional Backbone Infrastructure, the Special Taxes shall be deposited in the pay-as-you-go fund before allocating any Special Taxes pursuant to Section 7.6.5 and 7.6.6. below. The City shall pay amounts from the pay-as-you-go fund for Proposed Project Facilities or any mutually agreed upon Additional Backbone Infrastructure upon request by Heritage Fields, in accordance with the payment requisition procedures set forth in the Amended MIA. If the City directs that Special Taxes be allocated to a lower priority level in accordance with the preceding sentence (a "**Lower Priority Disbursement**") and if Heritage Fields is not reimbursed in full for the reimbursable costs of Proposed Project Facilities and any mutually agreed upon Additional Backbone Infrastructure in the time required under the Amended MIA, City shall remit to Heritage Fields within sixty (60) days of written demand the amount of funds disbursed for a Lower Priority Disbursement that were not paid to or for the benefit of Heritage Fields pursuant to Section 7.6.6 below, in accordance with the payment requisition procedures set forth in the Amended MIA, from

Special Taxes allocated pursuant to Section 7.6.3, Section 7.6.5, and the City's portion of Special Taxes allocated pursuant to Section 7.6.6, or other funds.

7.6.5 To City to pay the Secondary Amount.

7.6.6 For Authorized Facilities and Authorized Services as provided pursuant to Section 7.5.8.

7.7 Formation of the CFD. Subject to the provisions of this Section 7, the Authorized Facilities and Authorized Services shall be funded through the City's formation of a single CFD. Within the CFD, the City and Heritage Fields shall agree on the designation of multiple improvement areas ("**Improvement Areas**"), which may include two or more Tax Zones within each Improvement Area. The RMA for each Improvement Area shall be in the form of the RMA attached hereto as Exhibit "S", except that the following information, at a minimum, in an RMA for an Improvement Area shall be altered (by mutual written agreement of the City and Heritage Fields) to reflect Improvement Area specific information: (a) the identity of the Improvement Area; (b) the Maximum Special Taxes identified in Section C of the RMA; (c) the data identified in Table 2; (d) the amount of exempt acreage in Sections F and I of the RMA; (e) the Prepayment Portion of the Special Tax for both Residential Property and Non-Residential Property set forth in Section I of the RMA; (f) the percentages set forth in Section I; and (g) the percentages in Section J of the RMA. In addition, the City and Heritage Fields may, at any time prior to formation of the CFD, alter any terms of the RMA by mutual written agreement. Nothing in this Section 7.7 shall prevent an amendment of any RMA for an Improvement Area pursuant to the Change Proceedings, as set forth in Section 7.7.7. The City shall not form a CFD for the Property that has an RMA in form or substance different from the RMA attached hereto as Exhibit "S" (as amended in each case as set forth above).

7.7.1 Heritage Fields shall execute and deliver to the City a petition as described in Section 53318(c) of the California Government Code (the "**CFD Petition**") within ninety (90) days after the Second Effective Date, unless a Third Party Legal Challenge has been brought before that date, in which case Heritage Fields shall execute and deliver the CFD Petition to the City within ten (10) days after a final adjudication or legislative action rejecting such Third-Party Legal Challenge. Upon the delivery of the CFD Petition, the City shall conduct the required proceedings as set forth in Government Code Section 53311 *et seq.*, including but not limited to, the City adopting a Resolution of Intention to establish the CFD within ninety (90) days from the submission of the CFD Petition and the payment of any applicable deposit, and then the City holding a public hearing on the establishment of the CFD within thirty (30) days to sixty (60) days after the adoption of the Resolution of Intention.

7.7.2 Subject to the limitations set forth in this Amended and Restated Agreement (including, without limitation, Sections 7.4 and 7.5), Heritage Fields agrees to cooperate with the City and take all reasonable actions to accomplish the formation of the CFD, the designation of the Improvement Areas, the imposition of Special Taxes within each Improvement Area, and the authorization of bonded indebtedness within each

Improvement Area necessary in conjunction with the bonded indebtedness authorized in all other Improvement Areas to finance the Authorized Facilities and Authorized Services, including without limitation, if required by the City as to the CFD and each and every Improvement Area, the submission of a ballot to the City in favor of the formation of the CFD, the designation of Improvement Areas, the levying of such Special Taxes, and the authorization of bonded indebtedness within each Improvement Area necessary in conjunction with the bonded indebtedness authorized in all other Improvement Areas to finance the Authorized Facilities and Authorized Services, and to require any purchaser, other than a Purchaser/User, of Heritage Fields Property to vote accordingly. While it is acknowledged that this Amended and Restated Agreement cannot require the City or the City Council to form the CFD, the City represents that it can, and does hereby, agree that it shall not refuse Heritage Fields' requests to form the CFD, except for good and reasonable cause. Good and reasonable cause includes, without limitation, an adopted City-wide policy, enacted after reasonable notice to Heritage Fields, that does not allow for or discourages the formation of a CFD.

7.7.3 Each Improvement Area shall be authorized to finance any or all of the Authorized Facilities, irrespective of the geographical location of the Authorized Facilities or the phase in which the Authorized Facilities are constructed. Each Improvement Area shall be authorized to finance any or all of the Authorized Services irrespective of the geographic location of the Authorized Services.

7.7.4 The Special Taxes set forth in an RMA shall be secured by recordation in the Official Records of the County of Orange of continuing liens against all or portions of the property included within the boundaries of the respective Improvement Area.

7.7.5 The Maximum Special Tax for each Improvement Area on all users of the Taxable Property within the CFD shall escalate as set forth in the RMA. Subject to sound municipal financing practices, market conditions, and findings of compliance with applicable law, the debt service on the CFD Bonds in such Improvement Area shall also escalate by the same percentage as the Special Taxes.

7.7.6 The City may approve one or more JCFA's with other political entities to allow the CFD or any Improvement Area to finance facilities owned and/or maintained by Local Agencies other than the City.

7.7.7 At the request of Heritage Fields, but subject to the limitations contained in this Amended and Restated Agreement, the City agrees that it shall conduct Change Proceedings pursuant to the CFD Act to (i) make any changes to an RMA for an Improvement Area, including amending the rates (either increase or decrease) and method of apportionment of special taxes, (ii) increase or decrease the authorized bonded indebtedness within an Improvement Area, (iii) annex or remove property from an Improvement Area, or (iv) to take such other actions as authorized by the CFD Act (“**Change Proceedings**”), provided, however, the City makes no commitment as to the outcome of said Change Proceedings.

7.7.8 No bonds, notes, certificates of participation or other evidence of bonded indebtedness (other than the IRWD Bonds) shall be issued by any Local Agency, other than the City, at the request of Heritage Fields, or with its affirmative vote and/or consent, secured, in whole or part, by Taxable Property, and/or taxes or other assessments thereupon, without the advance written consent of the City, except in the event the City elects not to form the CFD and issue CFD Bonds in accordance with the terms of this Amended and Restated Agreement.

7.7.9 Upon formation of the CFD, or shortly thereafter, the City and Heritage Fields shall enter a "Protocol Agreement" whereby the City Council, as the legislative body of the CFD, agrees that the requirements of Sections 7.4 through 7.8 shall bind the CFD for the Term of the Agreement.

7.7.10 The City Property shall neither be subject to the levy of the Special Taxes nor be included in the capacity analyses set forth in Section 7.5 except in the event any portion of the ARDA Transfer Site is sold or leased pursuant to a long term lease to a private third-party (other than the City, RDA, OCGP Corporation, or any public entity) for a use that is neither a Great Park use nor a use ancillary to a Great Park use (as such ancillary uses are specified further in Section 3.9.7 above), in which case such portions of the ARDA Transfer Site shall be subject to the levy of the Special Taxes as identified in the RMA and included in the capacity analyses.

7.8 Issuance of Non-Subordinate Bonds. While it is acknowledged that this Amended and Restated Agreement cannot require the City or the City Council to issue and sell Non-Subordinate Bonds, the City represents that it can, and does hereby, agree that it shall not refuse Heritage Fields' requests to issue and sell Non-Subordinate Bonds from time to time in each Improvement Area consistent with the priorities set forth in Section 7.5 above, except for good and reasonable cause. Good and reasonable cause includes, without limitation, an adopted City-wide policy, enacted after reasonable notice to Heritage Fields, that does not allow for or discourages the formation of a CFD. The issuance of the Non-Subordinate Bonds shall, in general, be subject to the following parameters:

7.8.1 Unless the City determines otherwise, for fixed rate bonds, the amount of the reserve fund for each federal tax-exempt Non-Subordinate Bond issue shall equal the lesser of (i) 10% of the bond amount, (ii) the maximum annual debt service on such bonds, or (iii) 125% of the average annual debt service on such bonds. The City may authorize that a surety bond, letter of credit, or other credit facility may be used in lieu of all or a part of a reserve fund funded by bond proceeds.

7.8.2 The minimum appraised value-to-lien ratio required for each Non-Subordinate Bond issue shall be 3:1, unless otherwise required by the CFD Act.

7.8.3 Non-Subordinate Bonds may be issued as fixed or variable rate bonds. If Heritage Fields requests that variable rate bonds be issued, Heritage Fields shall obtain appropriate credit enhancement at its sole expense.

7.8.4 The term of the Non-Subordinate Bonds for each Improvement Area shall be determined by the City.

7.8.5 Non-Subordinate Bonds for each Improvement Area shall be issued and administered pursuant to a bond indenture, fiscal agent agreement, resolution of issuance, Charter City Resolution, or similar document relating to the pledge of Special Taxes for that Improvement Area (the “**Indenture**”).

7.8.6 All statements and material related to the sale of Non-Subordinate Bonds shall state that neither the faith, credit, nor the taxing power of the City is pledged to the repayment of the Non-Subordinate Bonds, nor that there is an obligation of the City to replenish the reserve fund from revenue sources other than Special Taxes or proceeds from foreclosure proceedings. The City shall have no monetary liability, contingent or otherwise, for the debt services related to any Non-Subordinate Bonds.

7.8.7 The Special Taxes shall continue to be levied and collected in accordance with the RMA and utilized to fund Authorized Facilities and Authorized Services as determined by the City, except that upon final payment of all Non-Subordinate Bonds and the financing of all Proposed Project Facilities and any mutually agreed upon Additional Backbone Infrastructure, the City Council may, in its sole discretion determine to reduce or discontinue the collection of the Special Taxes.

7.8.8 Subject to Section 7.5, the City shall neither issue any CFD Bonds, nor any other bonds, certificates or other forms of indebtedness, secured by the Special Taxes to finance any Authorized Facilities or Authorized Services other than the Proposed Project Facilities and any Additional Backbone Infrastructure, except on a subordinated basis (the “**Subordinated Bonds**”) to any CFD Bonds issued or which may be issued in the future to fund Authorized Services or Authorized Facilities provided, however; that (i) Subordinate Bonds shall not be included in the calculation of the minimum value to lien ratio for the purpose of issuing Non-Subordinate Bonds; (ii) The Special Taxes that secure the Subordinate Bonds are subordinate to the pledge or use of the Special Taxes for any of the purposes of higher priority set forth in Section 7.6; (iii) That until all Proposed Project Facilities and any Additional Backbone Infrastructure have been financed by the CFD, the City shall be limited to pledging, on a subordinated basis, the Special Taxes not in excess of the Indexed GA for such Improvement Area, unless a supplemental levy is required as a result of Special Tax delinquencies, as denoted in Section E.2. of the RMA; (iv) Special Taxes used to pay debt service or other costs associated with the Subordinate Bonds will be derived from the Indexed GA payable to the City to the effect that amounts expended on debt service and other costs for the Subordinate Bonds when combined with amounts received will not exceed the Pro Rata Share of the Indexed GA for such Improvement Areas; (v) At Heritage Fields’ request the City and Heritage Fields shall meet and review any Subordinated Bond issue prior to public dissemination of disclosure documents, provided however, that Heritage Fields’ shall not possess a right of consent in relation to the issuance of Subordinated Bonds; and (vi) the documentation for the Subordinated Bonds explicitly allows for the issuance of Non-Subordinate Bonds in any number of series and amounts that will be secured by the Special Taxes on a basis senior to that of Subordinate Bonds.

7.9 Apportionment; Application to County Property. The City covenants to request in writing that the County honor its obligations pursuant to Section 2.2.5 of the County Agreement, and to actively pursue enforcement of that provision, which provides as follows:

"The parties acknowledge that the City seeks to create a funding mechanism whereby all Base users pay their fair share of the costs of developing the necessary infrastructure and related improvements. The County agrees to participate in such a funding mechanism and pay its fair share of the costs that are limited to infrastructure improvements directly related to servicing the properties County is to receive referenced in 2.2.3 above. Infrastructure improvements shall refer to utilities, roadways, sewer lines and other types of infrastructure needs that are necessary to service each County parcel, if any. The County will not be required to contribute, through assessments or other funding or financing methods, to the development or maintenance costs or expenses for any park or open space that will be developed and maintained on the Base under the Irvine 'Great Park Plan'. Furthermore, to the extent they qualify, County shall have the option to pay any portion of its share of infrastructure costs and expenses with Road Funds or other non-General Fund revenues."

In this regard, the City agrees to meet and confer in good faith with Heritage Fields concerning the City's efforts to secure compliance with Section 2.2.5 of the County Agreement. The City shall not enter into any agreement with the County (or other parties, including OCTA) or a modification to the terms of the County Agreement that creates a material and adverse impact on the cost of the Backbone Infrastructure and/or a material and adverse impact on the timing of construction of the Backbone Infrastructure, as that timing is specified in the Master Phasing Plan and Schedule provided as Exhibit B to the MIA, as that schedule may be modified from time to time in accordance with the MIA. Nothing in this Section 7.9 requires that the City commence any litigation action against the County to enforce the terms of the County Agreement, provided that nothing contained herein shall be deemed to be a waiver by Heritage Fields of any rights Heritage Fields may have as against the County with respect to the County Agreement.

7.10 Waiver of Challenge to Special Tax Requirement. (A) Heritage Fields hereby waives and forever relinquishes any ability it may possess to challenge, judicially, administratively, or otherwise, the imposition of the Special Tax, or any portion thereof, the levy of the Special Tax, or any portion thereof, and/or the collection of the Special Tax, or any portion thereof, on any property which it/they own and/or control. The foregoing covenant shall not prevent Heritage Fields from bringing any challenge, judicially, administratively, or otherwise to specifically enforce the obligations of the City or the CFD under the Indenture, the RMA, Amended MIA, the Protocol Agreement, this Amended and Restated Agreement or any other agreement between the City and

Heritage Fields which reasonably relates to the Special Taxes. In addition, and without limitation, Heritage Fields hereby agrees not to file, and forebears and relinquishes the right to file, a petition, of any sort, whether by way of ballot proposition, initiative, referendum, or similar device, to amend, modify, reduce or otherwise negatively affect the collection of Special Taxes or any portion thereof, contemplated by this Amended and Restated Agreement and/or the RMA, except that this covenant shall not be construed to prohibit Heritage Fields from petitioning the City or the CFD to process, or participate in, any Change Proceedings in accordance with Section 7.7.7 above. Heritage Fields shall protect and indemnify the City from any loss of Special Tax revenue based upon its breach of one or more of the covenants set forth in this Section 7.7.10 or Section 7.7.2. (B) No person or entity, other than Heritage Fields and/or a Purchaser/User, shall claim any right, entitlement, or any other benefit under this Amended and Restated Agreement unless and until it has executed a document, approved as to form and content by the City Attorney, accepting and agreeing to the waivers, releases, and covenants set forth in Subsection 7.10(A) above.

8. PROPERTY-WIDE ACTIVITIES.

8.1 Master Subdivision Map. Heritage Fields shall not record any final subdivision map for all or any portion of the Heritage Fields Property (a “Subsequent Map”) unless and until it has filed a final Master Subdivision Map for that portion of the Property that is subject to the Subsequent Map, and has complied with all Master Subdivision Map conditions specified by the City to be applicable to that final Master Subdivision Map.

8.2 Property-Wide Permits.

8.2.1 Agency Permits. The development of the Property will require various permits and entitlements from state and federal agencies including without limitation a Section 404 Permit from the U.S. Army Corps of Engineers, a Section 401 Water Quality Certification from the California Regional Water Quality Control Board, a Fish and Game Section 1602 Permit from the California Department of Fish and Game, an Irvine Ranch Water District Subarea Master Plan, and a National Pollution Discharge Elimination System Permit (the “**Agency Permits**”). Heritage Fields shall process such Agency Permits in consultation and coordination with the City. Heritage Fields has obtained the following Agency Permits in connection with development of the Property, under which each of Heritage Fields, the City and OCGP Corporation are co-permittees: (i) Clean Water Act Section 404 Permit No. SPL-2006-1452-CJF, effective date April 30, 2007, issued by the United States Army Corps of Engineers (the “**404 Permit**”); (ii) California Fish and Game Code Section 1602 Streambed Alteration Agreement No. 1600-2006-0258-R5, effective date February 28, 2007 issued by the California Department of Fish and Game (the “**1602 Agreement**”); (iii) Section 401 Water Quality Standards Certification for the Heritage Fields and the Great Park Improvement Projects, the City of Irvine (ACOE Reference No. 200601452-CJF), effective date February 21, 2007, issued by the Santa Ana Regional Water Quality Control Board (the “**401 Certification**”). In addition, Heritage Fields has in place a Master Storm Water Pollution Prevention Plan, dated [March 2007] (the “**Master SWPPP**”) required by the 401

Certification. The City and OCGP Corporation are not co-permittees for purposes of the Master SWPPP. Instead, the City and OCGP Corporation are required to maintain separate storm water pollution prevention plans in compliance with the 401 Certification to cover any construction activity the City or OCGP Corporation undertake on the Property, and shall be separately responsible and liable for performance for their respective SWPPP.

8.2.2 Responsibility for Implementation. If either the City or Heritage Fields fails to implement its obligations under any of the Agency Permits and does not cure such failure pursuant to Section 14 of this Amended and Restated Agreement (“**Defaulting Party**”), and such failure would prevent the other Party from proceeding with its development of its property (“**Affected Party**”), the Affected Party may obtain an order for specific performance from a court providing that if such implementation is not timely commenced and diligently pursued by the Defaulting Party, the Affected Party may take responsibility for implementation of such obligations. The order may provide that the Defaulting Party shall grant the Affected Party all rights of access, construction easements, and other permits or licenses necessary to perform such work. The Affected Party shall have the right to recover the costs of performing such work from the Defaulting Party.

8.2.3 Indemnification. Each Party agrees to indemnify and defend any other Party for any violations of the Agency Permits a Party may cause, whether on that Party’s property or the other Party’s property.

8.3 City Cooperation. The City will cooperate with Heritage Fields, and assist Heritage Fields, as requested by Heritage Fields, in its efforts to obtain additional Agency Permits or to amend previously obtained Agency Permits. The City shall use reasonable efforts to provide to Heritage Fields, as soon as reasonably possible after a request for such additional information and materials reasonably needed by Heritage Fields to file sufficient applications or amendments for all applicable Agency Permits.

9. DEDICATIONS AND CONVEYANCES OF PROPERTY INTERESTS.

9.1 Police Site. Following the Second Effective Date and the City’s determination of its final detailed site plan that shows its proposed improvements and sets the precise boundaries upon which a metes and bounds legal description can be prepared, Heritage Fields shall execute, acknowledge, and deliver to City a grant deed in the form substantially the same as the form attached hereto as Exhibit P, conveying to City, for no additional consideration, fee title to the Police Site in consideration of the City’s performance of its obligations set forth in this Amended and Restated Agreement, unless a Third-Party Legal Challenge has been brought before that date, in which case the conveyance shall occur no earlier than ninety (90) days after a final adjudication or legislative action rejecting such Third-Party Legal Challenge. The City shall not be required to pay any fee or purchase price for the Police Site. The Police Site shall be used primarily as a public police facility, which may permit additional accessory City personnel, but not including any jail or other detention facilities except for temporary holding facilities. The City shall be responsible for any traffic mitigation, NITM fees or

other traffic fees related to such use, including any cumulative traffic obligation as provided in Section 3.12.1. The conveyance of the Police Site shall not affect Heritage Fields' approved character, density or intensity of uses of its property or of the traffic mitigation required for such uses. The conveyance shall be subject to deed restrictions, effective for a twenty (20) year period, limiting the use of the Police Site to its defined uses. Conveyance of the Police Site shall be subject to Section 9.9 with respect to LIFOCs.

9.1.1 Boundary Adjustments To Police Site. The Parties agree and understand that if any boundary adjustments that reduce the size of the Police Site are necessary under Section 9.6, Heritage Fields shall convey to the City, at no cost, such additional land adjacent to the Police Site as is necessary to fully offset said reduction.

9.1.2 Condition of Title; Title Insurance Policy. Heritage Fields shall cause the Police Site to be conveyed free and clear of all recorded and unrecorded monetary liens and all recorded and unrecorded non-monetary liens, encumbrances, easements, leases, covenants, conditions, restrictions, and other exceptions to or defects in title, excepting only the exceptions listed on Exhibit T. Heritage Fields shall pay all costs required to place title in the condition described in this Section 9.2. A condition to City's acceptance of the Police Site shall be the irrevocable commitment of the Title Company to deliver to, at City's direction, City upon the transfer of title to the Police Site, an ALTA standard or, at City's election, an extended coverage owner's policy of title insurance showing title vested in City in the condition described in this Section 9.2 with insurance coverage in the amount of the fair market value of the Police Site as determined by City, and with such title insurance to be paid by the City.

9.2 ARDA Transfer Site and Exchange Properties.

9.2.1 Conveyance of ARDA Transfer Site. Heritage Fields shall, within ninety (90) days of the Second Effective Date, convey to the City the ARDA Transfer Site and deliver to City a grant deed in the form substantially the same as the form attached hereto as Exhibit Q, unless a Third-Party Legal Challenge has been brought before that date, in which case the conveyance shall occur within ninety (90) days after a final adjudication or legislative action rejecting such Third-Party Legal Challenge. The City shall not be required to pay any fee or purchase price for the ARDA Transfer Site. Notwithstanding the 90-day time periods referenced above, the timing of the conveyance of the ARDA Transfer Site shall be subject to Section 9.9 with respect to LIFOCs, the final determination of the location of "Q" Street and the preparation of a metes and bounds legal description that correspondingly shows the precise boundaries of the ARDA Transfer Site.

9.2.1.1 Condition of Title of ARDA Transfer Site. Subject to Section 9.9, Heritage Fields shall cause the ARDA Transfer Site to be conveyed free and clear of all recorded and unrecorded monetary liens and all recorded and unrecorded non-monetary liens, encumbrances, easements, leases (other than the existing FAA lease), covenants, conditions, restrictions, and other exceptions to or defects in title, excepting only the exceptions listed on Exhibit U. Heritage Fields shall pay all costs required to

place title in the condition described in this Section 9.2. A condition to City's acceptance of the ARDA Transfer Site shall be the irrevocable commitment of the Title Company to deliver to, at City's direction, City upon the transfer of title to the ARDA Transfer Site an ALTA standard or, at City's election, an extended coverage owner's policy of title insurance showing title vested in City in the condition described in this Section 9.2 with insurance coverage in the amount of the fair market value of the ARDA Transfer Site as determined by City.

9.2.1.2 Adjustments to ARDA Transfer Site. Heritage Fields and the City may mutually agree in writing to modify or adjust the precise location and/or area or the land that comprises the ARDA Transfer Site so long as the replacement land is approximately the same acreage as that portion of the original ARDA Transfer Site as generally depicted on Exhibit "G," and more fully described as PIAs 28 and 30 on Exhibit "I."

9.2.2 Traffic Mitigation For ARDA Transfer Site. Conveyance of the ARDA Transfer Site shall not affect the character, density or intensity of uses approved for the Heritage Fields Property or the traffic mitigation required for such uses. The City shall be responsible for all maintenance of the ARDA Transfer Site and for any traffic mitigation, NITM payments or other traffic fees related to use of the ARDA Transfer Site.

9.2.3 Exchange of Exchange Properties. Subject to Section 9.9, the Parties shall, within ninety (90) days following the Second Effective Date or such later date as the Parties may mutually agree to, enter into a "land swap agreement" pursuant to which they shall convey the Exchange Properties to one another as follows: (i) Heritage Fields shall convey to City the Initial City Exchange Properties, and (ii) City shall convey to Heritage Fields the Initial Heritage Fields Exchange Properties. The failure to consummate the transaction contemplated by the land swap agreement shall not limit the effectiveness of this Amended and Restated Agreement, nor render it void or unenforceable.

9.3 Park Dedications.

9.3.1 Dedication Of Neighborhood Parks. Heritage Fields shall improve and offer to dedicate to the City on the subdivision maps for the Heritage Fields Property neighborhood parks, based on the rate of 3 acres/1,000 residential population of market rate housing units, and 2 acres/1,000 residential population of affordable housing units, which shall fully satisfy Heritage Fields' obligations to the City with respect to neighborhood parks.

9.3.2 Satisfaction Of Community Park Obligations. Heritage Fields' conveyance of the Great Park Property to the City shall be deemed to satisfy any requirement imposed upon Heritage Fields for the dedication or development of community parks pursuant to the City's General Plan and Municipal Code in connection with the development of the Heritage Fields Property consistent with the ARDA Overlay Plan or any development density which the City may approve for the Heritage Fields

Property in the future calculated at 2 acres/1,000 residential population or such other community parks requirement ratio the City may impose in the future.

9.4 Dedication Of School Site To IUSD. Heritage Fields acknowledges that it will be required to dedicate to IUSD fee title to the School Site at no cost to IUSD. The precise location and boundaries of the School Site shall be as determined by IUSD. From and after the Second Effective Date, Heritage Fields shall cooperate with IUSD in an effort to determine the terms for the timing and conveyance of the School Site to IUSD.

9.5 Dedication Of Streets To City. Heritage Fields acknowledges that it has offered to dedicate to the City on the Master Subdivision Map, and may offer to dedicate on subsequent subdivision maps for portions of the Heritage Fields Property, all arterials and major thoroughfares, and other secondary, collector and local roads. The City agrees that if such offers to dedicate are not accepted, the cost of maintaining such streets through a POA shall be an assessment or fee which shall be included in the calculation of the 2% Value Limitation, notwithstanding Section 7.

9.6 Modifications To Property Boundaries. The Parties acknowledge that it may be necessary to adjust the boundaries of the City Property and the Heritage Fields Property to accommodate roadway design standards, traffic mitigation requirements, and/or refinements in engineering data as it becomes available. The City and Heritage Fields shall cooperate with each other, and promptly perform such acts and execute such documents as necessary to effectuate such adjustments. The Parties agree that such adjustments may result in an uncompensated reduction of a Party's gross acreage.

9.7 Administrative Changes To Reflect Property Ownership Changes. If and to the extent the parties agree in the future to adjust the ownership of any portion of their respective properties, the Director of Community Development, with the concurrence of an authorized representative from Heritage Fields, shall have the authority to make such administrative changes to the exhibits to this Amended and Restated Agreement as may be necessary to accurately reflect the updated property ownership configuration. Nothing in this Section is intended to, nor shall it, create any amendment to the Existing Land Use Regulations and/or the ARDA Overlay Plan.

9.8 Rights of Way Reservation. With respect to any parcels conveyed by Heritage Fields to the City and including those which may be subsequently conveyed by the City to third parties (including the County), the City shall, to the extent consistent with the City's existing legal obligations, reserve all rights-of-way and easements shown on Exhibit "O."

9.9 Assignment Of LIFOCs. Notwithstanding any provision of this Amended and Restated Agreement to the contrary, with respect to those portions of the City Property which were or are to be transferred by Heritage Fields pursuant to any provision in this Amended and Restated Agreement (including, without limitation, the Police Site, and the ARDA Transfer Site and the Initial City Exchange Properties) that are covered in whole or in part by one or more LIFOCs, the Parties recognize that Heritage Fields cannot convey title to such property until the LIFOC property is transferred from the

DON. Heritage Fields shall execute and deliver to the City a proposed assignment and/or sublease of such LIFOCs in the form attached hereto as Exhibit "M" covering each LIFOC affecting the City Property within each Parcel. The City understands that such proposed assignment cannot be effective without the consent of the DON and that Heritage Fields does not and cannot guarantee such consent or its timing. In such event, Heritage Fields and the City shall mutually approve (in each Party's reasonable discretion) the form of, and shall each execute and deliver, a proposed sublease of such LIFOC.

9.10 Recordation of Restrictive Covenant. The Agency Permits require in perpetuity, protection of mitigation property as described in certain Agency Permits. The Parties will work with the appropriate federal and state agencies to finalize a restrictive covenant for the mitigation property as specified in the Agency Permits. The City shall execute and record the final restrictive covenant over such mitigation property as required under the 404 Permit and the 1602 Agreement.

10. PUBLIC BENEFIT FEE.

10.1 Public Benefit Fee. Heritage Fields shall pay to City a monthly public benefit fee ("**Public Benefit Fee**") as follows: (i) Twenty-Five Thousand Dollars (\$25,000.00) per month, commencing the month in which the Second Effective Date occurs to the month in which the third anniversary of the Second Effective Date occurs; (ii) One Hundred Thousand Dollars (\$100,000.00) per month, commencing the month in which the third anniversary of the Second Effective Date occurs to the month in which the sixth anniversary of the Second Effective Date occurs; and (iii) One Hundred Twenty-Five Thousand Dollars (\$125,000.00) per month, commencing the month in which the sixth anniversary of the Second Effective Date occurs to the month in which the ninth anniversary of the Second Effective Date occurs. The monthly Public Benefit Fee shall terminate and no longer be due or payable as of the ninth anniversary of the Second Effective Date. The City shall have the discretion as to the precise manner in which the Public Benefit Fees shall be used and allocated for such public benefit purposes.

10.2 Waivers Regarding Public Benefit Fee. Heritage Fields hereby consents to and waives any right of protest with regard to the establishment and enforcement of the fee described above. Heritage Fields further agrees that the Public Benefit Fee established by City pursuant to this Amended and Restated Agreement does not constitute a tax subject to the voter approval requirements of Article XIII A of the California Constitution, Article XIII C of the California Constitution or California Government Code Section 53720, *et seq.*, and, in addition, that the Public Benefit Fee is not a fee imposed "as an incident of property ownership" within the meaning of Article XIII D of the California Constitution.

11. UTILITIES.

11.1 Utility Easements. The Parties acknowledge that the existing utility system for the Property is rudimentary. Heritage Fields and the City shall work

cooperatively, including if necessary granting reciprocal non-exclusive easements along reasonable alignments over each Party's lands for the benefit of the other, to ensure that each Party may feasibly access all utilities needed to serve such Party's lands.

11.2 Water Rights. The City shall use the water rights that accrue to or from the Property for, in order of priority, (i) a source of water supply for the City Property, and (ii) provided the parties negotiate in good faith and agree upon acceptable terms and conditions for such use, a source of water supply for the Heritage Fields Property.

12. CC&Rs.

The Parties agree that the Declaration of Covenants, Conditions and Restrictions ("CC&Rs") recorded on the Property on July 12, 2005 as Instrument No. 2005-0538145 shall be of no force and effect on the Property and the Parties shall concurrently with the Second Effective Date take actions as are necessary to remove them.

13. RUNWAY HARDSCAPE.

Heritage Fields shall complete the demolition and facilitate the recycling of the runway hardscape on the Property in the manner, and to the extent, specified in the Amended MIA.

14. DEFAULT, REMEDIES, AND TERMINATION.

14.1 Notice And Opportunity To Cure. Before this Amended and Restated Agreement may be terminated or action may be taken to obtain relief in a manner consistent with this Amended and Restated Agreement, the Party seeking relief ("**Non-Defaulting Party**") shall comply with the notice and cure provisions of this Section 14.1. A Non-Defaulting Party in its discretion may elect to declare a default under this Amended and Restated Agreement in accordance with the procedures hereinafter set forth for any failure or breach of any other Party ("**Defaulting Party**") to perform any material duty or obligation of said Defaulting Party in accordance with the terms of this Amended and Restated Agreement. However, the Non-Defaulting Party must provide written notice ("**Default Notice**") to the Defaulting Party setting forth the nature of the breach or failure and the actions, if any, required by the Non-Defaulting Party to cure such breach or failure. The Defaulting Party shall be deemed in "default" of its obligations set forth in this Amended and Restated Agreement if the Defaulting Party has failed to take action and cured the default within ten (10) days after the date of such Default Notice (for monetary defaults), within thirty (30) days after the date of such Default Notice (for non-monetary defaults), or within such lesser time as may be specifically provided in this Amended and Restated Agreement. If, however, a non-monetary default cannot be cured within such thirty (30) day period, as long as the Defaulting Party does each of the following, then the Defaulting Party shall not be deemed in breach of this Amended and Restated Agreement:

- (i) within ten (10) days of the Default Notice, notifies the Non-Defaulting Party in writing with a reasonable explanation as to the reasons the asserted default is not curable within the thirty (30) day period;

(ii) within ten (10) days of the Default Notice, notifies the Non-Defaulting Party of the Defaulting Party's proposed course of action to cure the default;

(iii) promptly commences to cure the default within the thirty (30) day period;

(iv) makes periodic reports to the Non-Defaulting Party as to the progress of the program of cure; and

(v) diligently prosecutes such cure to completion,

14.2 Default Remedies.

14.2.1 Default Procedures. Subject to Section 14.3 and Section 14.4, in the event of a default, the Non-Defaulting Party, at its option, may institute an action pursuant to Section 14.6 to cure, correct, or remedy such default, enjoin any threatened or attempted violation, enforce the terms of this Amended and Restated Agreement by specific performance (including injunctive relief), or pursue any other remedy otherwise permissible under this Amended and Restated Agreement. Furthermore, the City, in addition to or as an alternative to exercising the remedies set forth in this Section 14.2, in the event of a material default by Heritage Fields, may (i) give notice of its intent to terminate or modify this Amended and Restated Agreement, and may carry through on that notice and intent to terminate, pursuant to the City Development Agreement Regulations and/or the Development Agreement Statute, in which event the matter shall be scheduled for consideration and review by the City Council in the manner set forth in the City Development Agreement Regulations and/or the Development Agreement Statute, and/or (ii) give notice of its intent to terminate any and all restrictions on the use of City Property specified in Section 3.9 of this Amended and Restated Agreement, and to carry through on that termination.

14.3 Limitations on Defaults. Notwithstanding any provision in this Amended and Restated Agreement to the contrary, a default by Heritage Fields (or any other fee title owner of another Lot within the Project) shall not constitute a default by a Purchaser/User. Likewise, a default by a Purchaser/User with respect to a Lot (or group of Lots) it owns or leases shall not constitute a default by Heritage Fields (or any other fee title owner of another Lot within the Heritage Fields Property). Therefore, if Heritage Fields has conveyed a Lot (or group of Lots) to a Purchaser/User and this Amended and Restated Agreement has not yet been terminated as to any Lot (or group of Lots) in accordance with the provisions of Section 2.4 above, (i) no Purchaser/User shall have any liability to the City (or otherwise) for or with respect to any default of Heritage Fields or any default of any other Purchaser/User, (ii) Heritage Fields shall have no liability to the City (or otherwise) for or with respect to any default by any Purchaser/User, and (iii) the City's election to terminate this Amended and Restated Agreement as a result of a default by Heritage Fields or any such Purchaser/User shall not effect a termination of this Amended and Restated Agreement with respect to those Lots owned or leased by a Non-

Defaulting Party until such time that this Amended and Restated Agreement would otherwise terminate in accordance with its terms.

14.4 Parties' Exclusive Remedies.

14.4.1 Limitation on Remedies. The Parties acknowledge that they would not have entered into this Amended and Restated Agreement if either Party were to be liable in damages under or with respect to this Amended and Restated Agreement, the Existing Land Use Regulations, or the application thereof, or any permit or approval sought by City or Heritage Fields in accordance with the Existing Land Use Regulations, except as provided in this section. Accordingly, Heritage Fields covenants on behalf of itself and its successors and assigns, not to sue the City, and the City on behalf of itself and its successors and assigns, not to sue Heritage Fields, for damages or monetary relief for any breach of this Amended and Restated Agreement or arising out of or connected with any dispute, controversy or issue regarding the application, interpretation or effect of this Amended and Restated Agreement, the Existing Land Use Regulations, or any land use permit or approval sought in connection with the development or use of the Heritage Fields Property or any portion thereof, the Parties agreeing that declaratory and injunctive relief, mandate, and specific performance shall be their sole and exclusive judicial remedies, except as provided in Section 14.4.2 below.

14.4.2 Recovery of Out-of-Pocket Losses and Damages. Notwithstanding Section 14.4.1 above, the Parties may pursue and obtain the additional remedies set forth below:

(i) Enforcement of Monetary Obligations. In the case of a breach of an obligation to pay money or to allocate funding in the manner specified in Section 7.6, or to indemnify and defend a Party as provided in Section 8.2.3, a Party may sue to compel monetary relief to the extent such relief involves enforcement of the other Party's obligations under this Amended and Restated Agreement and not damages or other monetary penalty over and above such obligations. For example, and without limitation, a Party may seek and recover the following monetary damages: (1) the amount of any overpayments to, or improper fees levied by, the City in excess of those fees established and permitted under the NITM Program or this Amended and Restated Agreement; (2) the amount of any NITM funds which the City may apply to other uses beyond those authorized by the NITM Program; (3) the amount of interest on NITM funds not credited by the City to NITM Program accounts as provided for in the NITM Program; and (4) the amount of funds owed by Heritage Fields toward the construction of the Proposed Project Facilities in accordance with Article XIII of the Amended MIA.

(ii) Additional Costs and Measures. In the event additional mitigation measures, conditions, requirements, or affordable housing obligations are imposed on Heritage Fields or the Heritage Fields Property by the City (i.e., in addition to those provided for in the MAHP and the ARDA Overlay Plan) in

violation of this Amended and Restated Agreement (“Objectionable Conditions”), the matter shall be submitted directly to binding arbitration pursuant to Section 14.7 for resolution as a non-monetary default (the Parties acknowledging and agreeing that any disputes arising under this sub-paragraph need not comply with the requirements of Section 14.6).

(iii) Restitution of Improper Development Fees. In the event any Development Fees or taxes are imposed on Development of the Property other than those authorized pursuant to this Amended and Restated Agreement, Heritage Fields shall be entitled to recover from City restitution of all such improperly assessed fees or taxes, together with interest thereon at the rate of specified in Article XV, Section 1 of the California Constitution from the date such sums were paid to City to the date of restitution.

(iv) Restitution Arising from Other Agreements. Heritage Fields may seek and recover monetary damages arising from agreements and/or approvals granted or entered into by the City and any third parties that materially and adversely affect the rights or obligations of Heritage Fields under this Amended and Restated Agreement (“Objectionable Agreements”) subject to the following qualifications and limitations: Heritage Fields shall have no right to recover any amounts under this sub-paragraph unless and until (a) the matter shall be submitted directly to binding arbitration pursuant to Section 14.7 (the Parties acknowledging and agreeing that any disputes arising under this sub-paragraph need not comply with the requirements of Section 14.6), and (b) if the award is adverse to the City, the City fails or refuses to refrain from entering into or rescind, as the case may be, the Objectionable Agreement (the Parties acknowledging and agreeing that if the City refrains from entering into or rescinds the Objectionable Agreement, it shall not be required to pay any monetary damages under this Amended and Restated Agreement).

14.5 Force Majeure/Supervening Events. The obligations by any Party hereunder shall not be deemed to be in default, and the Term of this Amended and Restated Agreement shall not be deemed to run, where delays or failures to perform are due to any cause without the fault and beyond the reasonable control of such Party, including to the extent applicable, the following: war; insurrection; strikes; walk-outs; the unavailability or shortage of labor, material, or equipment; riots; floods; earthquakes; the discovery and resolution of hazardous waste or significant geologic, hydrologic, archaeological, paleontological, or endangered species problems on the Property; fires; casualties; acts of God; governmental restrictions imposed or mandated by other governmental entities; with regard to delays of Heritage Fields’ performance, delays caused by the City’s failure to act or timely perform its obligations set forth herein; with regard to delays of the City’s performance, delays caused by Heritage Fields’ failure to act or timely perform its obligations set forth herein; inability to obtain necessary permits or approvals from City, County, RDA, or other governmental entities; enactment of conflicting state or federal statutes or regulations; judicial decisions; or litigation not commenced by such Party (collectively, “**Force Majeure**”). Notwithstanding the

foregoing, any delay caused by the failure of the City or any agency, division, or office of the City to timely issue a license, permit, or approval required pursuant to this Amended and Restated Agreement shall not constitute an event of Force Majeure extending the time for the City's performance hereunder. If written notice of such delay or impossibility of performance is provided to the other Parties within a reasonable time after the commencement of such delay or condition of impossibility, an extension of time for such cause will be granted in writing for the period of the enforced delay, or longer as may be mutually agreed upon by the Parties in writing, or the performance rendered impossible may be excused in writing by the Party so notified. In no event shall adverse market or financial conditions constitute an event of Force Majeure extending the time for such Party's performance hereunder.

14.6 Dispute Resolution. EXCEPT AS OTHERWISE SPECIFICALLY PROVIDED HEREIN, IF ANY CLAIM OR CONTROVERSY THAT ARISES OUT OF OR RELATES TO, DIRECTLY OR INDIRECTLY, THIS AMENDED AND RESTATED AGREEMENT OR ANY DEALINGS BETWEEN THE PARTIES CANNOT BE SETTLED BY THE PARTIES WITHIN THIRTY (30) DAYS AFTER EITHER PARTY IS FIRST PROVIDED WRITTEN NOTICE OF THE CLAIM OR CONTROVERSY BY THE OTHER, THE MATTER SHALL BE DETERMINED BY JUDICIAL REFERENCE PURSUANT TO THE PROVISIONS OF CALIFORNIA CODE OF CIVIL PROCEDURE SECTIONS 638 THROUGH 645.1, EXCEPT AS OTHERWISE MODIFIED HEREIN. THE PARTIES SHALL COOPERATE IN GOOD FAITH TO ENSURE THAT ALL NECESSARY AND APPROPRIATE PARTIES ARE INCLUDED IN THE JUDICIAL REFERENCE PROCEEDING. IN THE EVENT THAT A LEGAL PROCEEDING IS INITIATED BASED ON ANY SUCH DISPUTE, THE FOLLOWING SHALL APPLY: 1) THE PROCEEDING SHALL BE BROUGHT AND HELD IN THE COUNTY IN WHICH THE PROPERTY IS LOCATED UNLESS THE PARTIES AGREE TO A DIFFERENT VENUE; 2) THE PARTIES SHALL USE THE PROCEDURES ADOPTED BY JAMS FOR JUDICIAL REFERENCE AND SELECTION OF A REFEREE (OR ANY OTHER ENTITY OFFERING JUDICIAL REFERENCE DISPUTE RESOLUTION PROCEDURES AS MAY BE MUTUALLY ACCEPTABLE TO THE PARTIES); 3) THE REFEREE MUST BE A RETIRED JUDGE OR LICENSED ATTORNEY WITH SUBSTANTIAL EXPERIENCE IN RELEVANT REAL ESTATE MATTERS; 4) THE PARTIES TO THE JUDICIAL REFERENCE PROCEDURE SHALL AGREE UPON A SINGLE REFEREE WHO SHALL HAVE THE POWER TO TRY AND DECIDE ANY AND ALL OF THE ISSUES RAISED, WHETHER OF FACT OR OF LAW, WHICH MAY BE PERTINENT TO THE MATTERS IN DISPUTE, AND TO ISSUE A STATEMENT OF DECISION THEREON. ANY DISPUTE REGARDING THE SELECTION OF THE REFEREE SHALL BE RESOLVED BY JAMS OR THE ENTITY PROVIDING THE REFERENCE SERVICES, OR, IF NO ENTITY IS INVOLVED, BY THE COURT IN ACCORDANCE WITH CALIFORNIA CODE OF CIVIL PROCEDURE SECTIONS 638 AND 640; 5) THE REFEREE SHALL BE AUTHORIZED TO PROVIDE ALL REMEDIES AVAILABLE IN LAW OR EQUITY APPROPRIATE UNDER THE CIRCUMSTANCES OF THE CONTROVERSY; 6) THE REFEREE MAY REQUIRE ONE OR MORE PRE-HEARING CONFERENCES; 7) THE PARTIES SHALL BE ENTITLED TO DISCOVERY, AND THE REFEREE SHALL OVERSEE

DISCOVERY AND MAY ENFORCE ALL DISCOVERY ORDERS IN THE SAME MANNER AS ANY TRIAL COURT JUDGE; 8) A STENOGRAPHIC RECORD OF THE REFERENCE PROCEEDINGS SHALL BE MADE; 9) THE REFEREE'S STATEMENT OF DECISION SHALL CONTAIN FINDINGS OF FACT AND CONCLUSIONS OF LAW TO THE EXTENT APPLICABLE; 10) THE REFEREE SHALL HAVE THE AUTHORITY TO RULE ON ALL POST-HEARING MOTIONS IN THE SAME MANNER AS A TRIAL JUDGE; 11) THE PARTIES SHALL PROMPTLY AND DILIGENTLY COOPERATE WITH EACH OTHER AND THE REFEREE AND PERFORM SUCH ACTS AS MAY BE NECESSARY FOR AN EXPEDITIOUS RESOLUTION OF THE DISPUTE; 12) SUBJECT TO SECTION 20.3, EACH PARTY TO THE JUDICIAL REFERENCE PROCEEDING SHALL BEAR ITS OWN ATTORNEYS' FEES AND COSTS IN CONNECTION WITH SUCH PROCEEDING; AND 13) THE STATEMENT OF DECISION OF THE REFEREE UPON ALL OF THE ISSUES CONSIDERED BY THE REFEREE SHALL BE BINDING UPON THE PARTIES, AND UPON FILING OF THE STATEMENT OF DECISION WITH THE CLERK OF THE COURT, OR WITH THE JUDGE WHERE THERE IS NO CLERK, JUDGMENT MAY BE ENTERED THEREON. THE DECISION OF THE REFEREE SHALL BE APPEALABLE AS IF RENDERED BY THE COURT. THIS PROVISION SHALL IN NO WAY BE CONSTRUED TO LIMIT ANY VALID CAUSE OF ACTION, WHICH MAY BE BROUGHT BY ANY OF THE PARTIES. THE PARTIES ACKNOWLEDGE AND ACCEPT THAT BY EMPLOYING THIS JUDICIAL REFERENCE PROCEDURE THEY ARE WAIVING THEIR RIGHT TO A JURY TRIAL.

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14.7 Arbitration of Disputes. RECOGNIZING THAT TIMELY AND EFFECTIVE ENFORCEMENT OF THIS AGREEMENT IS CRITICAL TO THE PARTIES, IF FOR ANY REASON THE JUDICIAL REFERENCE PROCEDURES IN SECTION 14.6 ARE LEGALLY UNAVAILABLE AT THE TIME A DISPUTE WOULD OTHERWISE BE REFERRED TO JUDICIAL REFERENCE (OR DO NOT APPLY BY THE EXPRESS TERMS OF THIS AGREEMENT), THEN, UPON THE WRITTEN DEMAND OF EITHER PARTY, THE DISPUTE SHALL BE RESOLVED BY BINDING ARBITRATION IN ACCORDANCE WITH THE AMERICAN ARBITRATION ASSOCIATION'S COMMERCIAL ARBITRATION RULES, EXCEPT AS FOLLOWS. THE ARBITRATION SHALL BE CONDUCTED BY ONE ARBITRATOR WHO IS A RETIRED SUPERIOR, APPELLATE OR FEDERAL COURT JUDGE OR AN ATTORNEY WITH NOT LESS THAN FIFTEEN (15) YEARS EXPERIENCE IN REAL ESTATE MATTERS; A LIST OF POTENTIAL ARBITRATORS WHO CAN ENSURE THAT ANY DISPUTE CONCERNING A NON-MONETARY DEFAULT CAN BE HEARD AND DETERMINED WITHIN

NINETY (90) DAYS OF NOTICE OF ARBITRATION SHALL BE APPROVED BY THE PARTIES AS OF THE SECOND EFFECTIVE DATE. TO THE EXTENT THE RELIEF REQUESTED IN THE ARBITRATION SEEKS TO COMPEL THE PERFORMANCE OF A LEGISLATIVE ACT AND/OR THE ISSUANCE OF A WRIT OF MANDATE NOT PROPERLY THE SUBJECT OF AN ARBITRATION AWARD, THE PARTY SEEKING SUCH RELIEF MAY PROCEED BY JUDICIAL ACTION. THE ARBITRATION AWARD SHALL BE FINAL AND BINDING UPON THE PARTIES (EXCEPT IN CASE OF FRAUD OR UNDISCLOSED CONFLICT OF INTEREST ON THE PART OF THE ARBITRATOR) AND MAY BE ENTERED IN ANY COURT HAVING JURISDICTION THEREOF. THE ARBITRATOR SHALL BE EMPOWERED HEREBY TO ENTER SPECIFIC PERFORMANCE ORDERS AS SHALL, IN ITS DISCRETION, BE NECESSARY TO ENSURE THE TIMELY PERFORMANCE OF THE OBLIGATIONS OF THIS AGREEMENT BY EITHER OR BOTH OF THE PARTIES, SO AS TO AVOID THE DELAYS ASSOCIATED WITH OBTAINING SUCH RELIEF PURSUANT TO COURT ACTION. THE ARBITRATOR MAY ALLOCATE THE FEES AND COSTS OF ARBITRATION BETWEEN THE PARTIES AND MAY AWARD COSTS, INCLUDING REASONABLE ATTORNEYS' FEES, TO THE PREVAILING PARTY IN ACCORDANCE WITH SECTION 20.3. IN THE ABSENCE OF A DETERMINATION BY THE ARBITRATOR, EACH PARTY SHALL BEAR ITS PROPORTIONATE SHARE OF THE COSTS OF THE ARBITRATION AND THE ARBITRATOR AND ALL OF ITS OWN COSTS. NOTHING CONTAINED IN THIS SECTION SHALL RESTRICT ANY PARTY FROM SEEKING PRELIMINARY EQUITABLE RELIEF FROM THE COURT SYSTEM PENDING RESOLUTION OF THE ARBITRATION.

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15. ANNUAL REVIEW.

15.1 Timing Of Annual Review. During the Term of this Amended and Restated Agreement, at least once during every twelve (12) month period from the Second Effective Date, the City shall review the good faith compliance of Heritage Fields with the terms of this Amended and Restated Agreement ("**Annual Review**"). The Annual Review shall be conducted by the City Council or its designee in accordance with the City Development Agreement Regulations.

15.2 Standards For Annual Review. During the Annual Review, Heritage Fields shall be required to demonstrate good faith compliance with the terms of this Amended and Restated Agreement. If the City or its designee finds and determines that Heritage Fields has not complied with any of the terms or conditions of this Amended

and Restated Agreement, then the City may declare a default by Heritage Fields in accordance with Section 14 herein. The City may exercise its rights and remedies relating to any such event of default only after the period for curing a default as set forth in Section 14 has expired without cure of the default. The costs incurred by the City in connection with the Annual Review process shall be paid by Heritage Fields. Nothing in this paragraph shall be construed to prohibit the City from declaring a default in accordance with Section 14 herein, without first proceeding through an Annual Review.

15.3 Certificate Of Compliance. With respect to each year in which the City approves Heritage Fields' compliance with this Amended and Restated Agreement, the City shall, upon written request by Heritage Fields, provide Heritage Fields with a written certificate of good faith compliance within thirty (30) days of the City's receipt of Heritage Fields' request for same.

16. MORTGAGEE RIGHTS.

16.1 Encumbrances On The Property. The Parties hereto agree that this Amended and Restated Agreement shall not prevent or limit Heritage Fields, in any manner, from encumbering the Property or any portion thereof or any improvements thereon with any Mortgage securing financing with respect to the construction, development, use, or operation of the Heritage Fields Property.

16.2 Mortgagee Protection. This Amended and Restated Agreement shall be superior and senior to the lien of any Mortgage. Notwithstanding the foregoing, no breach of this Amended and Restated Agreement shall defeat, render invalid, diminish, or impair the lien of any Mortgage made in good faith and for value, and a Mortgagee Successor shall have the rights, benefits and remedies of Heritage Fields under this Amended and Restated Agreement and shall be subject to all of the terms and conditions of this Amended and Restated Agreement.

16.3 Mortgagee Not Obligated. Notwithstanding the provisions of this Section 16, a Mortgagee and a Mortgagee Successor will not have any obligation or duty pursuant to the terms set forth in this Amended and Restated Agreement to perform the obligations of Heritage Fields or other affirmative covenants of Heritage Fields hereunder, or to guarantee such performance, except that (i) the Mortgagee or Mortgagee Successor shall have the right to develop the Property under the Existing Land Use Regulations and/or the ARDA Overlay Plan provided that the Mortgagee or Mortgagee successor complies with the terms of this Amended and Restated Agreement and (ii) to the extent that any covenant to be performed by Heritage Fields is a condition to the performance of a covenant by the City, the performance thereof shall continue to be a condition precedent to the City's performance hereunder. If a Mortgagee or Mortgagee Successor obtains ownership of less than the entirety of the Heritage Fields Property, said Mortgagee or Mortgagee Successor may request, and the City shall not unreasonably refuse, an apportionment of obligations under this Amended and Restated Agreement that assigns to said Mortgagee or Mortgagee Successor (i) all of the obligations of Heritage Fields that are applicable solely to that portion of the Heritage Fields Property obtained by the Mortgagee or Mortgagee Successor plus (ii) a pro-rata share of those obligations

of Heritage Fields under this Amended and Restated Agreement that are not assigned to a specific portion of the Heritage Fields Property.

16.4 Notice Of Default To Mortgagee; Right Of Mortgagee To Cure. Each Mortgagee shall, upon written request to the City, be entitled to receive written notice from the City of the results of the Annual Review and of any default by Heritage Fields of its obligations set forth in this Amended and Restated Agreement. Each Mortgagee shall have a further right, but not an obligation, to cure such default within ten (10) days after receipt of such notice (for monetary defaults), within thirty (30) days after receipt of such notice (for non-monetary defaults) or, if such default can only be remedied or cured by such Mortgagee upon obtaining possession of the Property, such Mortgagee shall have the right to seek to obtain possession with diligence and continuity through a receiver or otherwise, and to remedy or cure such default within thirty (30) days after obtaining possession, and, except in case of emergency or to protect the public health or safety, the City may not exercise any of its judicial remedies set forth in this Amended and Restated Agreement until expiration of such thirty (30) day period; provided, however, that in the case of a default which cannot with diligence be remedied or cured within such thirty (30) day period, the Mortgagee shall have such additional time as is reasonably necessary to remedy or cure such default provided Mortgagee promptly commences to cure the default within the thirty (30) day period and diligently prosecutes such cure to completion.

17. ASSIGNMENT.

17.1 Right To Assign. Subject to the City's consent pursuant to Section 17.3, Heritage Fields shall have the right to assign its rights and obligations under this Amended and Restated Agreement in connection with a transfer of all or any portion of Heritage Fields' interest in the Heritage Fields Property. In the event of any such assignment, the assignee shall be liable for the performance of the designated obligations of Heritage Fields after the date of the assignment solely with respect to the portion of the Heritage Fields Property so transferred.

17.2 Assignee Subject To Terms Of Agreement. Following an assignment or transfer of any of the rights and interests of Heritage Fields set forth in this Amended and Restated Agreement in accordance with Section 17.3, the assignee's exercise, use, and enjoyment of that portion of the Heritage Fields Property so transferred shall be subject to the terms of this Amended and Restated Agreement to the same extent as if the assignee or transferee were Heritage Fields, subject to the limitations set forth in Section 14.2 above.

17.3 Release Upon Transfer. Upon the written consent of the City to the partial or complete assignment of this Amended and Restated Agreement (which consent shall not be unreasonably withheld) and the express written assumption in a form approved by the City of such assigned obligations of Heritage Fields under this Amended and Restated Agreement by the assignee, Heritage Fields shall be relieved of its legal duty to perform the assigned obligations set forth in this Amended and Restated Agreement, except to the extent Heritage Fields is in default hereunder with respect to the particular assigned

obligations prior to said transfer. In connection with its exercise of reasonable approval rights over proposed assignments, the City may consider, among other things, the extent of remaining Backbone Infrastructure construction obligations under the Amended MIA and the ability of Heritage Fields to perform said construction obligations, taking into account the remaining portion of the Heritage Fields Property owned by Heritage Fields and all funding sources for the remaining Backbone Infrastructure (including, without limitation, Special Tax revenues, CFD Bonds, and Heritage Fields' equity and debt sources).

18. INSURANCE AND INDEMNITY.

18.1 Insurance. Heritage Fields shall procure and maintain, commencing as of the Second Effective Date and thereafter at all times during the Term of this Amended and Restated Agreement when actual work on the Project is being performed by Heritage Fields, the following policies of insurance:

(i) Comprehensive General Liability Insurance. A policy of comprehensive general liability insurance written on a per occurrence basis in an amount not less than \$5,000,000 combined single limits.

(ii) Automobile Insurance. A policy of comprehensive automobile liability insurance written on a per occurrence basis in an amount not less than either (A) bodily insurance liability limits of \$2,000,000 per person and \$2,000,000 per occurrence and property damage liability limits of Five Hundred Thousand Dollars \$500,000 per occurrence and \$500,000 in the aggregate or (B) combined single limit liability of \$2,000,000. Said policy shall include coverage for owned, non-owned, leased, and hired cars.

(iii) Workers' Compensation Insurance. A policy of workers' compensation insurance in such amount as will fully comply with the laws of the State of California.

The policies of insurance required by this Amended and Restated Agreement shall be satisfactory only if issued by companies qualified to do business in California and rated "A: VII" or better in the most recent edition of Best's Insurance Guide. All of the aforescribed policies of insurance shall be primary insurance and shall name the City, City's Designee(s), and each of their respective officers, officials and employees as additional insureds. The insurer shall waive all rights of subrogation and contribution it may have against the City, the City's Designee, and their respective insurers. All of said policies of insurance shall provide that said insurance may not be amended or cancelled without providing thirty (30) days' prior written notice to the City. In the event any of said policies of insurance are cancelled, Heritage Fields shall, prior to the cancellation date, submit new evidence of insurance in conformance with this Section 18.1. No work to be performed by Heritage Fields pursuant to this Amended and Restated Agreement shall commence until Heritage Fields has provided the City with certificates of insurance or appropriate insurance binders evidencing the above insurance coverage and said certificates or binders are approved by the City.

18.2 Indemnity By Heritage Fields. Heritage Fields agrees to indemnify, defend, and hold harmless the City, the City's Designee, and their respective elected and appointed councils, boards, commissions, officers, agents, contractors and employees from and against any and all actions, suits, claims, liabilities, losses, damages, penalties, obligations, and expenses (including but not limited to attorneys' fees and costs) which may arise, directly or indirectly, from the acts, omissions, or operations of Heritage Fields or Heritage Fields' agents, contractors, subcontractors, or employees pursuant to this Amended and Restated Agreement, but excluding any loss resulting from the intentional or active negligence of the City, the City's Designee, or each of their respective elected and appointed councils, boards, commissions, officers, agents, contractors and employees. Notwithstanding the foregoing, City shall have the right to select and retain counsel to defend any such action or actions and Heritage Fields shall pay the cost thereof. The indemnity provisions set forth in this Amended and Restated Agreement shall survive termination of this Amended and Restated Agreement.

18.3 Indemnity By City. The City agrees to indemnify, defend, and hold harmless Heritage Fields, and its respective partners, members, agents, contractors and employees from and against any and all actions, suits, claims, liabilities, losses, damages, penalties, obligations, and expenses (including but not limited to attorneys' fees and costs) which may arise, directly or indirectly, from the acts, omissions, or operations of the City or the City's Designee, or either of their respective officers, officials, agents, contractors, subcontractors or employees pursuant to this Amended and Restated Agreement, but excluding any loss resulting from the intentional or active negligence of Heritage Fields, its agents, contractors or employees. Notwithstanding the foregoing, Heritage Fields shall have the right to select and retain counsel to defend any such action or actions and City shall pay the cost thereof. The indemnity provisions set forth in this Amended and Restated Agreement shall survive termination of this Amended and Restated Agreement.

19. THIRD-PARTY LEGAL CHALLENGE.

In the event of any Third Party Legal Challenge, City shall have the right but not the obligation to defend such Third Party Legal Challenge and Heritage Fields shall be responsible for the legal expenses incurred by City in connection therewith. Heritage Fields also shall have the right but not the obligation to defend any Third Party Legal Challenge. If Heritage Fields defends any such Third Party Legal Challenge, so long as Heritage Fields is not in default hereunder, City shall not allow any default or judgment to be taken against it or compromise the defense of the action without Heritage Field's prior written approval. The Parties shall act jointly in filing motions, briefs, trial statements, and other appropriate court documents, and in approving settlement of such action. Nothing herein shall obligate a Party to settle such Third Party Legal Challenge on terms that would constitute an amendment or modification of this Amended and Restated Agreement, the Existing Land Use Regulations, the ARDA Overlay Plan, or which would materially impact the beneficial uses of that Party's property.

In the event City elects to defend the Third Party Legal Challenge, Heritage Fields shall indemnify and hold harmless City and its officials and employees from and against

any claims, losses, or liabilities, including any award of attorneys' fees against the City, assessed or awarded against City by way of judgment, settlement, or stipulation. If Heritage Fields defends any such Third Party Legal Challenge, Heritage Fields shall indemnify and hold harmless City and its officials and employees from and against any claims, losses, or liabilities assessed or awarded, including any award of attorneys' fees, against City by way of judgment, settlement, or stipulation

20. MISCELLANEOUS.

20.1 Covenants. The provisions of this Amended and Restated Agreement shall constitute covenants and restrictions which shall run with the land comprising the Property for the benefit thereof, and the burdens and benefits hereof shall bind and inure to the benefit of each of the Parties hereto and all successors in interest to the Parties hereto.

20.2 Entire Agreement, Waivers And Amendments. This Amended and Restated Agreement, together with the other documents and agreements attached hereto, constitutes the entire understanding and agreement of the Parties and supersedes all previous negotiations, discussions, and agreements among the Parties with respect to all or part of the subject matter hereof. No parole evidence of any prior or other agreement shall be permitted to contradict or vary the terms of this Amended and Restated Agreement. Failure by a Party to insist upon the strict performance of any of the provisions of this Amended and Restated Agreement by any other Party, or the failure by a Party to exercise its rights upon the default of the other Party, shall not constitute a waiver of such Party's right to insist and demand strict compliance by the other Parties with the terms of this Amended and Restated Agreement thereafter. Any amendments or modifications to this Amended and Restated Agreement must be in writing, signed by duly authorized representatives of each of the Parties hereto, and recorded in the Official Records of Orange County, California.

20.3 Legal Expenses. In any judicial proceeding, arbitration, or mediation between the City and Heritage Fields seeking enforcement of any of the terms and provisions of this Amended and Restated Agreement (collectively, "**Action**"), the prevailing Party in such Action shall recover all of its actual and reasonable costs and expenses (whether or not the same would be recoverable pursuant to Code of Civil Procedure Section 1033.5 or Civil Code Section 1717 in the absence of this Amended and Restated Agreement), including expert witness fees, attorney's fees, and costs of investigation and preparation prior to the commencement of the Action. However, such recovery shall not exceed the dollar amount of the actual costs and expenses of the Party from whom such recovery is sought for such same Action ("Non-Prevailing Party's Expenses"), and such prevailing Party shall not recover any costs and expenses in excess of the Non-Prevailing Party's Expenses. The right to recover such costs and expenses shall accrue upon commencement of the Action, regardless of whether the Action is prosecuted to a final judgment or decision.

20.4 Constructive Notice And Acceptance. Every person who now or hereafter owns or acquires any right, title, or interest in or to any portion of the Project or the

Property is and shall be conclusively deemed to have consented and agreed to every provision contained herein, whether or not any reference to this Amended and Restated Agreement is contained in the instrument by which such person acquired an interest in the Project or the Property.

20.5 No Third-Party Beneficiaries. This Amended and Restated Agreement and all of its terms, conditions, and provisions are entered into only for the benefit of the Parties executing this Amended and Restated Agreement (and any successors in interest), and not for the benefit of any other individual or entity.

20.6 Relationship Of Parties. The City and Heritage Fields hereby renounce the existence of any form of joint venture or partnership between them and agree that nothing contained herein or in any document executed in connection herewith shall be construed as making the City and Heritage Fields joint venturers or partners.

20.7 Severability. If any term, provision, covenant, or condition of this Amended and Restated Agreement is invalidated by a timely referendum, determined by a court of competent jurisdiction to be invalid, void, or unenforceable, the remaining provisions of this Amended and Restated Agreement shall continue in full force and effect, unless and to the extent the rights and obligations or the benefits of the bargain of any Party have been materially altered or abridged by such holding or action, as determined by the Party who would have benefited, in which case, in accordance with the provisions of Section 2.2, the Original Development Agreement shall govern.

20.8 Further Actions And Instruments. Each of the Parties shall cooperate with and provide reasonable assistance to the other Parties to the extent necessary to implement this Amended and Restated Agreement. Upon the request of a Party at any time, the other Parties shall promptly execute, with acknowledgement or affidavit if reasonably required, and file or record such required instruments and writings and take any actions as may be reasonably necessary to implement this Amended and Restated Agreement or to evidence or consummate the transactions contemplated by this Amended and Restated Agreement.

20.9 Estoppel Certificate. Any Party hereunder may, at any time, deliver written notice to any other Party requesting such Party to certify in writing that, to the best knowledge of the certifying Party (i) this Amended and Restated Agreement is in full force and effect and a binding obligation of the Party; (ii) this Amended and Restated Agreement has not been amended or modified either orally or in writing, or if so amended, identifying the amendments; and (iii) the requesting Party is not in default in the performance of its obligations set forth in this Amended and Restated Agreement or, if in default, to describe therein the nature and amount of any such defaults. A Party receiving a request hereunder shall execute and return such certificate within thirty (30) days following the receipt thereof. Any third-party including a Mortgagee shall be entitled to rely on the certificate.

20.10 Applicable Law; Venue. This Amended and Restated Agreement shall be construed and enforced in accordance with the internal laws of the State of California.

Any action at law or in equity arising under this Amended and Restated Agreement or brought by any Party hereto for the purpose of enforcing, construing or determining the validity of any provision of this Amended and Restated Agreement shall be filed and tried in the Superior Court of the County of Orange, State of California or the United States District Court for the Central District of California, Santa Ana Division, and the Parties hereto waive all provisions of law providing for the removal or change of venue to any other court.

20.11 Non-Liability Of Officers, Employees and Other Parties. Notwithstanding anything in this Amended and Restated Agreement to the contrary, (1) no official, officer, or employee of the City shall be personally liable to Heritage Fields or its respective predecessors, successors and assigns for any loss arising out of or connected with this Amended and Restated Agreement or the Existing Land Use Regulations, and (2) no partner, member or affiliate of Heritage Fields, nor any such partner's, member's or affiliate's separate property shall be personally liable for any claim arising out of or related to this Amended and Restated Agreement. Further, the liability of Heritage Fields under this Amended and Restated Agreement shall be limited solely to the interest of Heritage Fields in the Heritage Fields Property.

20.12 Notices. Any notice or communication required hereunder between the City and a Heritage Fields Party must be in writing and may be given either personally, by registered or certified mail, return receipt requested, or by facsimile transmission. If given by registered or certified mail, the same shall be deemed to have been given and received on the date of actual receipt by the addressee designated herein below as the Party to whom the notice is sent. If personally delivered, a notice shall be deemed to have been given when delivered to the Party to whom it is addressed. Notices delivered by facsimile transmission shall be deemed to have been given on the first business day following the date of transmission to the facsimile number. A Party hereto may at any time, by giving ten (10) days' written notice to the other Parties hereto, designate any other address in substitution of the address to which such notice or communication shall be given. Such notices or communications shall be given to the Parties at their addresses set forth below:

If to City:

City of Irvine
City Hall
One Civic Center Plaza
Irvine, CA 92623-9575
Attn: Director of Community Development
Telephone: (949) 724-6451
Telecopy: (949) 724-6440

With a copy to: Rutan & Tucker, LLP
611 Anton Blvd., Suite 1400
Costa Mesa, CA 92626
Attn: Irvine City Attorney
Telephone: (714) 641-3422
Telecopy: (714) 546-9035

If to Heritage Fields: Heritage Fields El Toro LLC
7130 Trabuco Road
Irvine, CA 92618
Attn: Lynn Jochim, Division President
Telephone: (949) 784-4229
Telecopy: (949) 784-4270

With a copy to: c/o Lennar Homes of California, Inc.
25 Enterprise
Aliso Viejo, CA 92646
Attn: Legal Notices
Telephone: (949) 349-8000
Telecopy: (949) 349-0782

With a copy to: Robert I. McMurry, Esq.
Paul, Hastings, Janofsky & Walker LLP
515 South Flower Street, 25th Floor
Los Angeles, CA 90071
Telephone: (213) 683-6255
Telecopy: (213) 627-0705

20.13 Representation As To Ownership. Subject to the provision in this Amended and Restated Agreement concerning LIFOCs and the Initial Heritage Fields Exchange Properties, Heritage Fields represents and warrants to the City that it is the owner in fee of the Heritage Fields Property.

20.14 Authority To Execute. Heritage Fields warrants and represents that (i) it is duly organized and existing, (ii) it is duly authorized to execute and deliver this Amended and Restated Agreement, (iii) by so executing this Amended and Restated Agreement, Heritage Fields is formally bound to the provisions of this Amended and Restated Agreement, (iv) Heritage Fields' entering into and performance of its obligations set forth in this Amended and Restated Agreement does not violate any provision of any other agreement to which Heritage Fields is bound, and (v) there is no existing or threatened litigation or legal proceeding of which Heritage Fields is aware which could prevent Heritage Fields from entering into or performing its obligations set forth in this Amended and Restated Agreement.

20.15 Execution Of Agreement; Counterparts. This Amended and Restated Agreement may be executed by the Parties in counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute

one and the same agreement. This Amended and Restated Agreement shall constitute a valid and enforceable agreement between the City and Heritage Fields.

20.16 Exhibits. This Amended and Restated Agreement contains exhibits, attached hereto and made a part hereof by this reference. Said exhibits are identified as follows:

- A The Property
- B Initial City Park Property
- C Exchange Properties
- D Original Non-Park Property
- E-1 Group A Facilities
- E-2 Group B Facilities
- E-3 Narrative Description of Group A and Group B Facilities
- F Police Site
- G ARDA Transfer Site
- H Heritage Fields Property
- H-1 Heritage Fields Property
- H-2 Heritage Fields Property
- I Property Identification Map
- J [RESERVED]
- K [RESERVED]
- L ARDA Overlay Plan
- M Form LIFO Conveyance
- N Map of LIFO Properties
- O Rights-of-way and Easements
- P Deed for Police Site
- Q Deed for ARDA Transfer Site
- R Index for Guaranteed Amount
- S Rate and Method of Apportionment
- T Police Site Title Exceptions
- U ARDA Transfer Site Title Exceptions

[SIGNATURES APPEAR ON THE FOLLOWING PAGE]


CITY:

CITY OF IRVINE
a municipal corporation

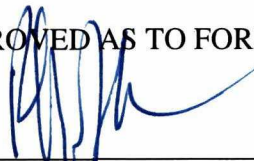
By: 
Mayor Sukhee Kang

Dated: 12/27, 2010

ATTEST:


Deputy City Clerk

APPROVED AS TO FORM


Philip D. Kohn
City Attorney


HERITAGE FIELDS:

HERITAGE FIELDS EL TORO, LLC,
a Delaware limited liability company

By: Heritage Fields LLC,
a Delaware limited liability company

By: Lennar-LNR Heritage Fields, LLC,
a Delaware limited liability company

By: Lennar Homes Of California, Inc.,
a California corporation

By: 
Name:

| |
|-----------------|
| Erik R. Higgins |
| Vice President |

Title: _____

Dated: _____, 2010

APPROVED AS TO FORM

PAUL, HASTINGS, JANOFSKY & WALKER LLP

By: _____
Robert I. McMurry, Esq.

Dated: _____, 2010

HERITAGE FIELDS:

HERITAGE FIELDS EL TORO, LLC,
a Delaware limited liability company

By: Heritage Fields LLC,
a Delaware limited liability company

By: Lennar-LNR Heritage Fields, LLC,
a Delaware limited liability company

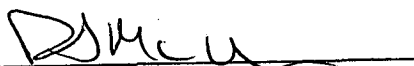
By: Lennar Homes Of California, Inc.,
a California corporation

By: _____
Name: _____
Title: _____

Dated: _____, 2010

APPROVED AS TO FORM

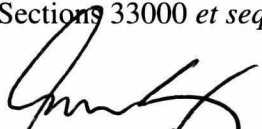
PAUL, HASTINGS, JANOFSKY & WALKER LLP

By: 
Robert I. McMurry, Esq.


Dated: Dec 26, 2010

RDA:

IRVINE REDEVELOPMENT AGENCY,
a redevelopment agency formed pursuant to Health
and Safety Code Sections 33000 *et seq.*

By: 
Name: Sukhee Khand
Title: Chair, Redevelopment Agency
Dated: 12/27, 2010

ATTEST:


Deputy Secretary of the Irvine
Redevelopment Agency

APPROVED AS TO FORM


Redevelopment Agency Counsel

STATE OF CALIFORNIA)
) ss
COUNTY OF ORANGE)

On DECEMBER 27, 2010, before me JERILYN BAGWELL, personally appeared ERIK R. HIGGINS, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/~~she~~-executed the same in his/~~her~~ authorized capacity, and that by his/~~her~~ signature on the instrument, the person or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Jerylyn Bagwell

Signature of Notary Public



(SEAL)

STATE OF CALIFORNIA)
) ss
COUNTY OF Orange)

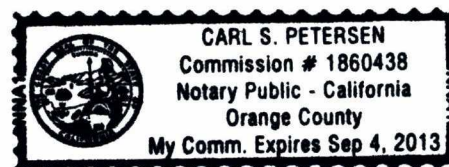
On December 27, 2010, before me Carl S. Petersen, Notary Public, personally appeared Sukhee Kang, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/~~she~~-executed the same in his/~~her~~ authorized capacity, and that by his/~~her~~ signature on the instrument, the person or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Carl S. Petersen

Signature of Notary Public



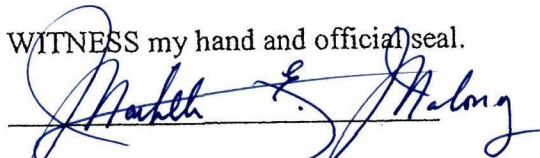
(SEAL)

STATE OF CALIFORNIA)
) ss
COUNTY OF Los Angeles)

On December 23, 2010, before me Marichelle E. Maloney Notary Public personally appeared Robert I. McHurry, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument, the person or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.


Signature of Notary Public



(SEAL)

CONSENT OF LIENHOLDER AND SUBORDINATION OF LIEN

EL TORO LLC, a Delaware limited liability company (individually and as lead arranger and administrative agent for itself and certain co-lenders), as beneficiary or assignee of certain property, rights, interests, and estates granted by Owner, as more specifically described in the following instruments: (a) That certain Deed of Trust with Absolute Assignment of Leases and Rents, Security Agreement and Fixture Financing Statement, dated December 21, 2005 and recorded in the Official Records for Orange County, California, on December 22, 2005 as Instrument No. 2005001023684; (b) That certain Substitution of Trustee and Deed of Partial Reconveyance, dated February 9, 2006, and recorded in the Official Records for Orange County, California, on March 2, 2006 as Instrument No. 2006000141834; (c) That certain Substitution of Trustee and Deed of Partial Reconveyance, dated February 9, 2006, and recorded in the Official Records for Orange County, California, on August 24, 2006 as Instrument No. 2006000565634; (d) That certain First Amendment to Deed of Trust, dated August 10, 2006, and recorded in the Official Records for Orange County, California, on August 24, 2006 as Instrument No. 2006000565861; (e) That certain Second Amendment to Deed of Trust, dated June 26, 2007, and recorded in the Official Records for Orange County, California, on June 26, 2007 as Instrument No. 2007000405167; (f) That certain Third Amendment to Deed of Trust, dated July 15, 2008, and recorded in the Official Records for Orange County, California, on July 15, 2008 as Instrument No. 2008000338318; (g) That certain Absolute Assignment of Leases and Rents, dated December 21, 2005, and recorded in the Official Records for Orange County, California, on December 22, 2005 as Instrument No. 2005001023685; (h) That certain Amendment to Absolute Assignment of Leases and Rents, dated June 26, 2007, and recorded in the Official Records for Orange County, California, on June 26, 2007 as Instrument No. 2007000405168; (i) That certain Second Amendment to Absolute Assignment of Leases and Rents, dated July 15, 2008, and recorded in the Official Records for Orange County, California, on July 15, 2008 as Instrument No. 2008000338317; and (j) that certain Fourth Amendment to Deed of Trust, dated June 24, 2009, and recorded November 3, 2009 as Instrument No. 2009000596966 (collectively (a)-(j) above are herein referred to as the "Lienholder Deeds of Trust and Assignments"), hereby consents to the foregoing Amended and Restated Development Agreement by and between the City of Irvine and Heritage Fields El Toro, LLC (and further between Heritage Fields El Toro, LLC and the Irvine Redevelopment Agency) to which this Consent of Lienholder and Subordination of Lien is attached (the "Amended and Restated Agreement") and hereby subordinates the lien and charge of the Lienholder Deeds of Trust and Assignments to the Amended and Restated Agreement and agrees further that said Amended and Restated Agreement shall, upon its recordation in the Official Records for Orange County, California, constitute a lien on the real property affected thereby and be prior and superior to the liens imposed by the Lienholder Deeds of Trust and Assignments on said real property.

[signature follows on next page]

SIGNATURE PAGE TO

**CONSENT OF LIENHOLDER AND
SUBORDINATION OF LIEN**

Dated: _____

EL TORO LLC,
a Delaware limited liability company

By:  _____
Name: Nicholas V. Colonna

Its: Authorized Signatory

By:  _____

Name: William R. Lindsay
~~Authorized Signatory~~

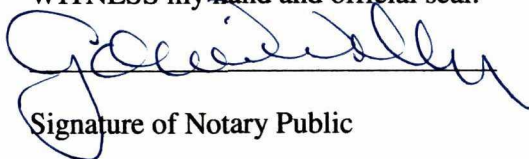
Its: _____

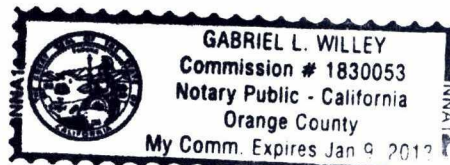
STATE OF CALIFORNIA)
) ss.
COUNTY OF LOS ANGELES)

On NOVEMBER 1, 2010, before me, GABRIEL L. WILLEY, personally appeared NICHOLAS V. COLONNA, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument, the person or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.


Signature of Notary Public



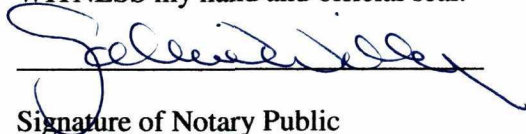
(SEAL)

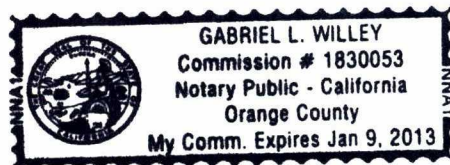
STATE OF CALIFORNIA)
) ss.
COUNTY OF LOS ANGELES)

On NOVEMBER 1, 2010, before me, GABRIEL L. WILLEY, personally appeared WILLIAM R. LINDSAY, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument, the person or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.


Signature of Notary Public



(SEAL)

EXHIBIT 'A'

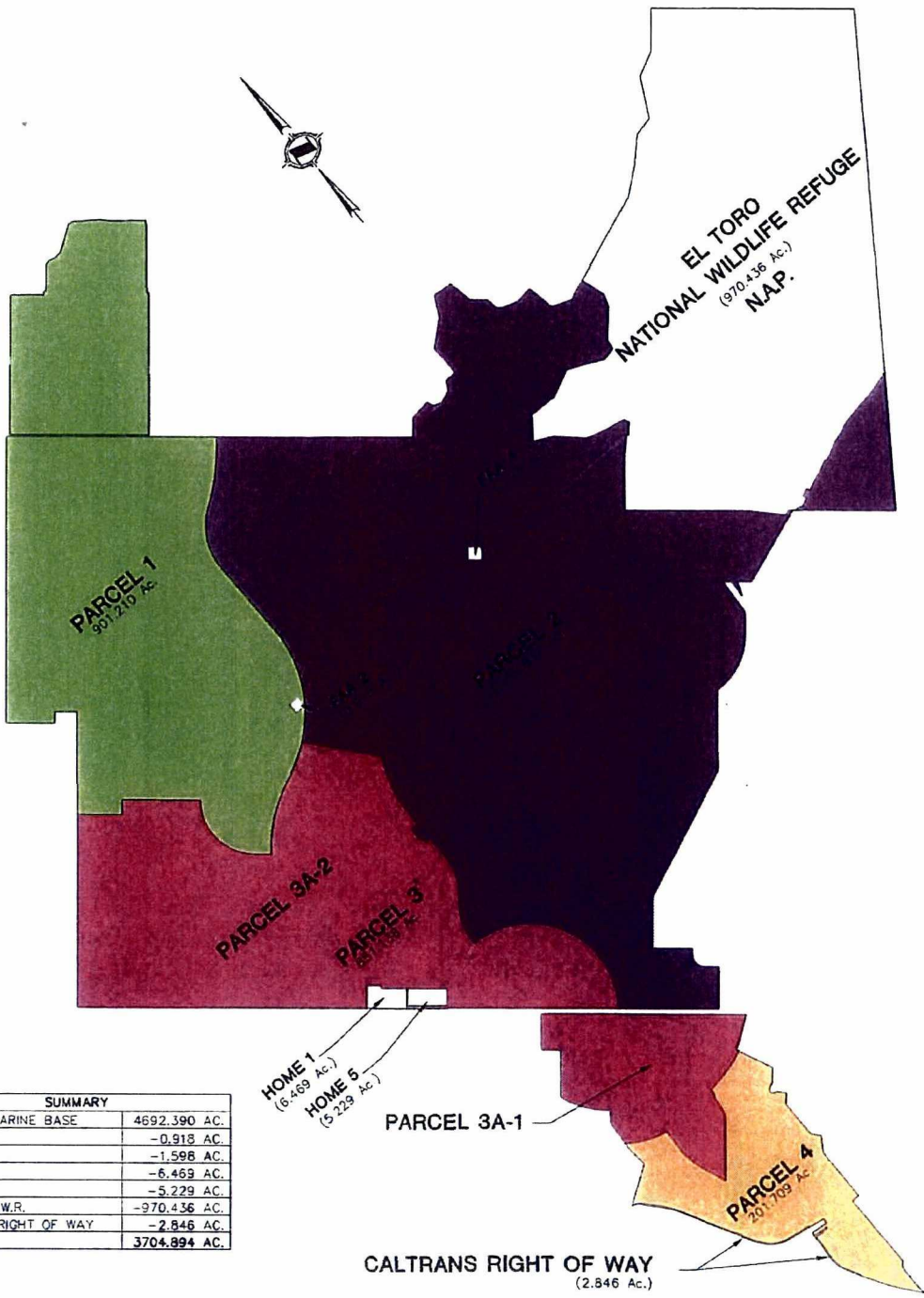
ACREAGE SUMMARY
 TOTAL ACREAGE TO BE SOLD: 3,704.894 Ac.
 TOTAL ACREAGE TO BE OWNED BY USA, CALTRANS, FAA, AND WILDLIFE
 REFUGE AND HOMELESS ASSISTANCE PROVIDERS: 987.496 Ac.
 TOTAL ACREAGE: 4,692.390 Ac.

EXHIBIT EXPLANATION:
 THE ACREAGES SHOWN HEREON ARE BASED ON PARCELS 1, 2,
 3A-1, 3A-2, AND 4 DESCRIBED IN THE QUITCLAIM DEEDS FROM
 THE USA TO HERITAGE FIELDS IGNORING THE EFFECTS OF LIFO, C,
 AS DEPICTED IN THE BID DOCUMENTS. THESE BID PARCELS HAD
 EXCEPTIONS NETTING OUT THE ACREAGES OF FAA AND HOME
 SITE PARCELS SHOWN HEREON.

LEGEND


- PARCEL 1
- PARCEL 2
- PARCEL 3*
- PARCEL 4

NOTE:
 ALL ACREAGES LISTED HEREON ARE THE TOTAL ACREAGES FOR
 THE PARCELS AS DEPICTED BY SEPARATE COLORS.
 ACREAGES IN PARENTHESES () INDICATE ACREAGE OF THE
 PARCEL INDICATED SHOWN FOR INFORMATIONAL PURPOSES ONLY.



| SUMMARY | |
|-----------------------|---------------------|
| EL TORO MARINE BASE | 4692.390 AC. |
| FAA 2 | -0.918 AC. |
| FAA 4 | -1.598 AC. |
| HOME 1 | -6.469 AC. |
| HOME 5 | -5.229 AC. |
| EL TORO N.W.R. | -970.436 AC. |
| CALTRANS RIGHT OF WAY | -2.846 AC. |
| TOTAL | 3704.894 AC. |

* PARCEL 3 IS COMPRISED OF PARCEL 3A-1 AND PARCEL 3A-2

| | | | |
|---|--|---------------------|-----------------------|
|  HUNSAKER & ASSOCIATES IRVINE, INC. PLANNING • ENGINEERING • SURVEYING Three Highways • Irvine, CA 92618 • P: (949) 583-7070 • F: (949) 583-4799 | FORMER EL TORO MCAS PROPERTY | | |
| | IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA | | |
| DATE: 9-19-07 | REV. DATE: 3-06-09 | DWG. BY: R. WHEELER | CHK'D BY: R. WILLIAMS |
| | | SCALE: 1"=2000' | W.O. 1855-80X |
| I:\HeritageFields\Exhibits\DA\0903-revised\EXH-A.dwg | | | |

PSOMAS

LEGAL DESCRIPTION

Exhibit "A"

Parcel 1

In the City of Irvine, County of Orange, State of California, being those portions of Lots 359 and 370 of Block 120, Lots 360 and 369 of Block 142, Lots 241 and 242 of Block 121, Lots 271, 272, 277 and 278 of Block 141, and Lots 279 and 280 of Block 140, of Irvine's Subdivision, as shown on the map filed in Book 1, Page 88, of Miscellaneous Maps, lying within the U.S. M.C.A.S.-El Toro property, and as shown on Record of Survey 97-1038 filed in Book 171, Pages 1 through 49 inclusive, all of the above documents and maps on file in the Recorders Office of said County, lying northerly, northwesterly, and westerly of the following described line:

Commencing at the southwest quarter corner of said Block 142; thence along the northeasterly line of said Lot 271, said line being also the former centerline of Irvine Boulevard as shown on said Record of Survey, North $49^{\circ}21'16''$ West 49.00 feet to the centerline of Lambert Road as shown on said Record of Survey; thence continuing North $49^{\circ}21'16''$ West 17.14 feet along said former centerline of Irvine Boulevard to the **True Point of Beginning**; thence leaving said centerline South $40^{\circ}12'23''$ West 208.48 feet to the beginning of a curve concave northwesterly having a radius of 3776.61 feet; thence southwesterly along said curve 1107.25 feet through a central angle of $16^{\circ}47'54''$ to the beginning of a reverse curve concave southeasterly having a radius of 1200.00 feet, a radial line to the beginning of said curve bears South $32^{\circ}59'43''$ East; thence southwesterly along said curve 1193.90 feet through a central angle of $57^{\circ}00'17''$; thence South $00^{\circ}00'00''$ West 1456.34 feet to the beginning of a curve concave northwesterly having a radius of 2400.00 feet; thence southwesterly along said curve 2768.42 feet through a central angle of $66^{\circ}05'28''$; thence South $66^{\circ}05'28''$ West 353.80 feet to the beginning of a curve concave southeasterly having a radius of 2500.00 feet; thence southwesterly along said curve 1038.99 feet through a central angle $23^{\circ}48'43''$; thence South $42^{\circ}16'45''$ West 235.22 feet; thence North $49^{\circ}51'20''$ West 281.26 feet to the beginning of a curve concave easterly having a radius of 1000.00 feet; thence northwesterly,

PSOMAS

1 northerly and northeasterly along said curve 1574.20 feet through a central angle of
2 90°11'43"; thence North 49°14'49" West 1446.32 feet; thence South 41°14'17" West
3 275.57 feet; thence North 49°21'34" West 817.62 feet to a point on the northwesterly line
4 of said Lot 279, said point lying distant thereon South 40°39'31" West 1675.66 feet from
5 the most northerly corner of said Lot 279.

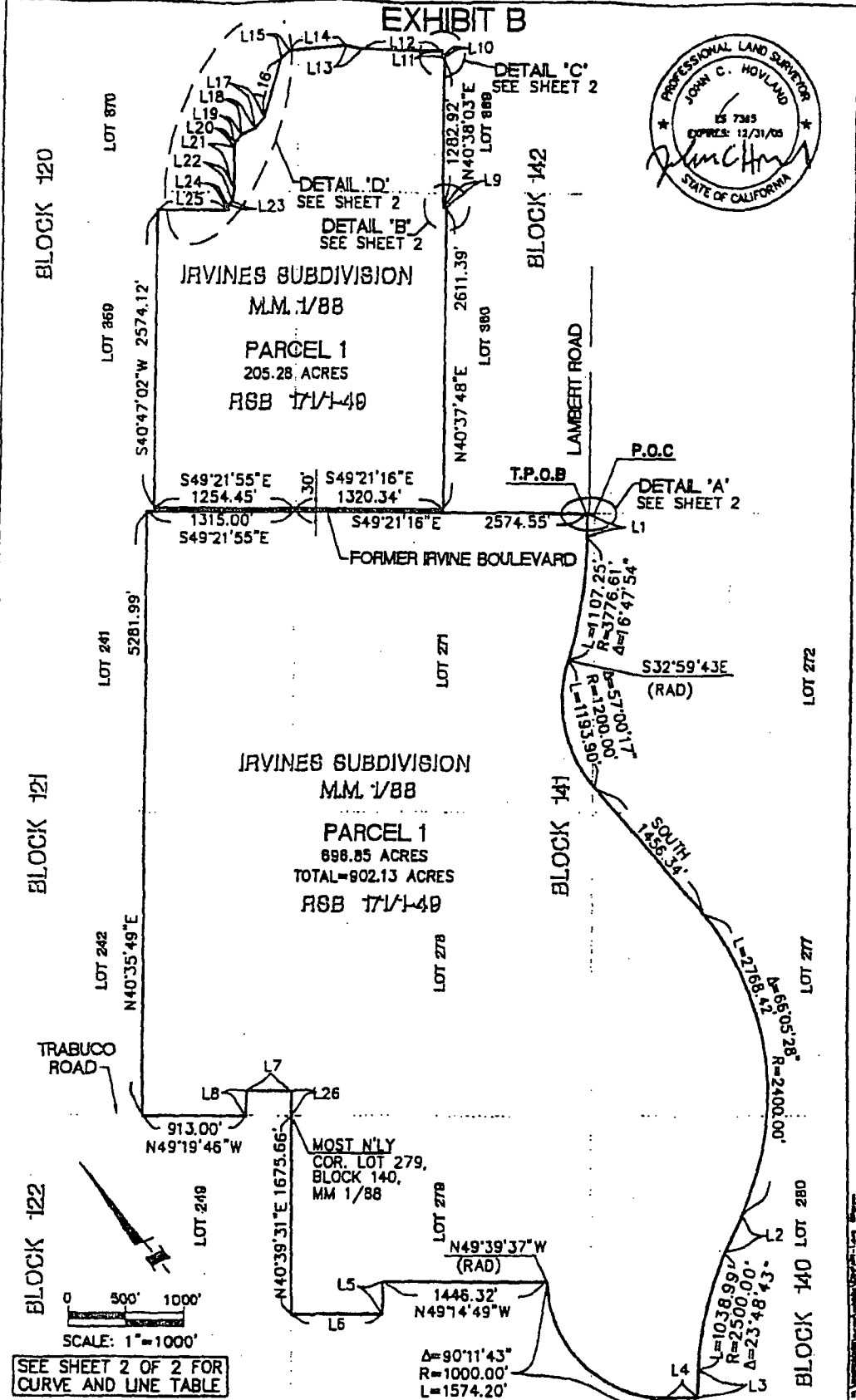
6
7 Excepting therefrom that 30.00 foot wide strip of land known as former Irvine Boulevard
8 as shown on said Record of Survey.

9
10 Containing 902.13 acres, more or less.

11
12 Subject to covenants, conditions, restrictions, rights-of-way and easements of record, if
13 any.

14
15 As shown on Exhibit "B" attached hereto and made a part hereof.
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31

EXHIBIT B

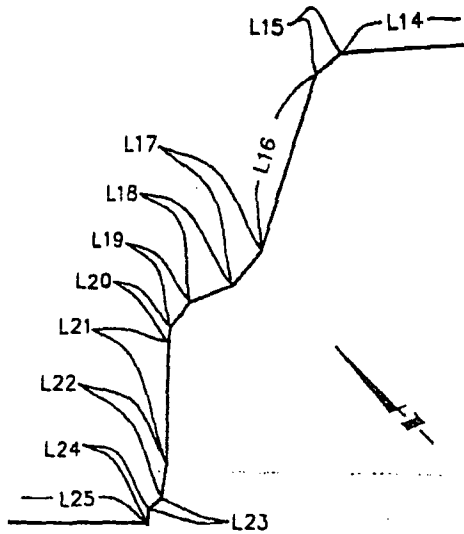


SEE SHEET 2 OF 2 FOR CURVE AND LINE TABLE

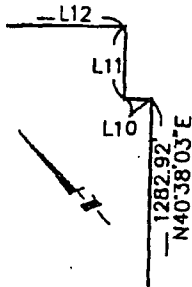
| | | |
|--|---|--|
| <p>DESCRIPTION: Those portions of Lots 359 and 370 of Block 120, Lots 320 and 349 of Block 142, Lots 241 and 242 of Block 121, Lots 271, 272, 277 and 278 of Block 141, Lots 279 and 280 of Block 140, in the unincorporated territory of the County of Orange, State of California, shown on the Irvines Subdivision Map in Book 1, Page 88, in the Office of said County.</p> <p>MCAS-EL TORO</p> | <p>SHEET 1 OF 2</p> <p>PSOMAS</p> <p>287 1st St Tustin, CA 92680 (714) 771-3333 Fax (714) 940-6282</p> | <p>SCALE 1" = 1000'</p> <p>DRAFTED CH</p> <p>CHECKED JCH</p> <p>DATE APRIL 2003</p> <p>JCS</p> <p>NUMBER 240R030100 TJ</p> |
|--|---|--|

EXHIBIT A-I

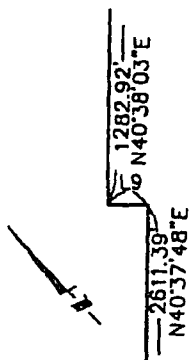
EXHIBIT B



DETAIL 'D'
SCALE 1"=400'



DETAIL 'C'
SCALE 1"=100'



DETAIL 'B'
SCALE 1"=100'

| LINE TABLE | | |
|------------|--------|-------------|
| NO. | LENGTH | BEARING |
| L1 | 208.48 | S40°12'23"W |
| L2 | 353.80 | S66°05'28"W |
| L3 | 235.22 | S42°16'45"W |
| L4 | 281.26 | N49°51'20"W |
| L5 | 275.57 | S41°14'17"W |
| L6 | 817.62 | N49°21'34"W |
| L7 | 400.00 | N49°19'46"W |
| L8 | 217.80 | S40°36'53"W |
| L9 | 30.00 | N49°20'54"W |
| L10 | 20.01 | N49°13'29"W |
| L11 | 53.18 | N40°37'45"E |
| L12 | 690.50 | N49°30'48"W |
| L13 | 151.34 | N40°59'05"W |
| L14 | 512.76 | N53°35'30"W |
| L15 | 95.00 | N86°29'26"W |
| L16 | 525.89 | S56°43'54"W |
| L17 | 127.13 | S80°10'23"W |
| L18 | 134.50 | N71°34'21"W |
| L19 | 91.30 | S78°06'29"W |
| L20 | 45.20 | S47°19'54"W |
| L21 | 351.20 | S40°17'49"W |
| L22 | 100.00 | S50°17'49"W |
| L23 | 48.20 | S89°45'29"W |
| L24 | 41.81 | S40°38'46"W |
| L25 | 627.28 | N49°42'16"W |
| L26 | 217.80 | N40°36'53"E |

FORMER Q. IRVINE BLVD.

NW'LY LINE
LOT 271
BLOCK 141,
M.M. 1/88

T.P.O.B.

2574.55'
S49°21'16"E

N49°21'16"W
17.14'

Q. LAMBERT ROAD

N49°21'16"W
49.00'

P.O.C.
SW 1/4 COR.
BLOCK 142
M.M. 1/88

DETAIL 'A'
SCALE 1"=50'



DESCRIPTION: These portions of Lots 359 and 370 of Block 120, Lots 390 and 399 of Block 142, Lots 244 and 242 of Block 121, Lots 271, 272, 277 and 278 of Block 141, Lots 279 and 280 of Block 140, in the unincorporated territory of the County of Orange, State of California, shown on the Irvine's Subdivision Cled in Book 1, Page 86, in the Office of said County.

MCAS-EL TORO

SHEET 2 OF 2

SCALE 1"=50'

PSOMAS

307 1st St. Santa Ana, CA 92701
949-251-1234 Fax: 949-251-1235

DRAFTED CN

CHECKED JCH

DATE APRIL 2003

JOB NUMBER 2NCR060100 T3

EXHIBIT A-I

PSOMAS

LEGAL DESCRIPTION

Exhibit "A"

Parcel 2

In the City of Irvine, County of Orange, State of California, being those portions of Lots 303 and 306 of Block 173, Lots 281 through 284 inclusive, of Block 155, Lot 280 of Block 140, Lots 271, 272 and 277 of Block 141, Lots 273 through 276 inclusive, of Block 154, Lots 299, 300 and 302 of Block 174, Lots 362, 363, 366 and 367 of Block 153, and Lot 313 of Block 175 of Irvine's Subdivision, as shown on map filed in Book 1, Page 88, of Miscellaneous Maps, lying within the U.S. M.C.A.S. El Toro property, as shown on Record of Survey 97-1038, filed in Book 171, Pages 1 through 49 inclusive, all of the above maps on file in the Recorder's Office of said County, lying easterly of the following described line:

Commencing at the southwest quarter corner of Block 142 of said Irvine's Subdivision, said quarter corner being shown on said Record of Survey; thence along the northeasterly line of said Lot 271, said line being also along the former centerline of Irvine Boulevard, as shown on said Record of Survey, North 49°21'16" West 49.00 feet to the centerline of Lambert Road as shown on said Record of Survey; thence continuing North 49°21'16" West 17.14 feet along said former centerline of Irvine Boulevard to the **True Point of Beginning**; thence leaving said centerline South 40°12'23" West 208.48 feet to the beginning of a curve concave northwesterly having a radius of 3776.61 feet; thence southwesterly along said curve 1107.25 feet through a central angle of 16°47'54" to beginning of a reverse curve concave southeasterly having a radius of 1200.00 feet, a radial line to the beginning of said curve bears North 32°59'43" West; thence southwesterly along said curve 1193.90 feet through a central angle of 57°00'17"; thence South 00°00'00" West 1456.34 feet to the beginning of a curve concave northwesterly having a radius of 2400.00 feet; thence southerly along said curve 2226.96 feet through a central angle of 53°09'53"; thence non-tangent to said curve South 39°16'19" East 1519.69 feet to the beginning of a non-tangent curve concave southeasterly having a radius of 2100.00 feet, a radial line to the beginning of said curve

PSOMAS

1 bears North 58°27'48" West; thence southerly along said curve 1155.88 feet through a
2 central angle of 31°32'12"; thence non-tangent to said curve South 00°57'09" West
3 276.56 feet; thence North 89°02'51" West 141.47 feet; thence South 00°57'09" West
4 221.51 feet to the beginning of a curve concave northeasterly having a radius of
5 120.00 feet; thence southerly, southeasterly and easterly along said curve 188.50 feet
6 through a central angle of 90°00'00"; thence South 89°02'51" East 38.00 feet; thence
7 South 00°57'09" West 396.66 feet to the beginning of a curve concave westerly having a
8 radius of 1200.00 feet; thence southerly along said curve 813.74 feet through a central
9 angle of 38°51'11"; thence South 39°48'20" West 226.79 feet to the beginning of a curve
10 concave easterly having a radius of 900.00 feet; thence southerly along said curve
11 605.19 feet through a central angle of 38°31'40"; thence South 01°16'40" West
12 129.84 feet to the beginning of a non-tangent curve concave southwesterly having a
13 radius of 1600.00 feet, a radial line to the beginning of said curve bears
14 North 01°09'46" East; thence easterly, southeasterly, southerly and southwesterly along
15 said curve 3582.01 feet through a central angle of 128°16'17" to a point on a line parallel
16 with and distant 50.00 feet northeasterly from the southwesterly line of said Block 155,
17 said point lying distant along said parallel line North 49°20'21" West 616.16 feet from
18 the southeasterly line of said Lot 283; thence along said parallel line
19 South 49°20'21" East 616.16 feet to said southeasterly line; thence along a line that is
20 parallel with and distant 50.00 feet northeasterly from the southwesterly line of said
21 Block 173, South 49°20'18" East 1220.06 feet to the terminus of the herein described
22 line.

23
24 **Excepting** therefrom the 970.435 acre parcel shown on Record of Survey 98-1077, filed
25 in Book 173, Pages 28 through 31, inclusive, in the office of the County Recorder of said
26 County.

27
28 Containing 1752.43 acres, more or less.

29
30 Subject to covenants, conditions, restrictions, rights-of-way and easements of record, if
31 any.

PSOMAS

1

2

The distances shown hereon are ground distances.

3

4

As shown on Exhibit "B" attached hereto and made a part hereof.

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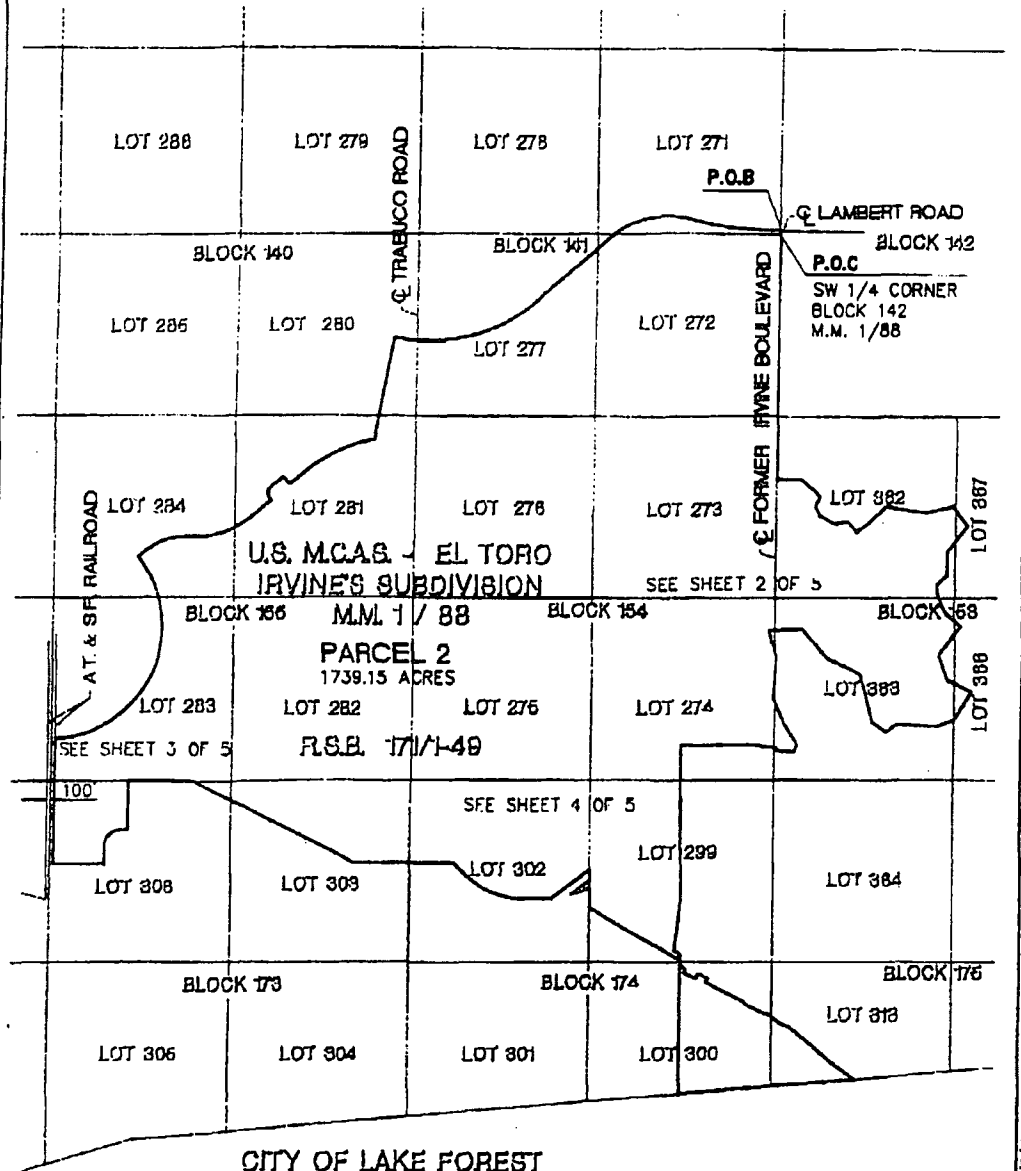
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27

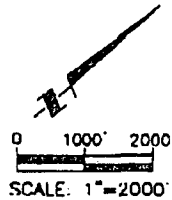
28

29

EXHIBIT B



CITY OF LAKE FOREST
 RANCHO CANADA DE LOS ALISOS
 M.F.L.A. CO 3/290-291



SEE SHEET 5 OF 5 FOR
 CURVE AND LINE TABLE

DESCRIPTION: That portion of Lots 306 & 303 of Block 173, Lots 281 thru 284 of Block 165, Lot 280 of Block 140, Lots 271, 272 & 277 of Block 141, Lots 273 thru 276 of Block 154, Lots 299 & 302 of Block 174, Lots 303, 304, 305, & 307 of Block 183, Lots 313, 314, 304, & 305 of Block 175, Lots 315 & 300 of Block 178, Lot of Block 380, and Lot 369 of Block 182, in the City of Irvine, County of Orange, State of California, as shown the Irvine's Subdivision, filed in Book 1 Page 88.

SHEET 1 OF 5

SCALE 1" = 2000'

PSOMAS

DRAFTED: CM

CHECKED: JCH

DATE: APRIL, 2003

JOB NUMBER: ZNOR060100 13

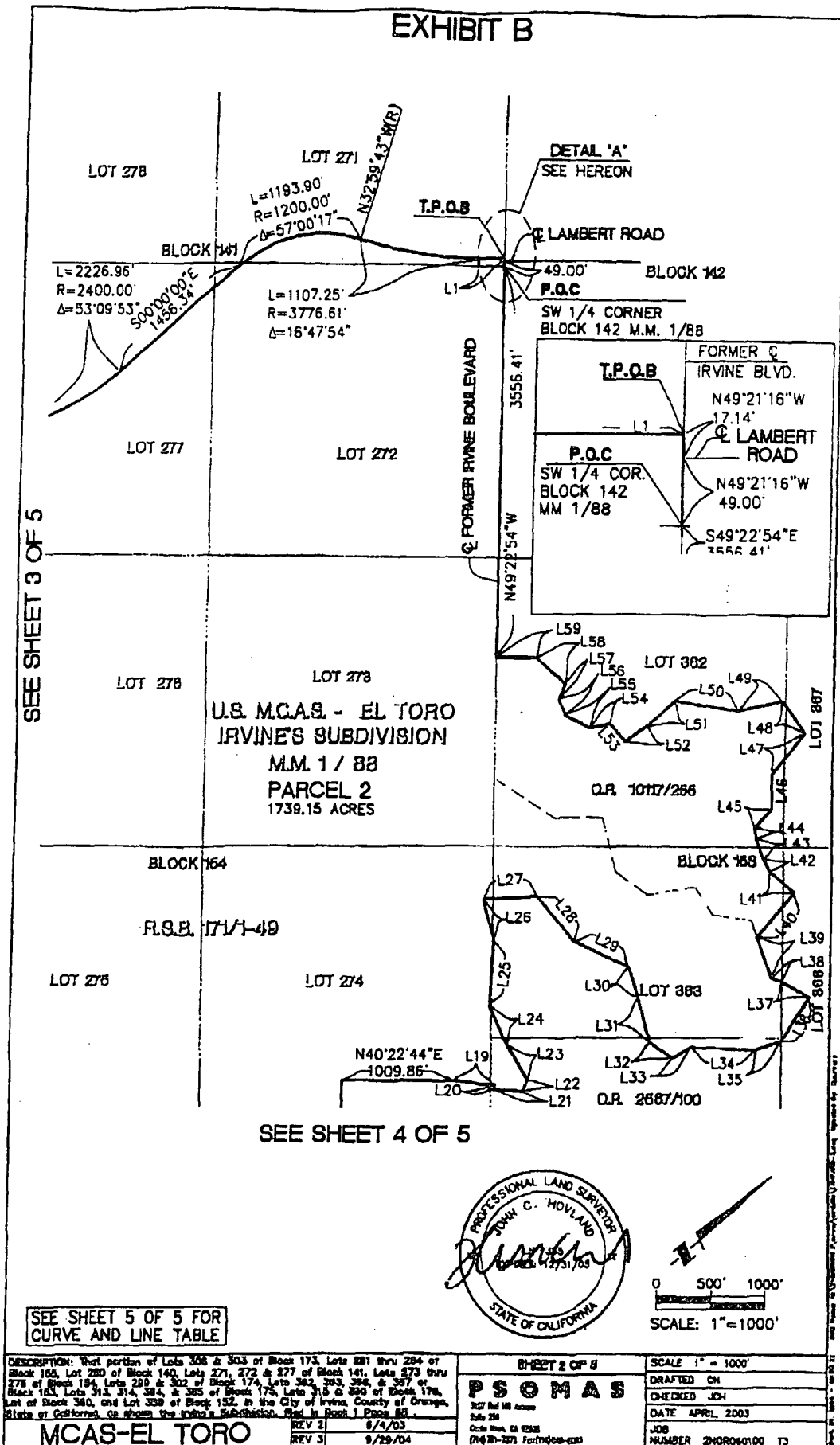
MCAS-EL TORO

REV 2 6/4/03
 REV 3 6/28/04

287 Red Hill Avenue
 Suite 200
 Costa Mesa, CA 92626
 (714) 261-7272 Fax (714) 440-8003

EXHIBIT A-II

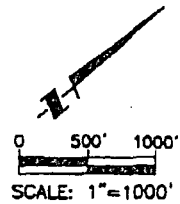
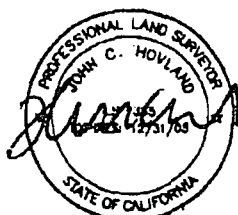
EXHIBIT B



SEE SHEET 3 OF 5

SEE SHEET 4 OF 5

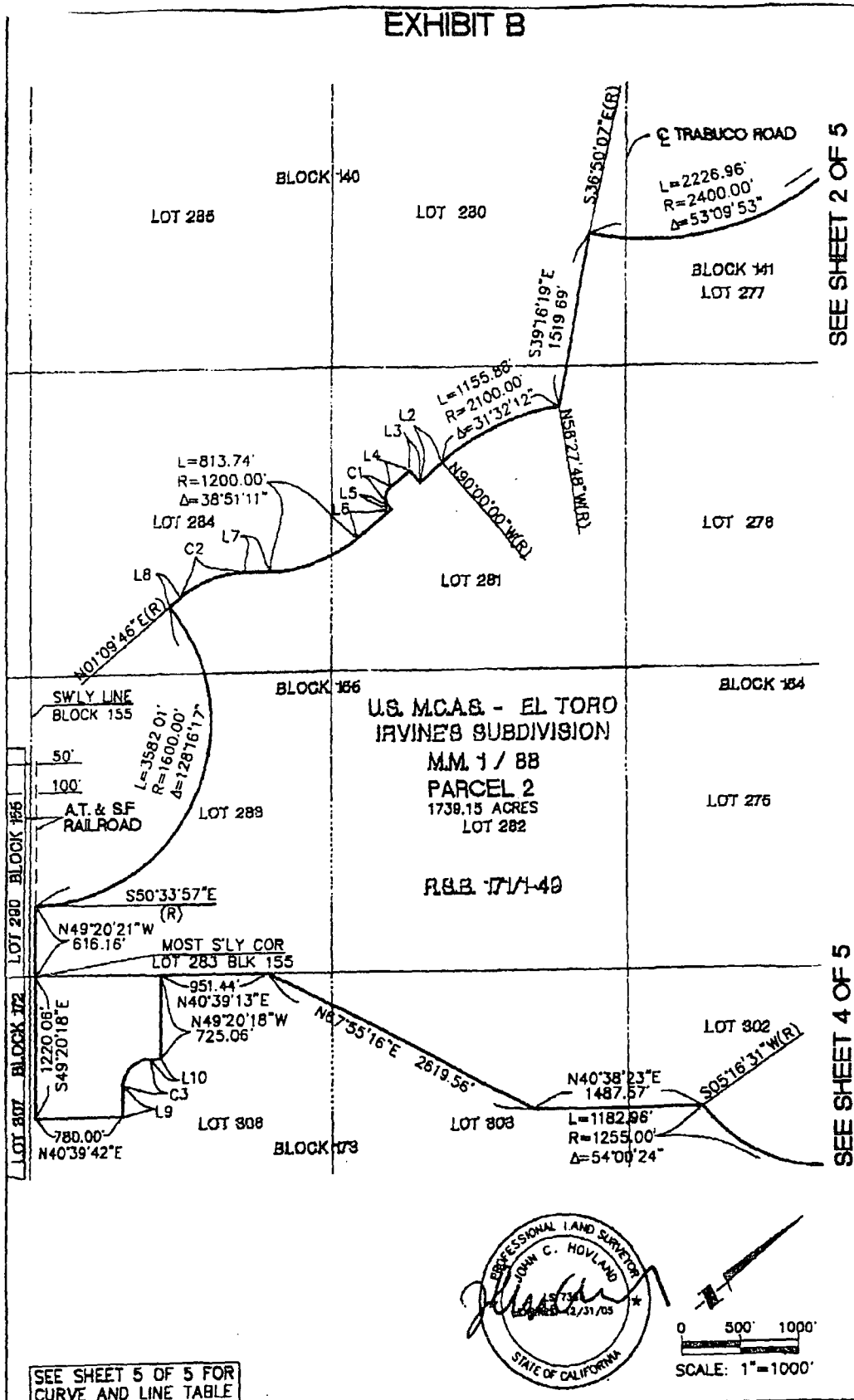
SEE SHEET 5 OF 5 FOR
CURVE AND LINE TABLE



| | | |
|---|---|--|
| DESCRIPTION: That portion of Lots 302 & 303 of Block 173, Lots 381 thru 384 of Block 163, Lot 280 of Block 140, Lots 271, 272 & 277 of Block 141, Lots 273 thru 276 of Block 154, Lots 289 & 302 of Block 174, Lots 382, 383, 386, & 387 of Block 163, Lots 313, 314, 384, & 385 of Block 173, Lots 315 & 320 of Block 176, Lot of Block 340, and Lot 339 of Block 132, in the City of Irvine, County of Orange, State of California, as shown the Irvine's Subdivision, filed in Book 1 Page 85. | SHEET 2 OF 5 | SCALE 1" = 1000' |
| | PSOMAS <small>307 Red Hill Avenue Suite 201 Costa Mesa, CA 92626 (714) 261-3370 Fax (714) 261-0200</small> | DRAFTED CN CHECKED JCH DATE APRIL 2003 JOB NUMBER 2NOR060100 13 |
| | MCAS-EL TORO | REV 2 6/4/03 REV 3 9/29/04 |

EXHIBIT A-II

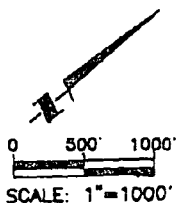
EXHIBIT B



SEE SHEET 2 OF 5

SEE SHEET 4 OF 5

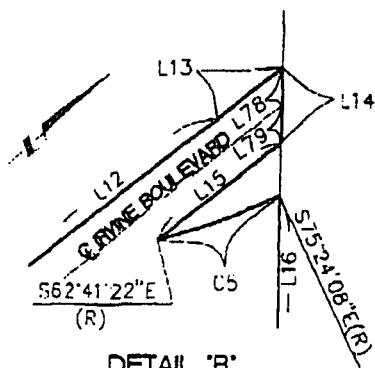
SEE SHEET 5 OF 5 FOR CURVE AND LINE TABLE



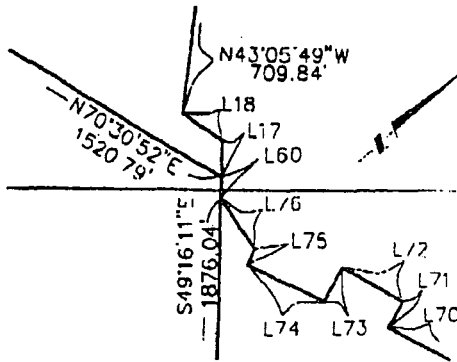
| | | |
|--|---|--|
| DESCRIPTION: That portion of Lots 308 & 309 of Block 173, Lots 291 thru 294 of Block 155, Lot 280 of Block 140, Lots 271, 272 & 277 of Block 141, Lots 273 thru 276 of Block 154, Lots 289 & 301 of Block 174, Lots 362, 363, 368 & 367 of Block 153, Lots 313, 314, 364, & 328 of Block 175, Lots 318 & 350 of Block 176, Lot of Block 300, and Lot 308 of Block 182, in the City of Irvine, County of Orange, State of California, as shown the Irvine's Subdivision, filed in Book 1 Page 88. | SHEET 3 OF 5 | SCALE 1" = 1000' |
| | PSOMAS 357 Red Hill Avenue Suite 109 Costa Mesa, CA 92626 (714) 261-7021 Fax (714) 446-6003 | DRAFTED CH CHECKED JCH DATE APRIL 2003 JOB NUMBER 2NOR080100 T3 |
| MCAS-EL TORO | REV 2 6/4/03 REV 3 6/28/04 | |

EXHIBIT A-II

EXHIBIT B

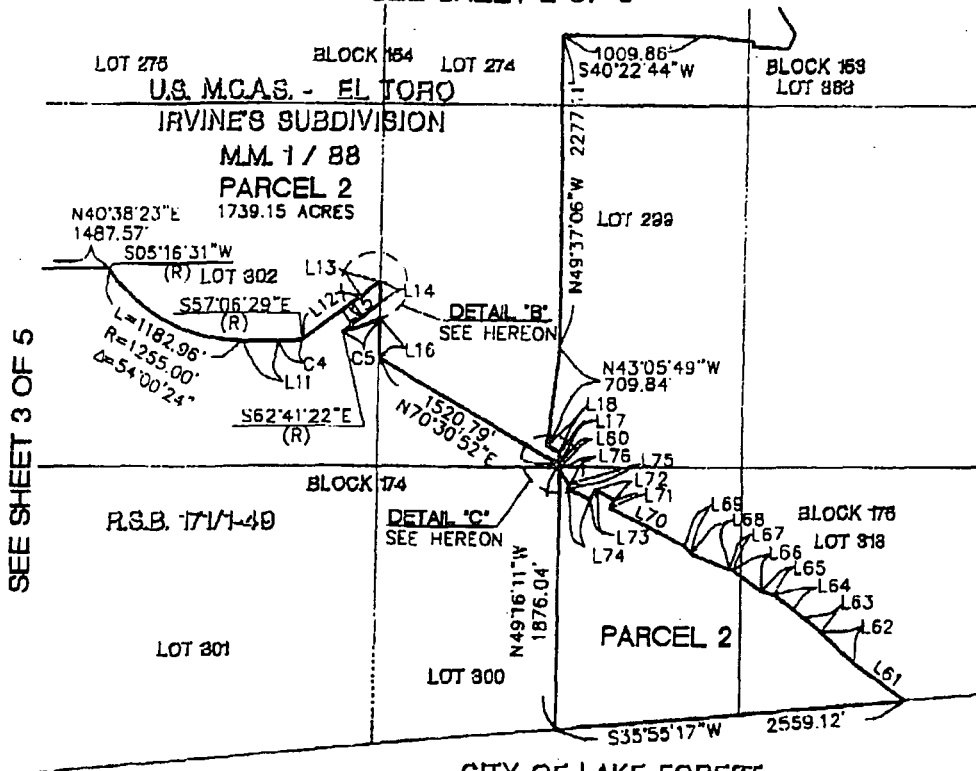


DETAIL 'B'
SCALE 1" = 300'



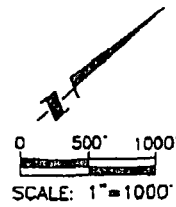
DETAIL 'C'
SCALE 1" = 300'

SEE SHEET 2 OF 5



SEE SHEET 3 OF 5

CITY OF LAKE FOREST
RANCHO CANADA DE LOS ALISOS
M.R.L.A. CO 3/280-291



SEE SHEET 5 OF 5 FOR
CURVE AND LINE TABLE

DESCRIPTION: That portion of Lots 308 & 303 of Block 173, Lots 281 thru 284 of Block 158, Lot 220 of Block 140, Lots 271, 272 & 277 of Block 141, Lots 273 thru 278 of Block 154, Lots 299 & 302 of Block 174, Lots 353, 353, 353, & 357 of Block 153, Lots 313, 314, 354, & 365 of Block 173, Lots 313 & 360 of Block 178, Lot of Block 320, and Lot 369 of Block 152, in the City of Irvine, County of Orange, State of California, as shown the Irvine's Subdivision, filed in Book 1, Page 811.

SHEET 4 OF 5
PSOMAS
JULY 1998
DATE: APRIL, 2003
JOB NUMBER: 2NCR060100 13

SCALE 1" = 1000'
DRAFTED CH
CHECKED JCH
DATE APRIL, 2003
JOB NUMBER 2NCR060100 13

MCAS-EL TORO

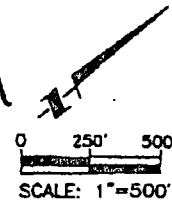
EXHIBIT A-II

EXHIBIT B

| LINE TABLE | | |
|------------|------------|-------------|
| NO. | LENGTH(FT) | BEARING |
| L1 | 208.48 | S40°12'23"W |
| L2 | 276.58 | S00°57'09"W |
| L3 | 141.47 | N89°02'51"W |
| L4 | 221.51 | S00°57'09"W |
| L5 | 38.00 | S89°02'51"E |
| L6 | 396.66 | S00°57'09"W |
| L7 | 226.79 | S39°48'20"W |
| L8 | 129.84 | S01°16'40"W |
| L9 | 265.16 | N49°20'18"W |
| L10 | 100.00 | N40°39'42"E |
| L11 | 249.30 | N41°16'07"E |
| L12 | 516.75 | N03°38'44"E |
| L13 | 176.68 | N02°41'27"E |
| L14 | 159.99 | S49°15'52"E |
| L15 | 332.04 | S02°41'27"W |
| L16 | 282.44 | S49°15'52"E |
| L17 | 77.98 | N49°16'11"W |
| L18 | 103.60 | S74°22'29"W |
| L19 | 378.73 | N47°00'59"E |
| L20 | 36.97 | S43°46'25"E |
| L21 | 253.88 | N44°10'35"E |
| L22 | 114.34 | N27°39'45"W |
| L23 | 358.80 | N80°16'46"W |
| L24 | 395.26 | N73°37'35"W |
| L25 | 600.49 | N46°14'31"W |
| L26 | 386.94 | N84°33'36"W |
| L27 | 485.85 | N37°18'55"E |
| L28 | 542.47 | S89°00'03"E |
| L29 | 542.88 | N65°05'59"E |
| L30 | 292.98 | S87°02'19"E |
| L31 | 419.52 | S84°00'47"E |
| L32 | 250.57 | N77°23'57"E |
| L33 | 202.52 | N08°37'42"E |
| L34 | 602.13 | N43°04'22"E |
| L35 | 245.79 | N19°58'15"E |
| L36 | 469.87 | N17°07'55"W |
| L37 | 284.78 | S89°29'32"W |
| L38 | 103.05 | S58°28'51"W |
| L39 | 400.68 | N69°03'15"W |
| L40 | 525.37 | N09°57'17"W |
| L41 | 290.35 | S81°17'11"W |
| L42 | 124.67 | N78°49'46"W |
| L43 | 203.08 | N88°35'40"W |
| L44 | 104.09 | N56°18'27"W |
| L45 | 216.34 | N06°22'01"W |
| L46 | 325.40 | N49°05'35"W |
| L47 | 477.81 | N11°45'54"W |
| L48 | 360.00 | N84°51'40"W |
| L49 | 417.78 | S27°40'18"W |
| L50 | 598.73 | S48°36'32"W |
| L51 | 344.48 | S02°59'41"E |
| L52 | 228.32 | S03°00'59"W |
| L53 | 220.14 | S87°55'12"W |
| L54 | 186.94 | S28°01'09"W |
| L55 | 255.62 | S69°51'58"W |
| L56 | 156.90 | N72°56'54"W |

| CURVE TABLE | | | |
|-------------|------------|---------|-----------|
| NO. | LENGTH(FT) | RADIUS | DELTA |
| C1 | 188.50 | 120.00 | 90°00'00" |
| C2 | 605.19 | 900.00 | 38°31'40" |
| C3 | 361.28 | 230.00 | 90°00'00" |
| C4 | 183.48 | 1255.00 | 08°22'36" |
| C5 | 278.46 | 1255.00 | 12°42'46" |
| C6 | 457.83 | 955.00 | 27°28'04" |
| C7 | 506.24 | 845.00 | 34°19'33" |
| C8 | 133.34 | 211.96 | 36°02'33" |
| C9 | 603.27 | 646.25 | 53°29'05" |

| LINE TABLE | | |
|------------|------------|-------------|
| NO. | LENGTH(FT) | BEARING |
| L57 | 151.70 | N24°32'07"W |
| L58 | 367.42 | S83°17'33"W |
| L59 | 358.95 | S40°40'32"W |
| L60 | 45.06 | S49°16'11"E |
| L61 | 476.64 | N76°05'15"E |
| L62 | 320.43 | N82°25'15"E |
| L63 | 165.87 | N78°20'15"E |
| L64 | 265.63 | N79°45'15"E |
| L65 | 103.32 | N55°15'15"E |
| L66 | 257.59 | N75°55'15"E |
| L67 | 34.25 | N44°40'15"E |
| L68 | 290.62 | N84°40'15"E |
| L69 | 78.87 | N88°45'15"E |
| L70 | 612.07 | N67°20'15"E |
| L71 | 65.00 | S21°00'30"E |
| L72 | 155.00 | N88°59'30"E |
| L73 | 83.12 | N21°00'30"W |
| L74 | 184.71 | N65°30'27"E |
| L75 | 37.00 | S23°59'33"E |
| L76 | 132.97 | S84°39'33"E |
| L77 | 438.55 | S19°46'09"E |
| L78 | 79.99 | S49°15'52"E |
| L79 | 80.00 | S49°15'52"E |



DESCRIPTION: That portion of Lots 308 & 303 of Block 173, Lots 281 thru 284 of Block 155, Lot 280 of Block 140, Lots 271, 272 & 277 of Block 141, Lots 273 thru 276 of Block 134, Lots 278 & 302 of Block 174, Lots 312, 313, 314, & 317 of Block 153, Lots 315, 316, 317, & 318 of Block 176, Lots 319 & 320 of Block 178, Lot of Block 390, and Lot 382 of Block 182, in the City of Irvine, County of Orange, State of California, as shown on the Irwin's Subdivision, filed in Book 1 Page 85.

SHEET 6 OF 6

SCALE 1" = 500'

PSOMAS

DRAFTED CN

207 1st St. Irvine, CA 92614
 (714) 261-2222 Fax (714) 261-2221

CHECKED JH

DATE APRIL, 2003

MCAS-EL TORO

REV 1 5/27/03
 REV 2 6/4/03

JOB NUMBER 2NOR030100 TJ

EXHIBIT A-II

PSOMAS

LEGAL DESCRIPTION

Exhibit "A"

Parcel 3A-1

In the City of Irvine, County of Orange, State of California, being those portions of Lots 290 of Block 156, and Lots 307 and 310 of Block 172 of Irvine's Subdivision, as shown on the map filed in Book 1, Page 88 of Miscellaneous Maps, and also those portions of Parcels 1A and 2, described in the deed recorded in Book 11831, Page 1062 and Book 11253, Page 959 of Official Records, lying within the U.S. M.C.A.S. El Toro property, all as shown on Record of Survey 97-1038, filed in Book 171, Pages 1 through 49 inclusive, all of the above documents and maps on file in the Recorders Office of said County, lying northerly of the following described line:

Beginning at the intersection of the centerline of Alton Parkway with the westerly line of said Parcel 2, said intersection being also the beginning of a non-tangent curve concave northeasterly having a radius of 1800.00 feet, a radial line to the beginning of said curve bears South 37°36'19" West, (shown as South 37°36'05" West on said Record of Survey); thence southeasterly along said curve and said centerline 815.37 feet through a central angle of 25°57'15"; thence leaving said centerline South 04°46'49" West 323.29 feet to the beginning of a curve concave easterly having a radius of 1400.00 feet; thence southerly along said curve 616.04 feet through a central angle of 25°12'42"; thence South 20°25'53" East 490.17 feet; thence North 40°26'55" East 1130.96 feet to the beginning of a curve concave northwesterly having a radius of 417.00 feet; thence northeasterly along said curve 299.22 feet through a central angle of 41°06'48" to the beginning of a reverse curve concave southeasterly having a radius of 518.00 feet, a radial line to the beginning of said curve bears South 89°20'07" West; thence northeasterly along said curve 265.18 feet through a central angle of 29°19'55"; thence non-tangent to said curve North 09°24'49" West 60.00 feet to a point on said centerline; thence North 80°35'11" East 399.69 feet along said centerline to the beginning of a non-tangent curve concave northerly having a radius of 1800.00 feet, a radial line to the

PSOMAS

1 beginning of said curve, bears South 08°31'46" East; thence easterly along said curve
2 496.71 through a central angle of 15°48'39" to the easterly line of said Parcel 2.

3
4 Together with the following described parcel:

5
6 **Parcel 3A-2**

7 In the City of Irvine, County of Orange, State of California, being those portions of Lots
8 279, 280, 285, and 286 of Block 140, and Lots 281, 283, and 284 of Block 155 of Irvine's
9 Subdivision, as shown on a map filed in Book 1 Page 88, of Miscellaneous Maps, lying
10 within the U.S. M.C.A.S. El Toro property, and as shown on Record of Survey 97-1038,
11 filed in Book 171, Pages 1 through 49, inclusive, all of the records of said County,
12 described as follows:

13
14 Commencing at the southwest quarter corner of Block 142 said quarter corner being
15 shown on said Record of Survey; thence along the northeasterly line of said Lot 271, said
16 line being also the former centerline of Irvine Boulevard, as shown on said Record of
17 Survey, North 49°21'16" West 49.00 feet to the centerline of Lambert Road as shown on
18 said Record of Survey; thence continuing North 49°21'16" West 17.14 feet along said
19 former centerline of Irvine Boulevard; thence leaving said former centerline
20 South 40°12'23" West 208.48 feet to the beginning of a curve concave northwesterly
21 having a radius of 3776.61 feet; thence southwesterly along said curve 1107.25 feet
22 through a central angle of 16°47'54" to beginning of a reverse curve concave
23 southeasterly having a radius of 1200.00 feet, a radial line to the beginning of said curve
24 bears South 32°59'43" East; thence southwesterly along said curve 1193.90 feet through
25 a central angle of 57°00'17"; thence South 00°00'00" West 1456.34 feet to the beginning
26 of a curve concave northwesterly having a radius of 2400.00 feet; thence southwesterly
27 along said curve 2226.96 feet through a central angle of 53°09'53" to the **True Point of**
28 **Beginning**; thence South 39°16'19" East 1519.69 feet to the beginning of a non-tangent
29 curve concave southeasterly having a radius of 2100.00 feet, a radial line to the beginning

PSOMAS

1 of said curve bears North 58°27'48" West; thence southerly along said curve 1155.88 feet
2 through a central angle of 31°32'12"; thence non-tangent to said curve
3 South 00°57'09" West 276.56 feet; thence North 89°02'51" West 141.47 feet; thence
4 South 00°57'09" West 221.51 feet to the beginning of a curve concave northeasterly
5 having a radius of 120.00 feet; thence southeasterly along said curve 188.50 feet through
6 a central angle of 90°00'00"; thence South 89°02'51" East 38.00 feet; thence South
7 00°57'09" West 396.66 feet to the beginning of a curve concave westerly having a radius
8 of 1200.00 feet; thence southerly along said curve 813.74 feet through a central angle of
9 38°51'11"; thence South 39°48'20" West 226.79 feet to the beginning of a curve concave
10 easterly having a radius of 900.00 feet; thence southerly along said curve 605.19 feet
11 through a central angle of 38°31'40"; thence South 01°16'40" West 129.84 feet to the
12 beginning of a non-tangent curve concave southwesterly having a radius of 1600.00 feet,
13 a radial line to the beginning of said curve bears North 01°09'46" East; thence easterly,
14 southeasterly, southerly and southwesterly along said curve 3582.01 feet through a
15 central angle of 128°16'17" to a point on a line parallel with and distant 50.00 feet
16 northeasterly from the southwesterly line of said Blocks 155 and 140, said point lying
17 distant along said parallel line North 49°20'21" West 616.16 feet from the southeasterly
18 line of said Lot 283; thence North 49°20'21" West 9954.02 feet along said parallel line to
19 a point on the northwesterly line of said Lot 286; thence North 40°39'31" East 3554.68
20 feet along the northwesterly line of said Lots 286 and 279 to a point lying distant thereon
21 South 49°39'31" West 1675.66 feet from the most northerly corner of said Lot 279;
22 thence South 49°21'34 East 817.62 feet; thence North 41°14'17" East 275.57 feet; thence
23 South 49°14'49" East 1446.32 feet to the beginning of a non-tangent curve concave
24 easterly having a radius of 1000.00 feet, a radial line to the beginning of said curve bears
25 North 49°39'37" West; thence southwesterly, southerly, and southeasterly along said
26 curve 1574.20 feet through a central angle of 90°11'43"; thence South 49°51'20" East
27 281.26 feet; thence North 42°16'45" East 235.22 feet to the beginning of a curve concave
28 southeasterly having a radius of 2500.00 feet; thence northeasterly along said curve
29 1038.99 feet through a central angle of 23°48'43"; thence North 66°05'28" East
30 353.80 feet to the beginning of a curve concave northwesterly having a radius of

PSOMAS

1 2400 feet; thence northeasterly along said curve 541.46 feet through a central angle of
2 12°55'35" to the **True Point of Beginning**.

3

4 Containing 862.84 acres, more or less.

5

6 Subject to covenants, conditions, restrictions, rights-of-way and easements of record, if
7 any.

8

9 As shown on Exhibit "B" attached hereto and made a part hereof.

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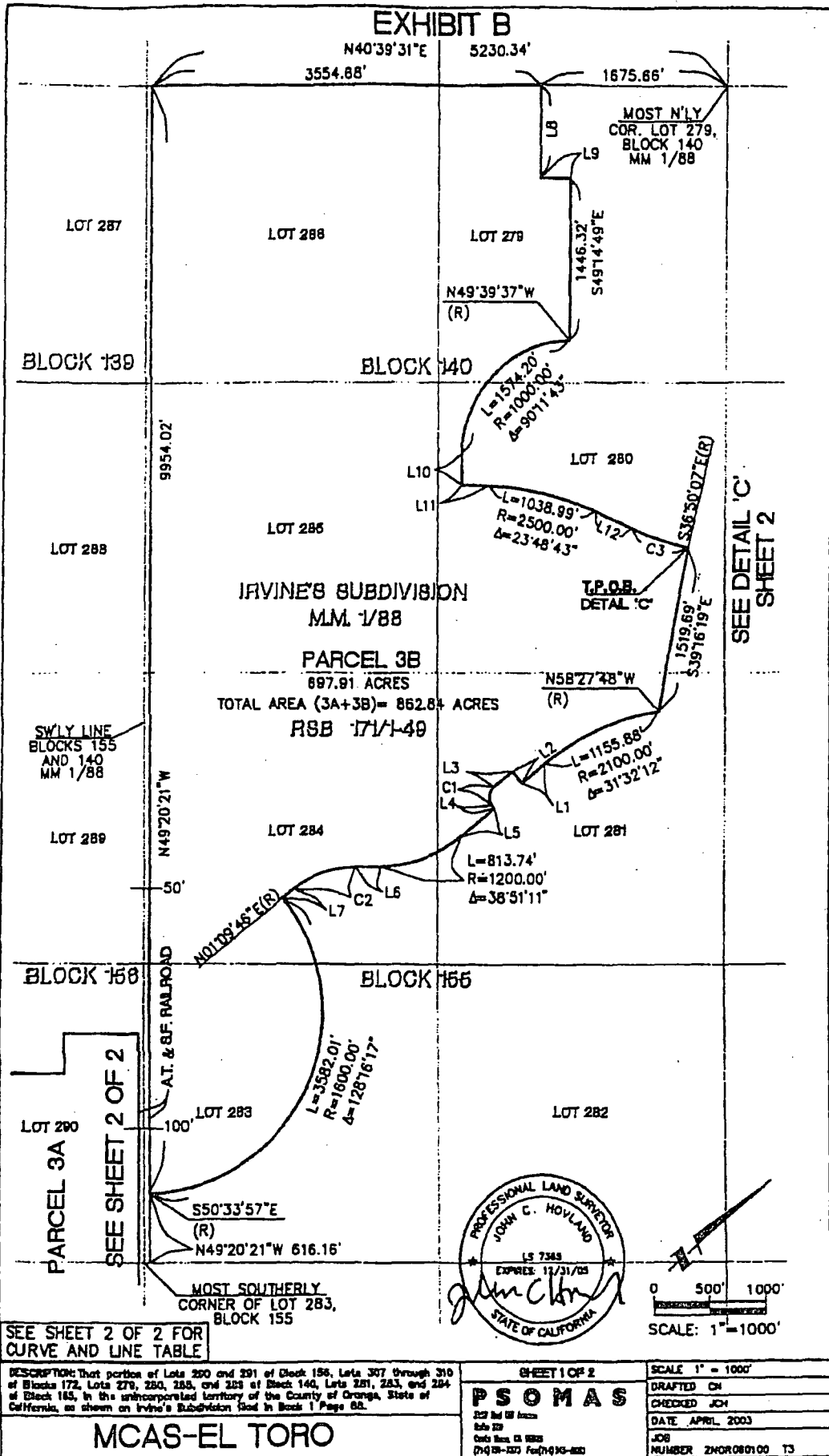
28

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EXHIBIT B



SEE SHEET 2 OF 2 FOR CURVE AND LINE TABLE

DESCRIPTION: That portion of Lots 290 and 291 of Block 156, Lots 307 through 310 of Blocks 172, Lots 279, 280, 283, and 285 of Block 140, Lots 281, 283, and 284 of Block 155, in the unincorporated territory of the County of Orange, State of California, as shown on Irvine's Subdivision Map in Block 1 Page 68.

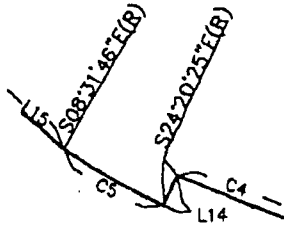
MCAS-EL TORO

PSOMAS
 227 1st St. Suite 100
 Costa Mesa, CA 92626
 (714) 261-3333 Fax: (714) 935-8820

SHEET 1 OF 2
 SCALE 1" = 1000'
 DRAFTED CH
 CHECKED JCH
 DATE APRIL 2003
 JOB NUMBER ZHOR080100 T3

EXHIBIT B

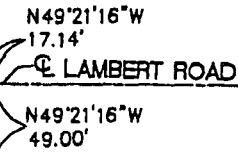
0 500' 1000'
SCALE: 1"=1000'



DETAIL 'A'
NO SCALE

SEE DETAIL 'C'

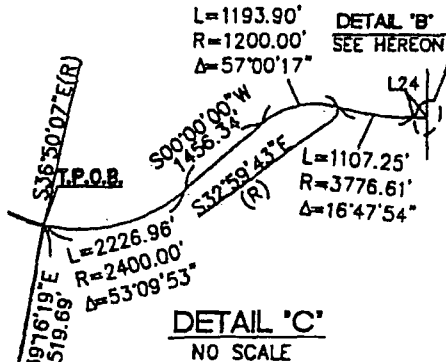
P.O.C.
SW 1/4 COR.
BLOCK 142
M.M. 1/88



DETAIL 'B'
NO SCALE

| LINE TABLE | | |
|------------|-------------|--------------|
| NO. | LENGTH (FT) | BEARING |
| L1 | 276.58 | S00°57'09\"W |
| L2 | 141.47 | N89°02'51\"W |
| L3 | 221.51 | S00°57'09\"W |
| L4 | 38.00 | S89°02'51\"E |
| L5 | 396.66 | S00°57'09\"W |
| L6 | 226.78 | S39°48'20\"W |
| L7 | 129.84 | S01°16'40\"W |
| L8 | 817.62 | S49°21'34\"E |
| L9 | 275.57 | N41°14'17\"E |
| L10 | 281.26 | S49°51'20\"E |
| L11 | 235.22 | N42°16'45\"E |
| L12 | 353.80 | N66°05'28\"E |
| L13 | 363.30 | N55°30'00\"E |
| L14 | 60.00 | N24°20'25\"W |
| L15 | 399.69 | N80°35'11\"E |
| L16 | 60.00 | N09°24'49\"W |
| L17 | 490.17 | S20°25'53\"E |
| L18 | 323.29 | S04°46'49\"W |
| L19 | 444.45 | S05°38'08\"W |
| L20 | 245.00 | S40°24'26\"W |
| L21 | 871.70 | S40°39'39\"W |
| L22 | 359.93 | S49°20'21\"E |
| L23 | 665.28 | S40°39'39\"W |
| L24 | 208.48 | S40°12'23\"W |

SEE SHEET 1 OF 2



DETAIL 'C'
NO SCALE

| CURVE TABLE | | | |
|-------------|--------|---------|------------|
| NO. | LENGTH | RADIUS | DELTA |
| C1 | 188.50 | 120.00 | 90°00'00\" |
| C2 | 605.18 | 900.00 | 38°31'40\" |
| C3 | 541.46 | 2400.00 | 12°55'35\" |
| C4 | 308.54 | 1740.00 | 10°09'35\" |
| C5 | 496.71 | 1800.00 | 15°48'39\" |
| C6 | 265.18 | 518.00 | 29°19'55\" |
| C7 | 299.22 | 417.00 | 41°06'48\" |
| C8 | 616.04 | 1400.00 | 25°12'42\" |

DESCRIPTION: That portion of Lots 290 and 291 of Block 168, Lots 307 through 310 of Block 172, Lots 271, 280, 283, and 284 of Block 140, Lots 281, 283, and 284 of Block 153, in the unincorporated territory of the County of Orange, State of California, as shown on Irvin's Subdivision Map in Book 1 Page 64.

MCAS-EL TORO

SHEET 2 OF 2

SCALE 1" = 1000'

PSOMAS

DRAFTED CH

300 1st St
Suite 30
Costa Mesa, CA 92626
(949) 271-7271 Fax (949) 440-4880

CHECKED JCH

DATE APRIL 2003

JCD

NUMBER 240R060100 T3

PSOMAS

LEGAL DESCRIPTION

Exhibit A

Parcel 4

In the City of Irvine, County of Orange, State of California, being those portions of Lots 290 and 291 of Block 156, and Lots 307 through 310 inclusive of Block 172 of Irvine's Subdivision, as shown on the map filed in Book 1, Page 88 of Miscellaneous Maps, and also those portions of Parcels 2 and 3, described in the deed recorded in Book 11831, Page 1062, of Official Records, all lying within the U.S. M.C.A.S. El Toro property, as shown on Record of Survey 97-1038, filed in Book 171, Pages 1 through 49 inclusive, all of the above documents and maps on file in the Recorders Office of said County, lying southerly of the following described line:

Beginning at the intersection of the centerline of Alton Parkway with the westerly line of said Parcel 2, said intersection being also the beginning of a non-tangent curve concave northeasterly having a radius of 1800.00 feet, a radial line to the beginning of said curve bears South 37°36'19" West; thence southeasterly along said curve and said centerline 815.37 feet through a central angle of 25°57'15"; thence leaving said centerline South 04°46'49" West 323.29 feet to the beginning of a curve concave easterly having a radius of 1400.00 feet; thence southerly along said curve 616.04 feet through a central angle of 25°12'42"; thence South 20°25'53" East 490.17 feet; thence North 40°26'55" East 1130.96 feet to the beginning of a curve concave northwesterly having a radius of 417.00 feet; thence northeasterly along said curve 299.22 feet through a central angle of 41°06'48" to the beginning of a reverse curve concave southeasterly having a radius of 518.00 feet, a radial line to the beginning of said curve bears South 89°20'07" West; thence northeasterly along said curve 265.18 feet through a central angle of 29°19'55"; thence non-tangent to said curve North 09°24'49" West 60.00 feet to a point on said centerline; thence North 80°35'11" East 399.69 feet along said centerline to the beginning of a non-tangent curve concave northerly having a radius of 1800.00 feet, a radial line to the beginning of said curve bears South 08°31'46" East;

PSOMAS

1 | thence easterly along said curve 496.71 feet through a central angle of 15°48'39" to the
2 | easterly line of said Parcel 2.

3 |

4 | Containing 201.71 acres, more or less.

5 |

6 | Subject to covenants, conditions, restrictions, rights-of-way and easements of record, if
7 | any.

8 |

9 | As shown on Exhibit "B" attached hereto and made a part hereof.

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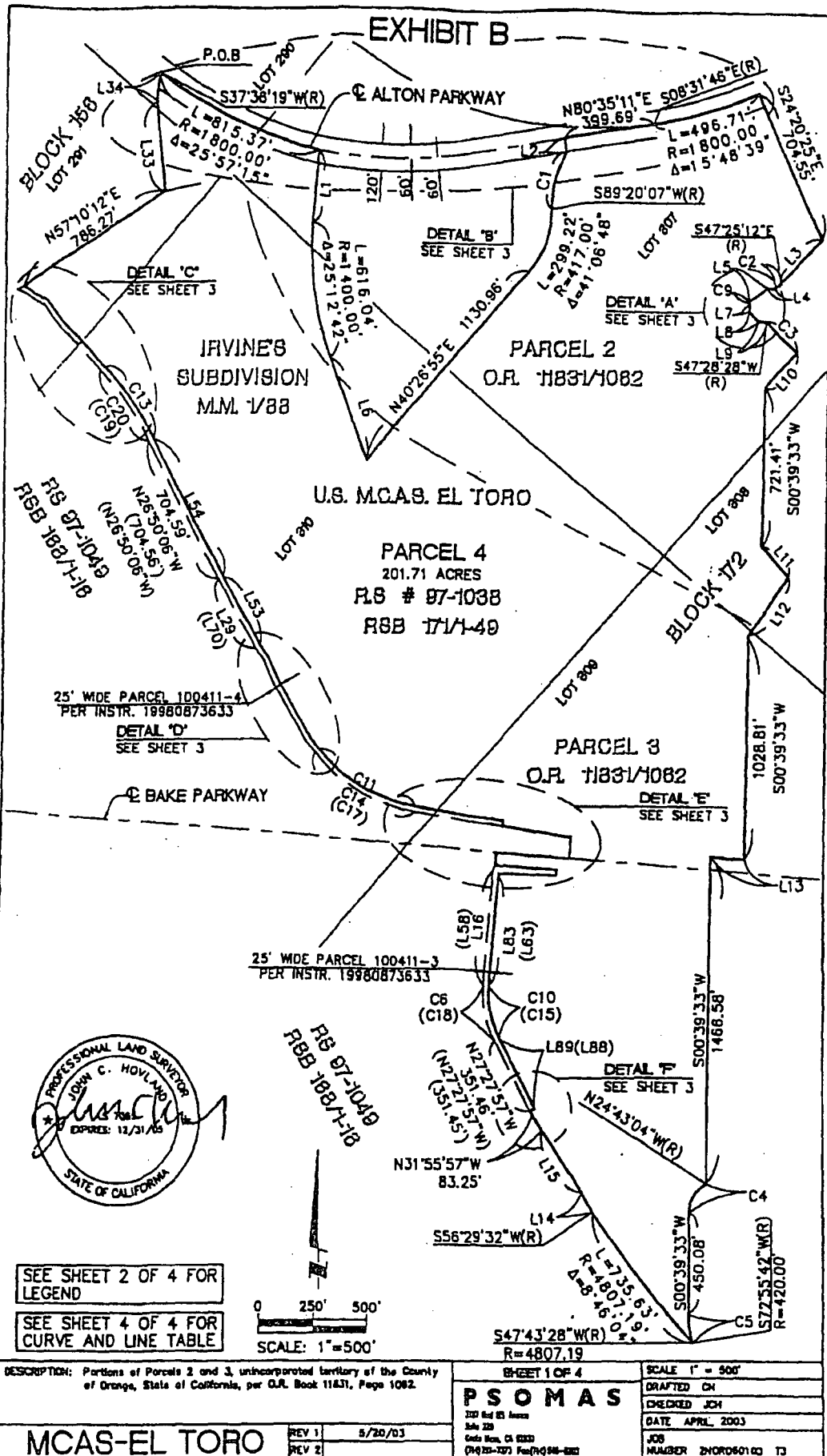
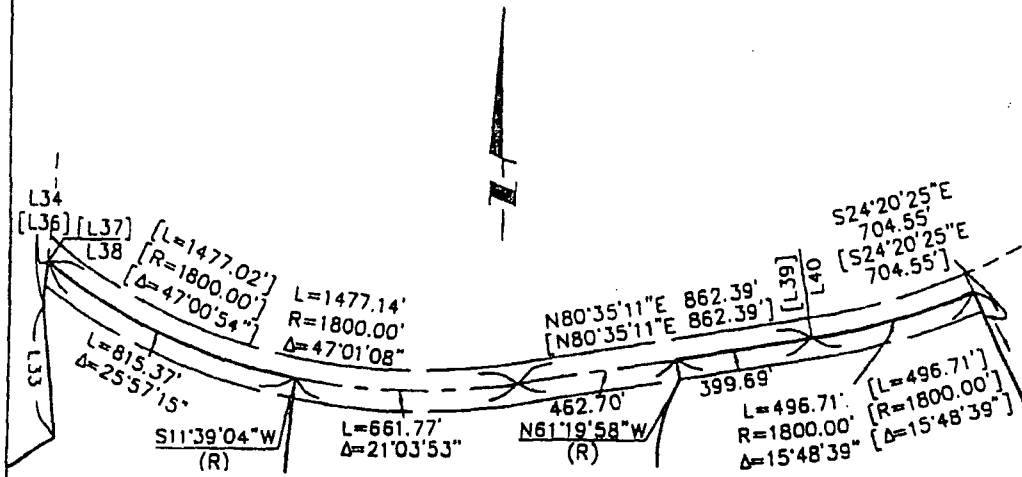
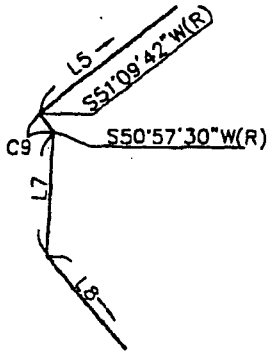


EXHIBIT A-IV

EXHIBIT B



DETAIL 'B'
SCALE 1" = 400'



DETAIL 'A'
SCALE 1" = 40'

LEGEND

- () Record Per Record of Survey 97-1038 RSB 171/1-49.
- () Record Per Quitclaim Deed Recorded December 17, 1998, Instrument No. 19980873633, O.R. and Record of Survey 97-1049, RSB 168/1-16.

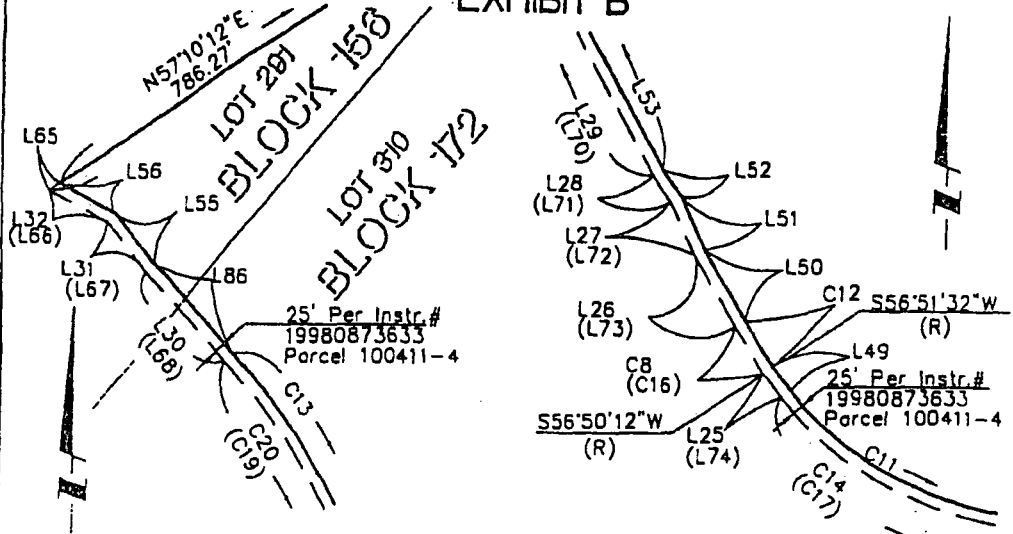


SEE SHEET 4 OF 4 FOR CURVE AND LINE TABLE

| | | | |
|--|---------------|---------|-------------------------|
| DESCRIPTION: Portions of Parcels 2 and 3, unincorporated territory of the County of Orange, State of California, per C.L.R. Book 11831, Page 1082. | SHEET 2 OF 4 | | SCALE 1" = 500' |
| | PSOMAS | | DRAFTED SFB |
| MCAS-EL TORO | REV 1 | 5/20/03 | CHECKED JCH |
| | REV 2 | | DATE APRIL 2003 |
| | | | JOB NUMBER ZNOR00100 T3 |

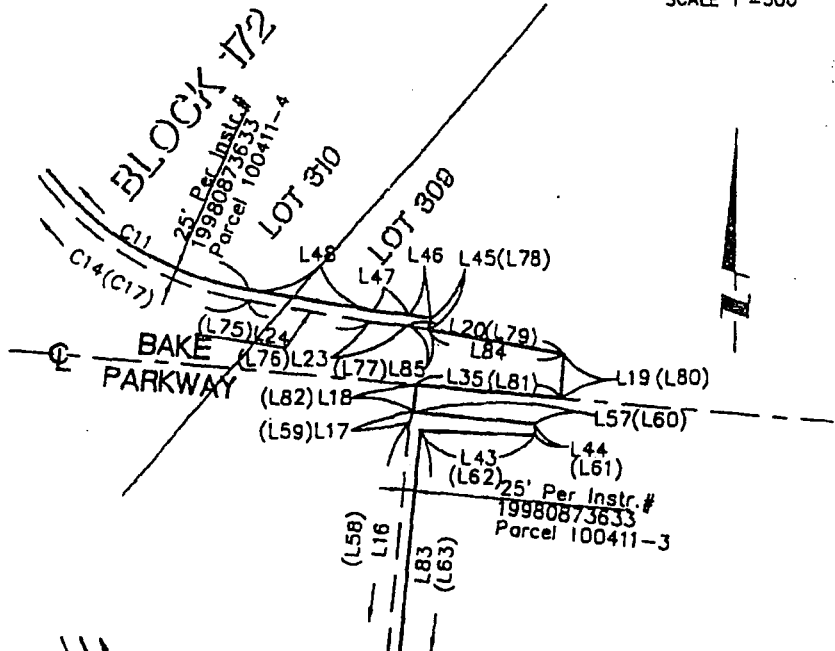
EXHIBIT A-IV

EXHIBIT B

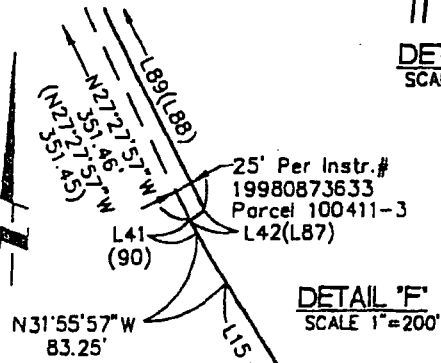


DETAIL 'C'
SCALE 1"=300'

DETAIL 'D'
SCALE 1"=300'



DETAIL 'E'
SCALE 1"=300'



DETAIL 'F'
SCALE 1"=200'



SEE SHEET 4 OF 4 FOR
CURVE AND LINE TABLE

SEE SHEET 2 OF 4 FOR
FOR LEGEND

DESCRIPTION: Portions of Parcels 2 and 3, unincorporated territory of the County of Orange, State of California, per O.R. Book 11831, Page 1082.

SHEET 3 OF 4

SCALE 1" = 500'

PSOMAS

DRAFTED SFJ

CHECKED JCH

DATE APRIL 2003

JCB

NUMBER 2N0R060100 T3

MCAS-EL TORO

REV 1 5/20/03
REV 2

300 Red Hill Avenue
Suite 201
Costa Mesa, CA 92626
(714) 261-3273 Fax (714) 446-8811

EXHIBIT A-IV



EXHIBIT B

SEE SHEET 2 OF 4 FOR FOR LEGEND

| LINE TABLE | | |
|------------|------------|---------------|
| NO. | LENGTH(FT) | BEARING |
| L1 | 323.29 | S04°46'49"W |
| L2 | 60.00 | N09°24'49"W |
| L3 | 269.60 | S42°34'48"W |
| L4 | 38.56 | N84°39'47"W |
| L5 | 100.00 | S51°09'42"W |
| L6 | 490.17 | S20°25'53"E |
| L7 | 36.23 | S02°49'08"W |
| L8 | 60.00 | S40°47'01"E |
| L9 | 36.23 | S84°23'22"E |
| L10 | 216.54 | S41°25'05"W |
| L11 | 185.84 | S41°30'00"E |
| L12 | 325.00 | S33°11'01"W |
| L13 | 150.37 | N85°20'42"W |
| L14 | 98.64 | N28°16'11"W |
| L15 | 319.56 | N32°20'05"W |
| L16 | 517.15 | N04°39'03"E |
| L17 | 27.92 | N18°31'06"E |
| L18 | 57.50 | N04°38'58"E |
| L19 | 95.79 | N04°38'58"E |
| L20 | 356.12 | N80°29'02"W |
| L23 | 81.08 | N84°45'40"W |
| L24 | 275.40 | N80°28'49"W |
| L25 | 63.38 | N38°20'00"W |
| L26 | 180.06 | N30°52'21"W |
| L27 | 120.81 | N24°13'05"W |
| L28 | 68.69 | N33°52'58"W |
| L29 | 360.05 | N28°55'06"W |
| L30 | 259.71 | N42°50'00"W |
| L31 | 135.82 | N39°25'00"W |
| L32 | 147.34 | N62°43'34"W |
| L33 | 395.85 | N05°37'01"W |
| L34 | 128.46 | N05°36'08"E |
| L35 | 325.78 | S85°21'02"E |
| L36 | [128.17] | [N05°36'08"E] |
| L37 | RADIAL | [S37°36'05"W] |
| L38 | RADIAL | [S37°36'19"W] |
| L39 | RADIAL | [S08°31'46"E] |
| L40 | RADIAL | S08°31'46"E |
| L41 | 20.64 | N27°27'57"W |
| L42 | 25.06 | S58°37'33"W |
| L43 | 257.70 | N88°21'06"W |
| L44 | 25.00 | N04°38'58"E |
| L45 | 25.09 | N04°38'50"E |
| L46 | 46.02 | N80°29'02"W |
| L47 | 81.08 | N84°45'40"W |
| L48 | 274.47 | N80°28'49"W |
| L49 | 62.25 | N38°20'00"W |
| L50 | 178.58 | N30°52'21"W |
| L51 | 121.47 | N24°13'05"W |

| LINE TABLE | | |
|------------|------------|---------------|
| NO. | LENGTH(FT) | BEARING |
| L52 | 69.72 | N33°52'58"W |
| L53 | 358.51 | N28°55'06"W |
| L54 | 704.13 | N26°50'06"W |
| L55 | 140.23 | N39°25'00"W |
| L56 | 138.12 | N62°43'34"W |
| L57 | 275.50 | N85°21'02"W |
| L58 | (517.13) | (N04°39'03"E) |
| L59 | (27.89) | (N19°11'07"E) |
| L60 | (275.50) | (S85°20'57"E) |
| L61 | (25.00) | (S04°39'03"W) |
| L62 | (257.85) | (N88°21'01"W) |
| L63 | (505.63) | (S04°39'03"W) |
| L65 | 28.84 | N57°10'12"E |
| L66 | (147.46) | (S62°43'34"E) |
| L67 | (135.82) | (S39°25'00"E) |
| L68 | (259.70) | (S42°50'00"E) |
| L70 | (360.04) | (S28°55'06"E) |
| L71 | (68.69) | (S33°52'58"E) |
| L72 | (120.81) | (S24°13'05"E) |
| L73 | (180.05) | (S30°52'21"E) |
| L74 | (63.38) | (S38°20'00"E) |
| L75 | (275.39) | (S80°28'49"E) |
| L76 | (81.05) | (S84°43'32"E) |
| L77 | (47.21) | (S80°28'49"E) |
| L78 | (25.09) | (N04°39'03"E) |
| L79 | (356.11) | (S80°28'49"E) |
| L80 | (95.79) | (S04°39'03"W) |
| L81 | (325.78) | (S85°20'57"E) |
| L82 | (57.50) | (S04°39'03"W) |
| L83 | 505.72 | N04°39'03"E |
| L84 | 308.91 | N80°29'02"W |
| L85 | 47.21 | N80°29'02"W |
| L86 | 258.97 | N42°50'00"W |
| L87 | (25.06) | (S58°37'33"W) |
| L88 | (349.74) | (S27°27'57"E) |
| L89 | 349.74 | N27°27'57"W |
| L90 | (20.64) | (N27°27'57"W) |

| CURVE TABLE | | | |
|-------------|------------|------------|-------------|
| NO. | LENGTH(FT) | RADIUS(FT) | DELTA |
| C1 | 265.18 | 518.00 | 29°19'55" |
| C2 | 39.42 | 770.00 | 02°56'00" |
| C3 | 195.55 | 1850.00 | 06°03'23" |
| C4 | 157.90 | 140.00 | 64°37'23" |
| C5 | 129.97 | 420.00 | 17°43'51" |
| C6 | 260.10 | 464.02 | 32°07'00" |
| C8 | 117.55 | 2940.11 | 02°17'27" |
| C9 | 6.57 | 1850.00 | 00°12'12" |
| C10 | 246.09 | 439.02 | 32°07'00" |
| C11 | 533.33 | 725.03 | 42°08'49" |
| C12 | 115.44 | 2915.11 | 02°16'08" |
| C13 | 397.91 | 1425.05 | 15°59'54" |
| C14 | 551.72 | 750.03 | 42°08'49" |
| C15 | (246.08) | (439.00) | (32°07'00") |
| C16 | (117.55) | (2940.00) | (02°17'27") |
| C17 | (551.70) | (750.00) | (42°08'49") |
| C18 | (260.09) | (464.00) | (32°07'00") |
| C19 | (390.91) | (1400.00) | (15°59'54") |
| C20 | 390.93 | 1400.05 | 15°59'54" |

DESCRIPTION: Portions of Parcels 2 and 3, unincorporated territory of the County of Orange, State of California, per O.R. Book 11831, Page 1032.

SHEET 4 OF 4

SCALE 1" = 500'

PSOMAS

207 1st St. Suite 201
Brea, CA 92623
(714) 781-7271 Fax: (714) 946-8883

DRAFTED SFB

CHECKED JCH

DATE APRIL 2003

JOB

NUMBER 2N09080100 T3

MCAS-EL TORO

REV 1 5/25/03
REV 2

EXHIBIT A-IV

EXHIBIT "B"

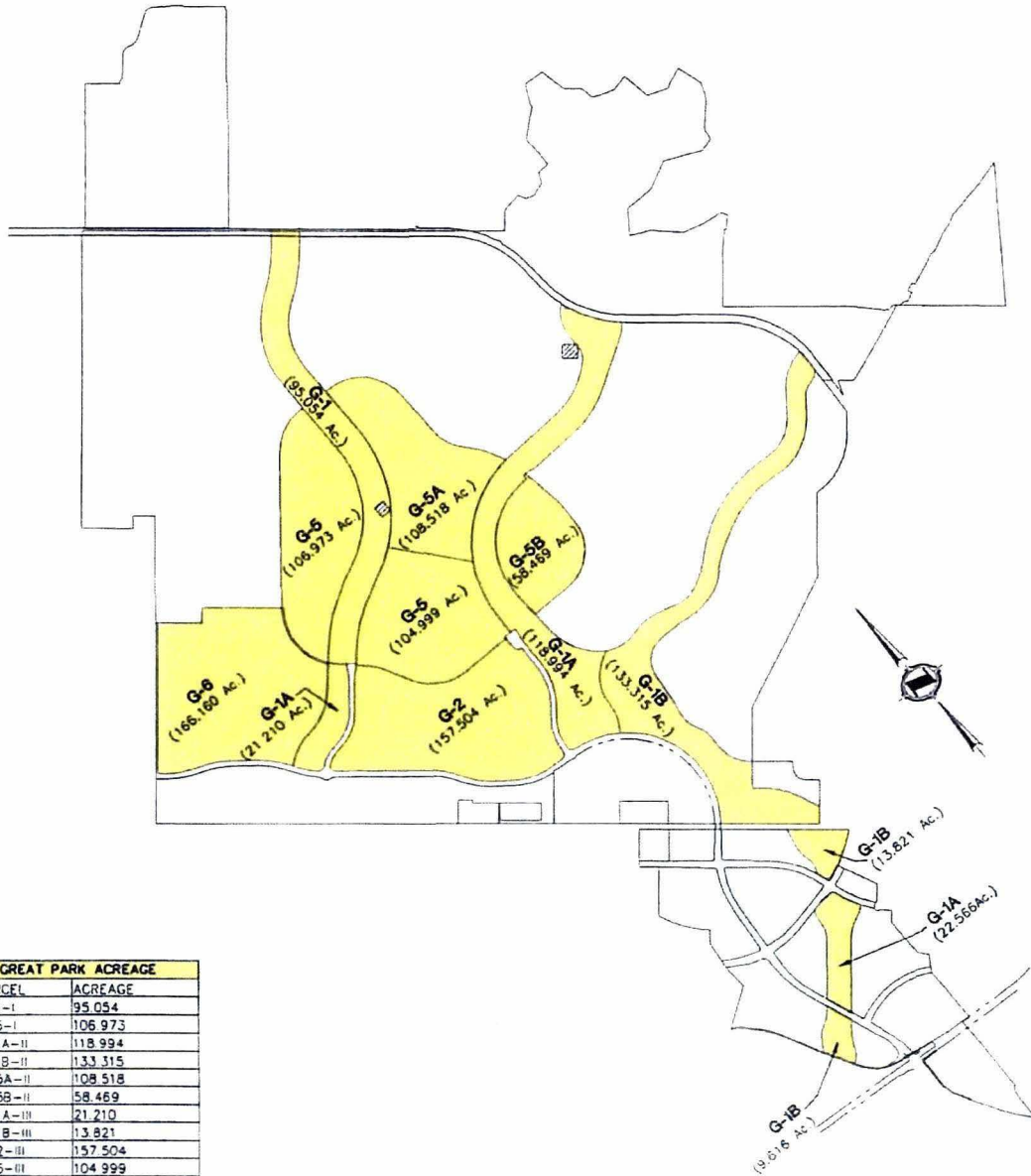
ACREAGE SUMMARY
 TOTAL ACREAGE OF THE GREAT PARK: 1,117.199 Ac.

LEGEND

- GREAT PARK CITY PARCELS
- INDICATES FAA PARCELS

EXHIBIT EXPLANATION:
 THE PARCELS SHOWN HEREON REPRESENT THE GREAT PARK PARCELS AS DESCRIBED IN THE DEVELOPMENT AGREEMENT RECORDED 7/12/05 AS INSTRUMENT NO. 2005000538135 OF OFFICIAL RECORDS.

THE ACREAGES SHOWN HEREON DO NOT INCLUDE FAA PARCELS WHICH ARE NOT A PART OF THE SUBJECT PROPERTY.



| GREAT PARK ACREAGE | |
|--------------------|----------|
| PARCEL | ACREAGE |
| G-1-I | 95.054 |
| G-5-I | 106.973 |
| G-1A-II | 118.994 |
| G-1B-II | 133.315 |
| G-5A-II | 108.518 |
| G-5B-II | 58.469 |
| G-1A-III | 21.210 |
| G-1B-III | 13.821 |
| G-2-III | 157.504 |
| G-5-III | 104.999 |
| G-6-III | 166.160 |
| G-1A-IV | 22.566 |
| G-1B-IV | 9.616 |
| SUM | 1117.199 |

HUNSAKER & ASSOCIATES
 IRVINE, INC.
 PLANNING • ENGINEERING • SURVEYING
 Three Hedges • Irvine, CA 92618 • PH (949) 263-3070 • FX (949) 263-0759

DATE: 2/28/08 REV: DATE 7-29-09 DWN BY: K. LYNCH

INITIAL CITY PARK PROPERTY
ORANGE COUNTY GREAT PARK
 IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA

SCALE: W.O. 1856-80X

EXHIBIT 'C'

ACREAGE SUMMARY

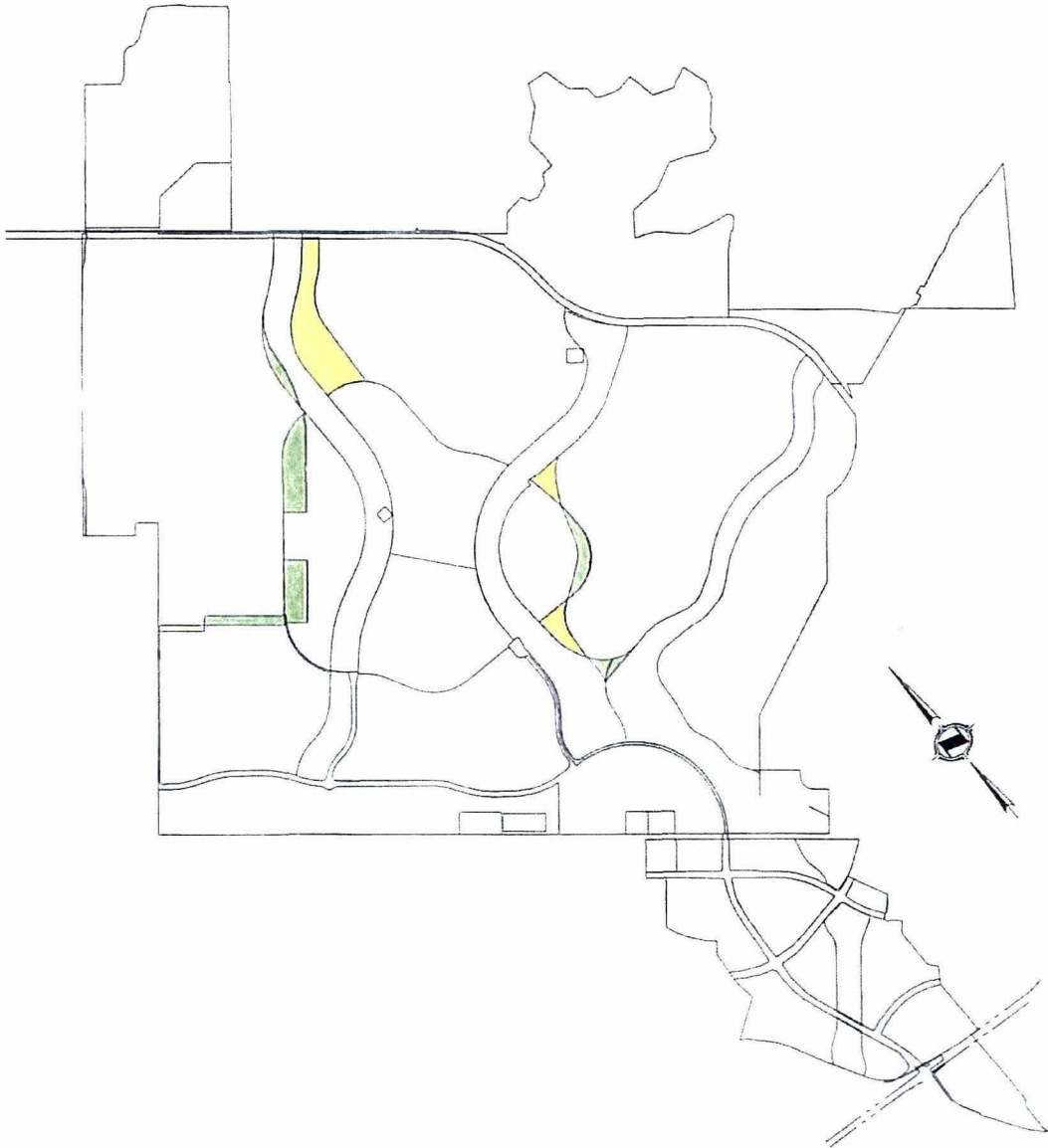
TOTAL ACREAGE TO BE GRANTED TO HERITAGE FIELDS: **44.971 Ac.**
 TOTAL ACREAGE TO BE GRANTED TO CITY: **44.971 Ac.**

LEGEND

- PARCELS TO BE TRANSFERRED TO HERITAGE FIELDS.
- PARCELS TO BE TRANSFERRED TO THE CITY OF IRVINE.

EXHIBIT EXPLANATION:

THE PARCELS SHOWN HEREON REPRESENT A PROPOSED EXCHANGE OF PROPERTY BASED ON THE APPROVED OCTOBER, 2006, GENERAL PLAN AMENDMENT AND ZONE CHANGE, PARCEL MAP 2006-271 AND THE AGREEMENT FOR EXCHANGE OF PROPERTY.



| | | | | | | | | | | |
|---|---------|--|----------|--------|------------|----------|-------------|-------|------------|---------------|
| HUNSAKER & ASSOCIATES IRVINE, INC. PLANNING • ENGINEERING • SURVEYING Three Hughes • Irvine, CA 92618 • P: (949) 583-1010 • F: (949) 583-0759 | | EXCHANGE PROPERTIES IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA | | | | | | | | |
| DATE | 2/28/08 | REV. DATE | 03/06/09 | DWC BY | R. WHEELER | CHK'D BY | R. WILLIAMS | SCALE | 1" = 2000' | W.O. 1855-80X |
| I:\HeritageFields\Exhibits\DA\0903-revised\EXH-C.dwg | | | | | | | | | | |

EXHIBIT 'D'

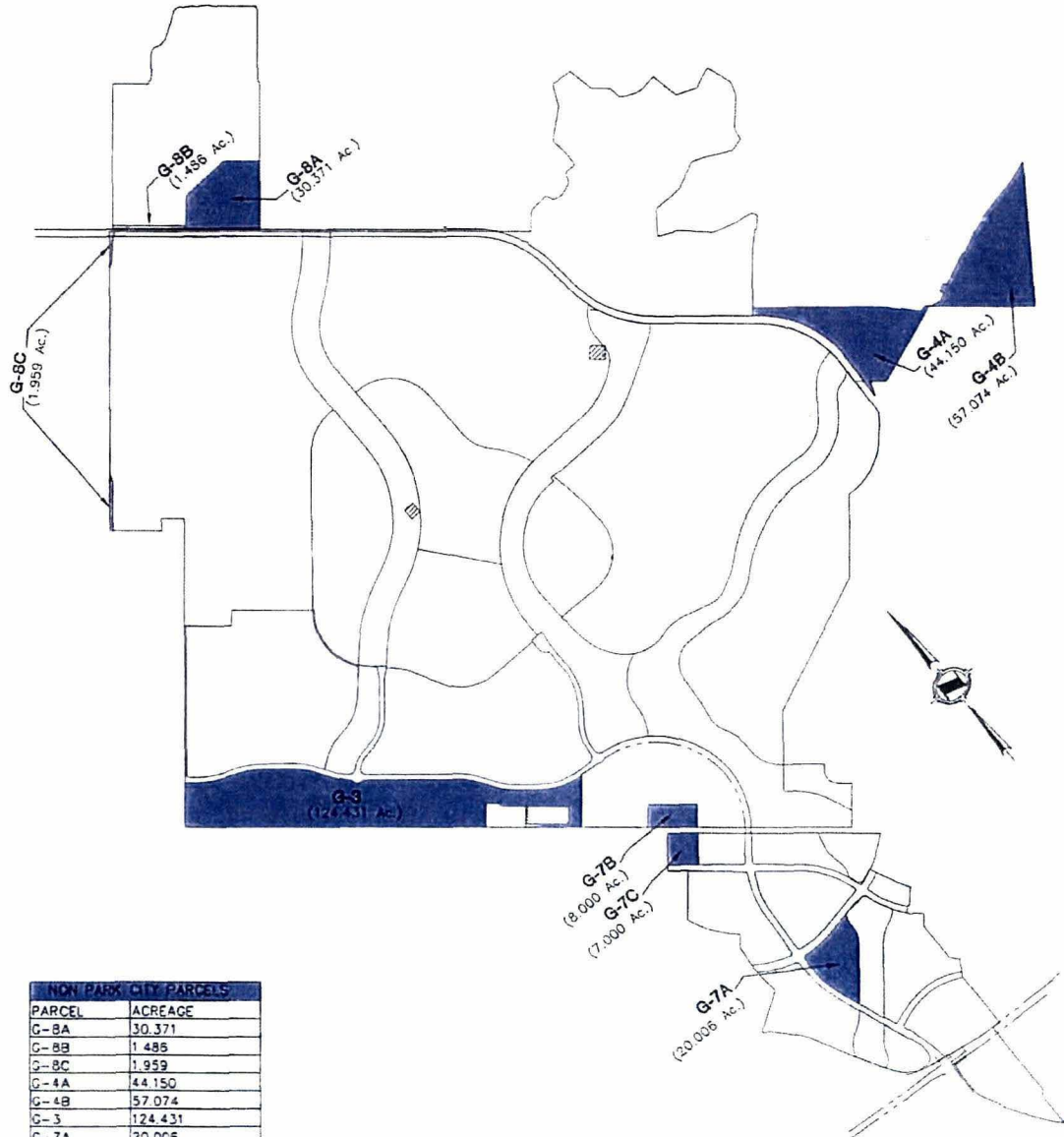
ACREAGE SUMMARY
 TOTAL ACREAGE OF NON-GREAT PARK CITY PROPERTY: 294.477 Ac.

LEGEND


- NON-PARK CITY PROPERTY
- INDICATES FAA PARCELS

EXHIBIT EXPLANATION:
 THE PARCELS SHOWN HEREON REPRESENT THE CITY PARCELS AS DESCRIBED IN THE DEVELOPMENT AGREEMENT RECORDED 7/12/05 AS INSTRUMENT NO. 2005000538136 OF OFFICIAL RECORDS NOT ASSOCIATED WITH THE GREAT PARK PROPERTY. THE ACREAGES REPRESENT THESE PARCELS AS DESCRIBED EXCLUDING ANY PORTION OF SAID PARCELS LYING WITHIN FAA PARCELS 2 AND 4 AND HOME PARCELS 1 AND 5. PARCEL G-8C IS SHOWN HEREON AS DESCRIBED IN CORRECTION GRANT DEED RECORDED 3/2/06 AS INSTRUMENT NO. 2006000141833 O.R.

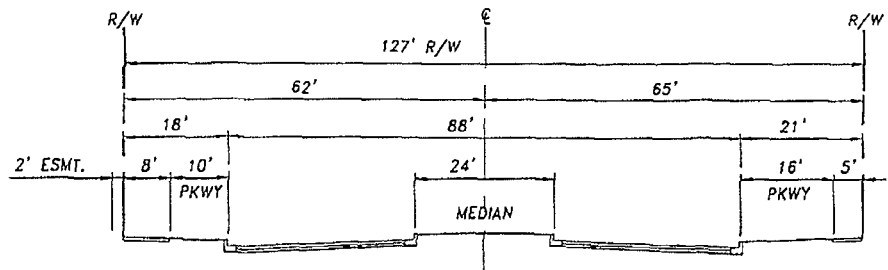
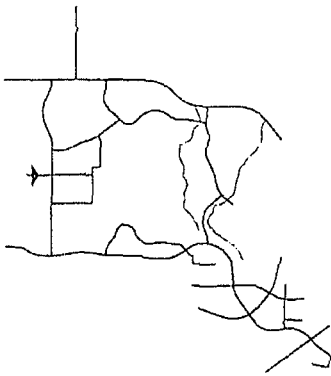
THE ACREAGES SHOWN HEREON DO NOT INCLUDE HOME PARCELS WHICH ARE NOT A PART OF THE SUBJECT PROPERTY.



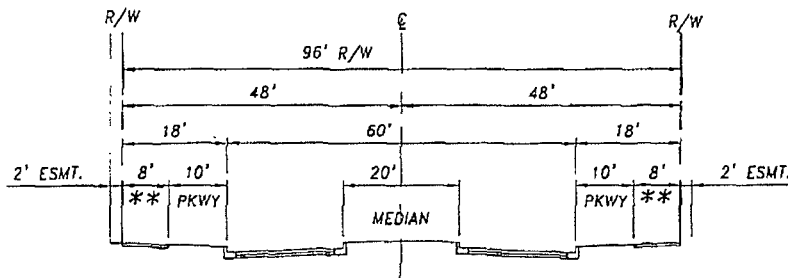
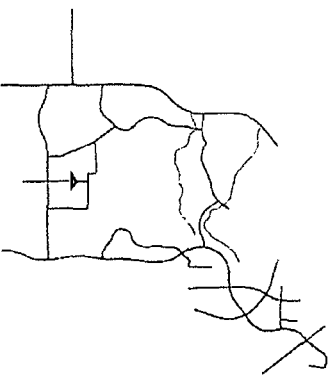
| NON PARK CITY PARCELS | |
|-----------------------|---------|
| PARCEL | ACREAGE |
| G-8A | 30.371 |
| G-8B | 1.485 |
| G-8C | 1.959 |
| G-4A | 44.150 |
| G-4B | 57.074 |
| G-3 | 124.431 |
| G-7A | 20.006 |
| G-7B | 8.000 |
| G-7C | 7.000 |
| SUM | 294.477 |

| | | | |
|---|---|-----------------|---------------|
|  HUNSAKER & ASSOCIATES IRVINE, INC. PLANNING • ENGINEERING • SURVEYING Three Hights • Irvine, CA 92618 • P: (949) 583-1010 • F: (949) 583-0729 | ORIGINAL NON-PARK PROPERTY IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA | | |
| | DATE: 2/28/08 REV: 3/06/09 DWG BY: R. WHEELER CK'D BY: R. WILLIAMS | SCALE: 1"=2000' | W.O. 1856-80X |

*HERITAGE FIELDS / ORANGE COUNTY GREAT PARK
GROUP A AND GROUP B FACILITIES CROSS SECTIONS
JULY 2009*



TRABUCO ROAD



TRABUCO ROAD

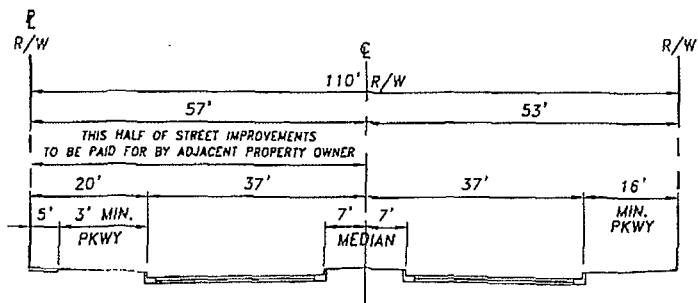
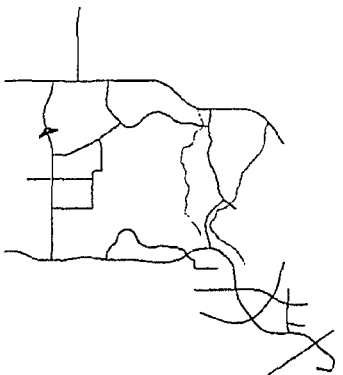
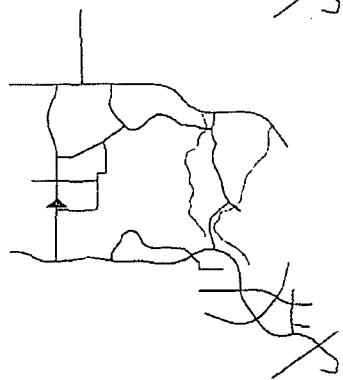
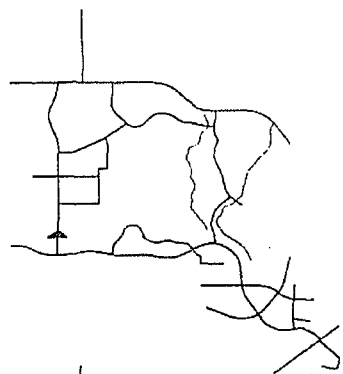
** TRAIL TRANSITIONS FROM PARKWAY ADJACENT TO CURB
ADJACENT AS REQUIRED TO PRESERVE EXISTING TREES

HUNSAKER & ASSOCIATES
P L A N N I N G • E N G I N E E R I N G • S U R V E Y I N G
Three Heights • Irvine, CA 92618 • TEL (949) 263-1010 • FAX (949) 263-0737

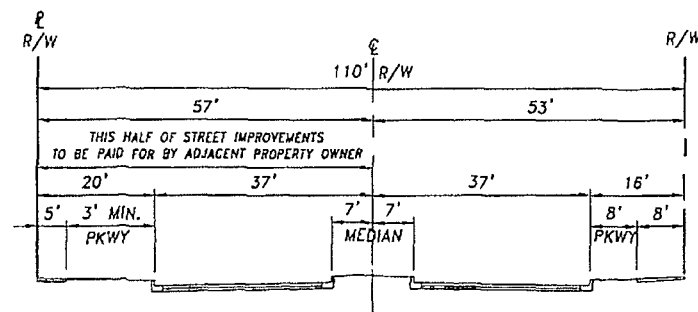
MAP DATE: 06/20/09
SCALE: 1" = 30'
PROJECT NO.: 03/27/09

HORIZONTAL SCALE: 1" = 30'

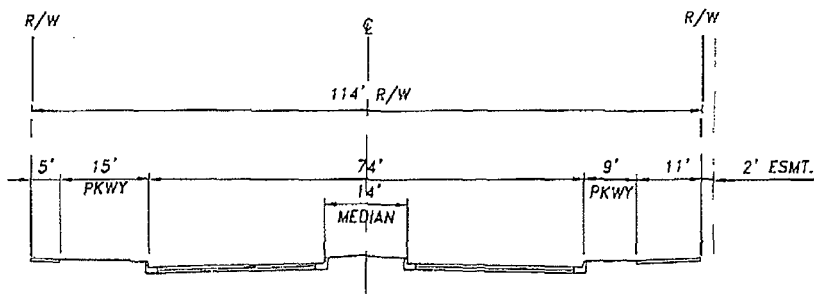
| | |
|------------------|-----------------------------|
| BACKBONE STREETS | PREPARED FOR |
| TRABUCO ROAD | Great Park NEIGHBORHOODS |



"O" STREET



"O" STREET



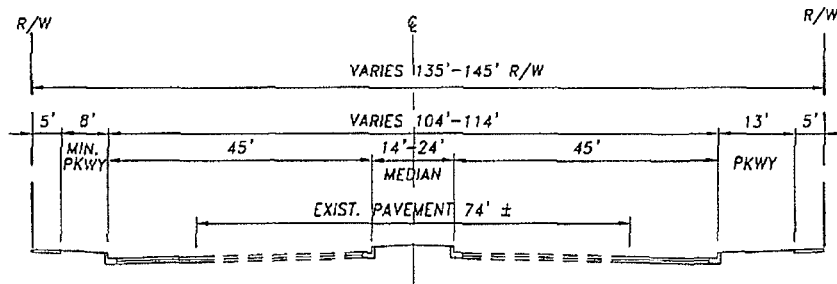
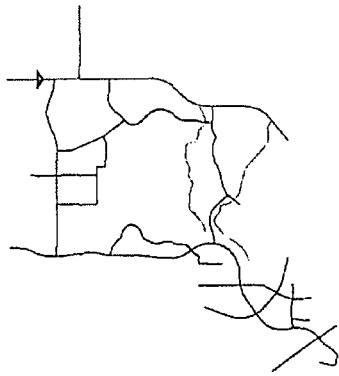
"O" STREET

HUNSAKER & ASSOCIATES
IRVINE, INC.
PLANNING • ENGINEERING • SURVEYING
Irvine, CA 92618 • Tel: 949 263-1070 • Fax: 949 263-1071

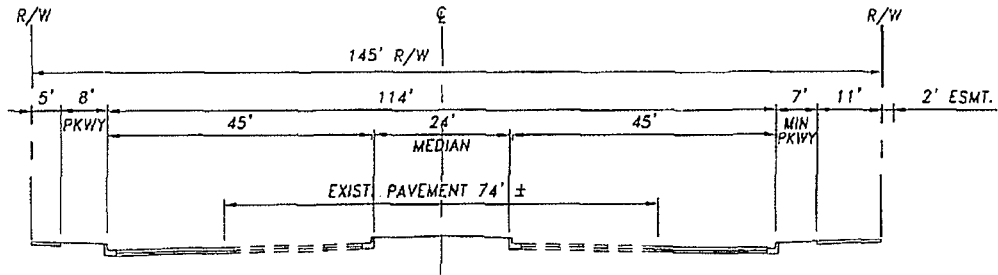
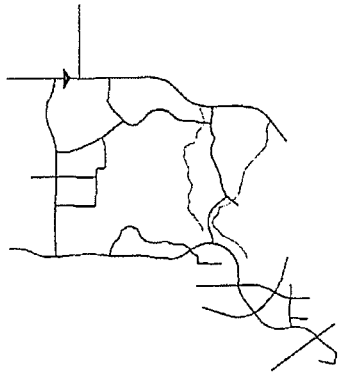
MAP DATE: 03/23/09
DATE: 03/23/09
PROJECT: 03/23/09

HORIZONTAL SCALE: 1" = 30'

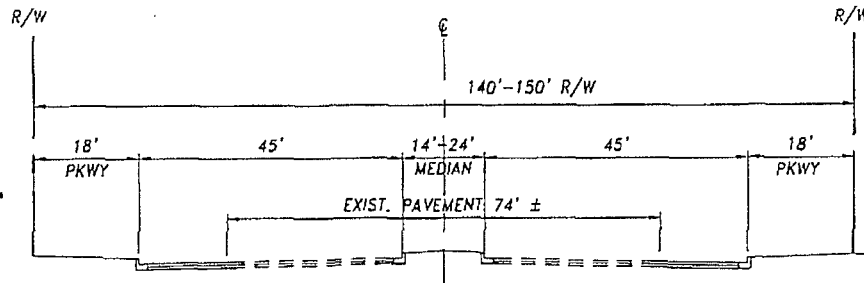
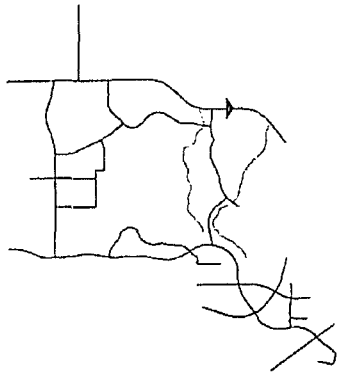
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|-------------------|------------------------------------|
| BACKBONE STREETS | PREPARED FOR |
| "O" STREET | Great Park NEIGHBORHOODS |



IRVINE BOULEVARD



IRVINE BOULEVARD



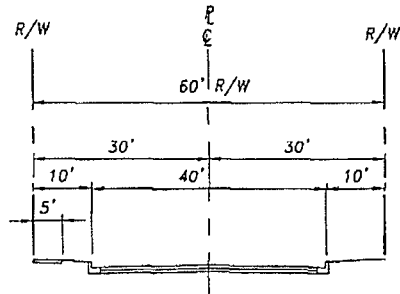
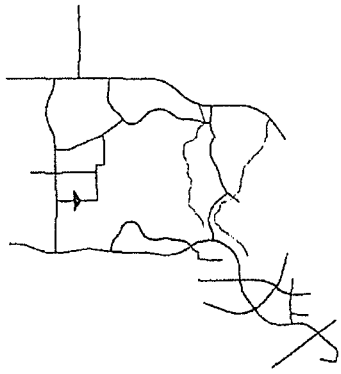
IRVINE BOULEVARD

HUNSAKER & ASSOCIATES
 IRVINE, INC.
 PLANNING • ENGINEERING • SURVEYING
 Three Highways • Irvine, CA 92618 • TEL: (949) 261-7070 • FAX: (949) 261-6771

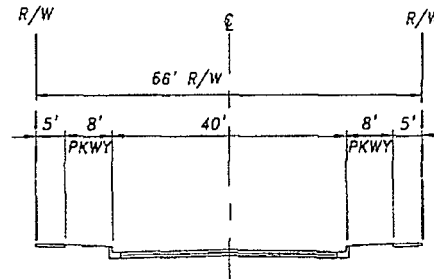
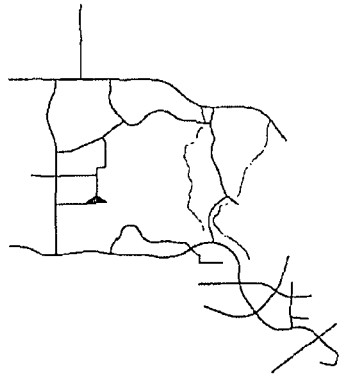
MAP DATE CENTER
 03/23/09
 03/23/09

HORIZONTAL SCALE: 1" = 30'

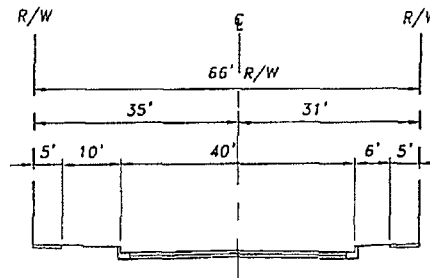
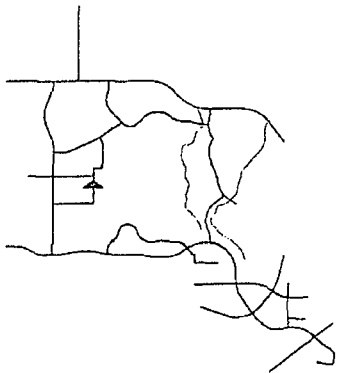
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|------------------|------------------------------------|
| BACKBONE STREETS | PREPARED FOR |
| IRVINE BLVD. | Great Park NEIGHBORHOODS |



"LV" STREET



"Y" STREET



"Y" STREET

HUNSAKER & ASSOCIATES
 IRVINE, CALIFORNIA
 PLANNING • ENGINEERING • SURVEYING
 One Regent • Irvine, CA 92618 • Tel: (949) 363-7910 • Fax: (949) 363-8729

MAP DATE: 02/23/09
 DATE: 03/23/09
 03/23/09

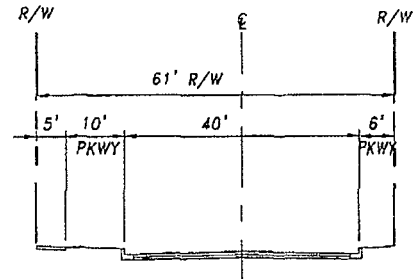
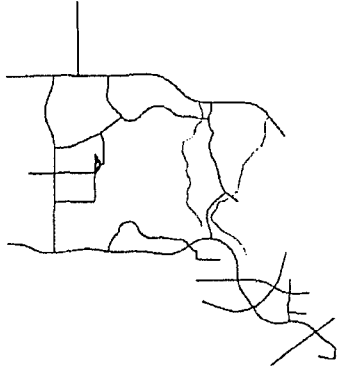
HORIZONTAL SCALE: 1" = 30'

BACKBONE STREETS

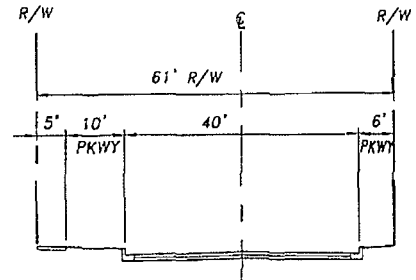
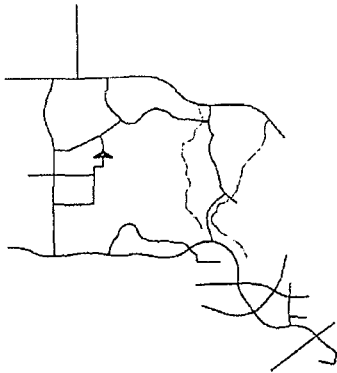
"LV" STREET &
 "Y" STREET

PREPARED FOR

Great Park
 NEIGHBORHOODS



"X" STREET



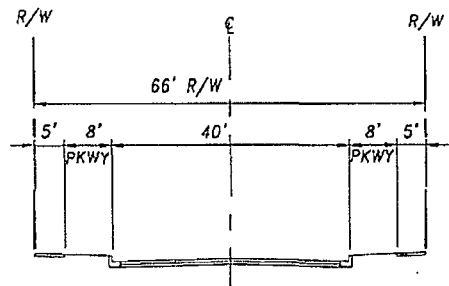
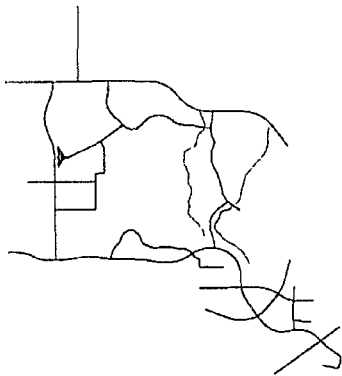
"T" STREET

HUNSAKER & ASSOCIATES
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 PLANNING • ENGINEERING • SURVEYING
 Three Eagles • Irvine, CA 92618 • PH 949 583-7070 • FX 949 583-0759

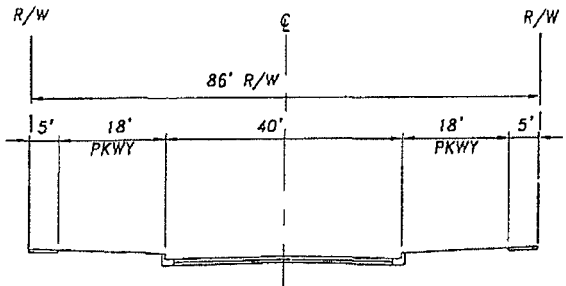
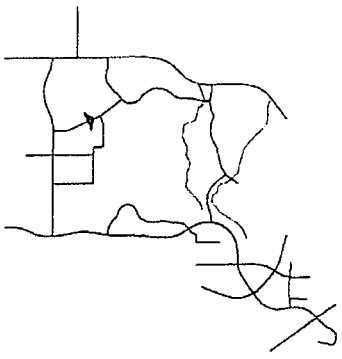
MAP DATE IDENTIFIER
 03/23/09 P.D.V.
 DATE PLOTTED
 03/23/09

HORIZONTAL SCALE: 1" = 30'

| | |
|----------------------------|------------------------------------|
| BACKBONE STREETS | PREPARED FOR |
| "X" STREET & "T" STREET | Great Park NEIGHBORHOODS |



"LQ" STREET



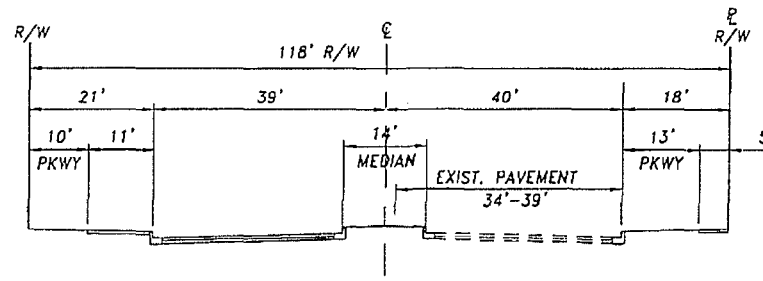
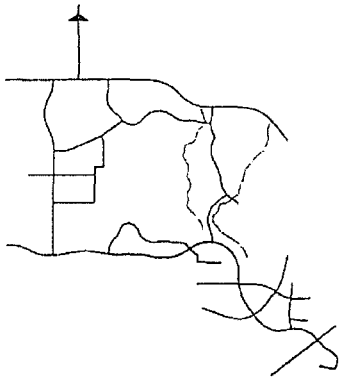
"LQ" STREET

HUNSAKER & ASSOCIATES
 IRVINE, INC.
 PLANNING • ENGINEERING • SURVEYING
 Three Hughes • Irvine, CA 92618 • Tel: (949) 263-7000 • Fax: (949) 263-0777

MAP DATE: 03/23/09
 PREPARED BY: D.V.
 CHECKED BY: D.V.

HORIZONTAL SCALE: 1" = 30'

| | |
|------------------|------------------------------------|
| BACKBONE STREETS | PREPARED FOR |
| "LQ" STREET | Great Park NEIGHBORHOODS |



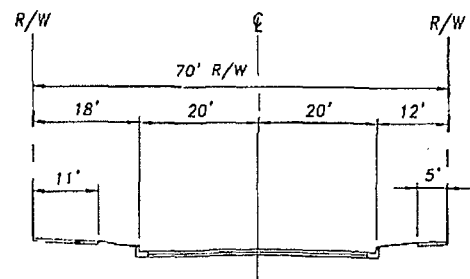
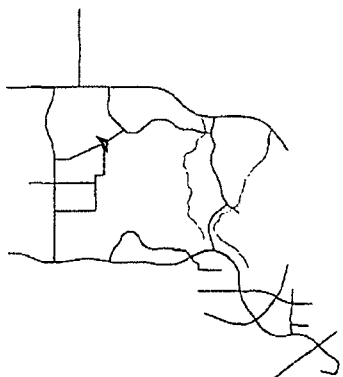
RIDGE VALLEY

HUNSAKER & ASSOCIATES
 IRVINE, INC.
 PLANNING • ENGINEERING • SURVEYING
 Three Pkwy • Irvine, CA 92618 • 714 (949) 543-7070 • FX: (949) 543-0757

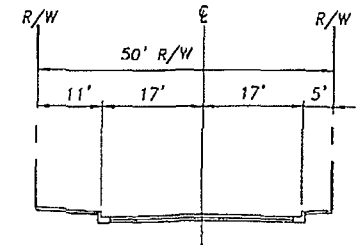
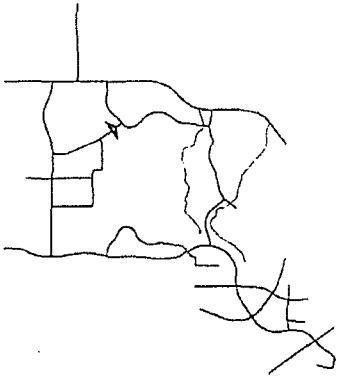
MAP DATE CENTERED
 03/23/09
 BY: D.V.

HORIZONTAL SCALE: 1" = 30'

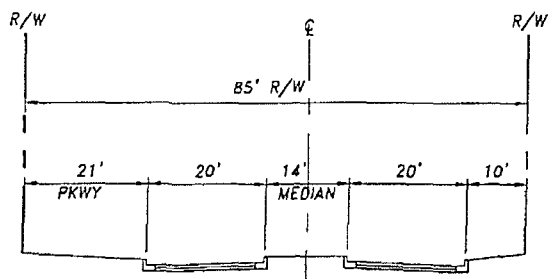
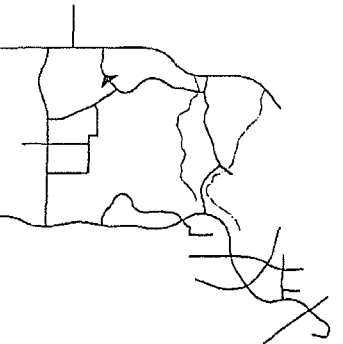
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|------------------|------------------------------------|
| BACKBONE STREETS | PREPARED FOR |
| RIDGE VALLEY | Great Park NEIGHBORHOODS |



"Q" STREET
(APPROVED ON AMENDED VTTM 17008 AS "T" ST.)



"Q" STREET
(APPROVED ON AMENDED VTTM 17008 AS "T" ST.)



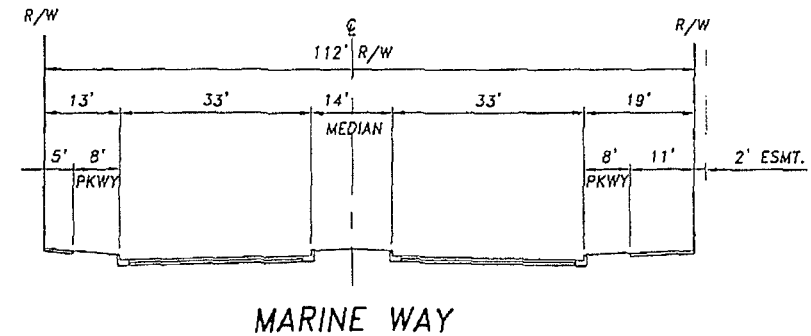
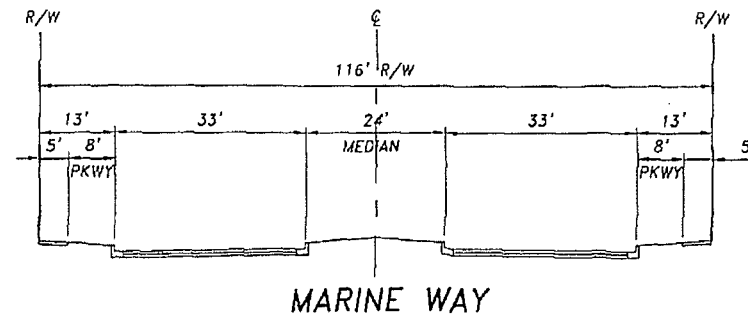
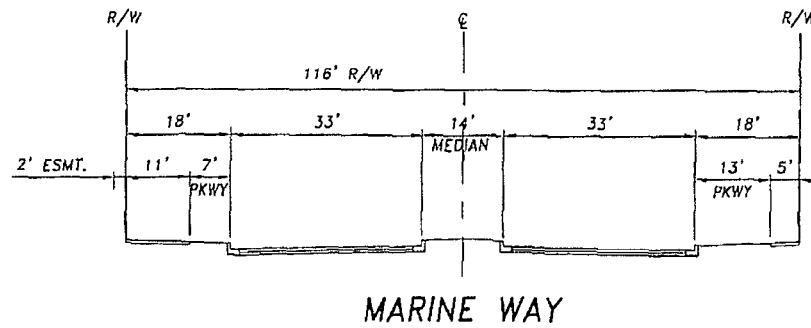
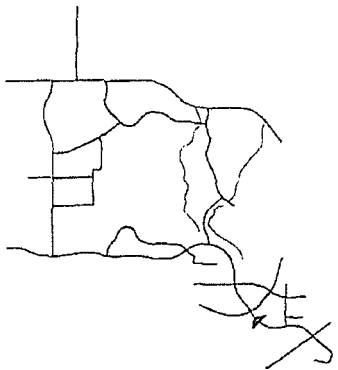
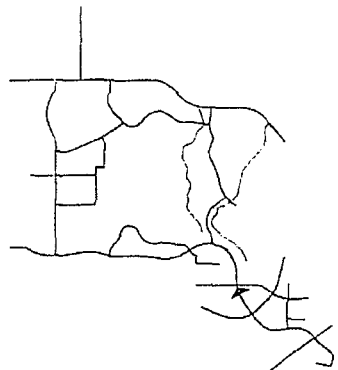
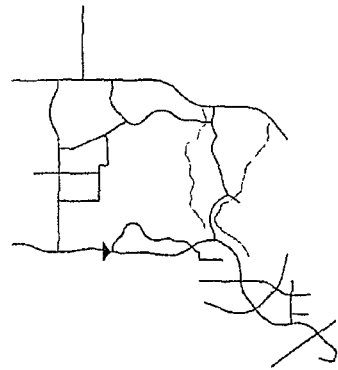
"A" STREET

HUNSAKER & ASSOCIATES
IRVINE, INC.
PLANNING • ENGINEERING • SURVEYING
17000 Hughes • Irvine, CA 92618 • TEL 949 263-1010 • FAX 949 263-0291

DATE CENTER
8/27/09
83723706

HORIZONTAL SCALE: 1" = 30'

| | |
|--|-------------------------------------|
| BACKBONE STREETS | PREPARED FOR |
| "Q" STREET & "A" STREET | Great Park NEIGHBORHOODS |

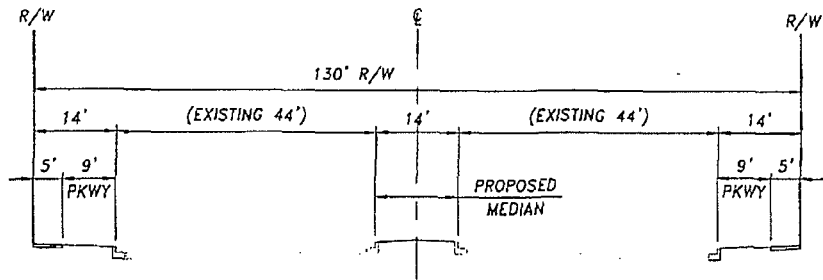
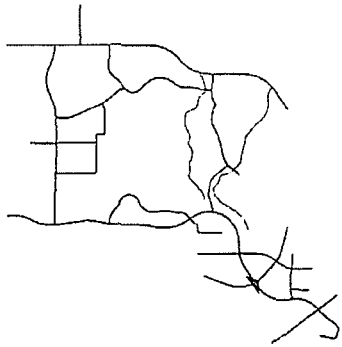


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 Three Hughes • Irvine, CA 92618 • Tel: (949) 583-1010 • Fax: (949) 583-0759

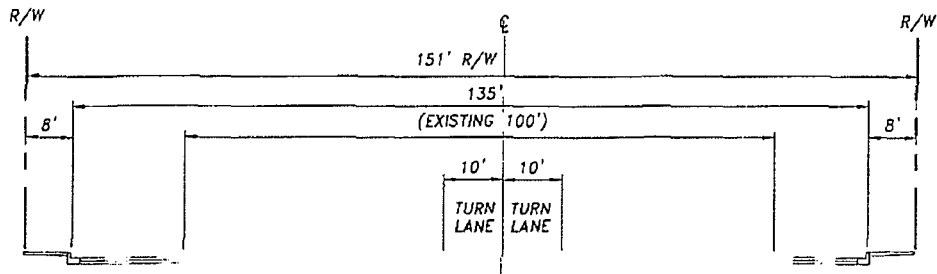
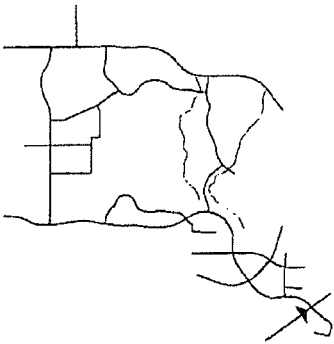
MAP DATE: 08/21/09
 DATE: 03/23/09
 BY: R.B.V.

HORIZONTAL SCALE: 1" = 30'

| | |
|------------------|-----------------------------|
| BACKBONE STREETS | PREPARED FOR |
| MARINE WAY | Great Park NEIGHBORHOODS |



ALTON PARKWAY



BAKE PARKWAY

HUNSAKER & ASSOCIATES
 IRVINE, INC.
 PLANNING • ENGINEERING • SURVEYING
 13901 Highgate • Irvine, CA 92618 • TEL: (949) 263-7000 • FAX: (949) 263-0733

MAP DATE CENTER
 01/23/09 BDDY
 03/23/09

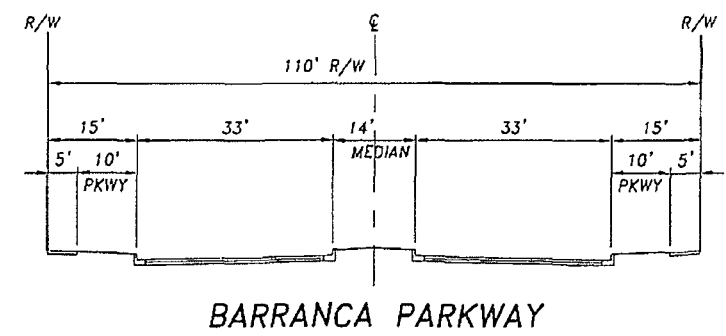
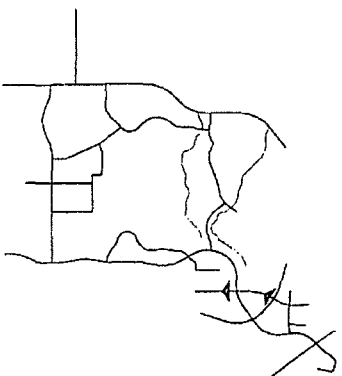
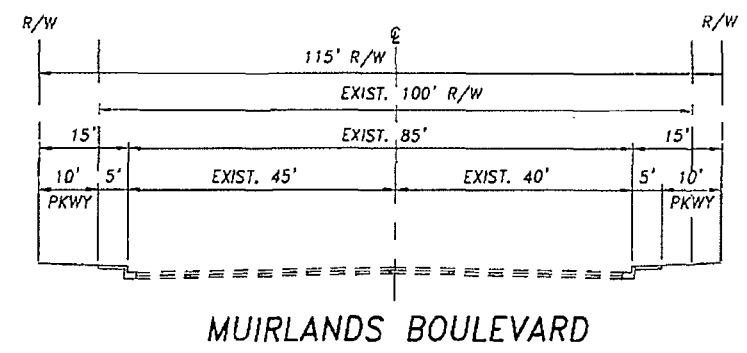
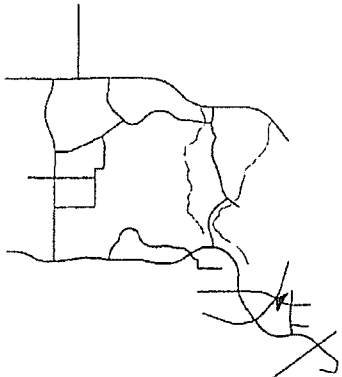
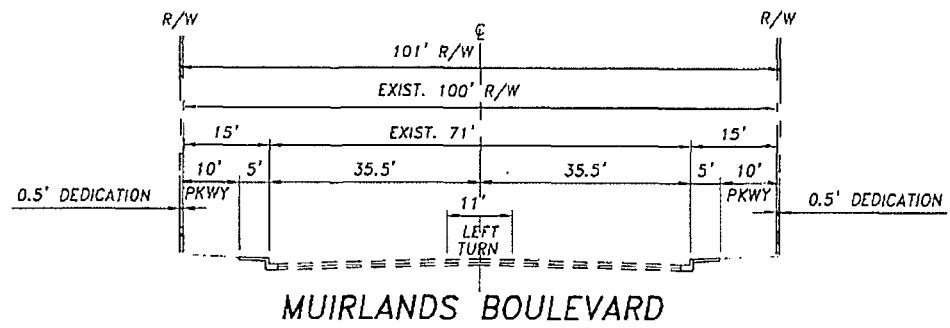
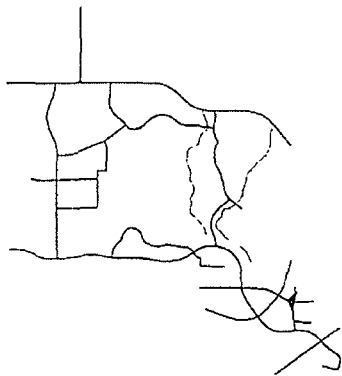
HORIZONTAL SCALE: 1" = 30'

BACKBONE STREETS

ALTON & BAKE PARKWAY

PREPARED FOR

Great Park
NEIGHBORHOODS



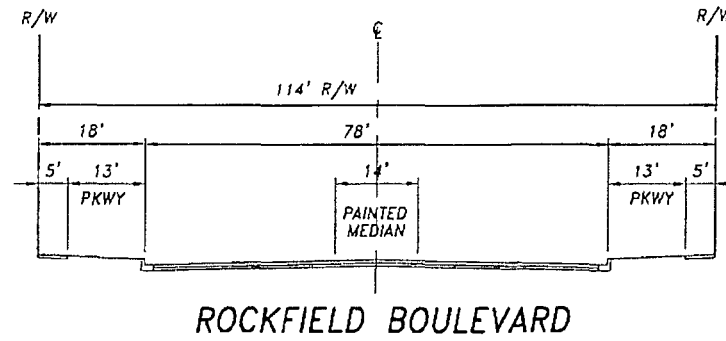
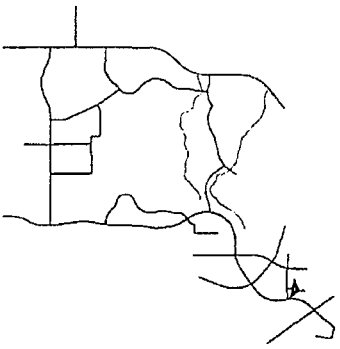
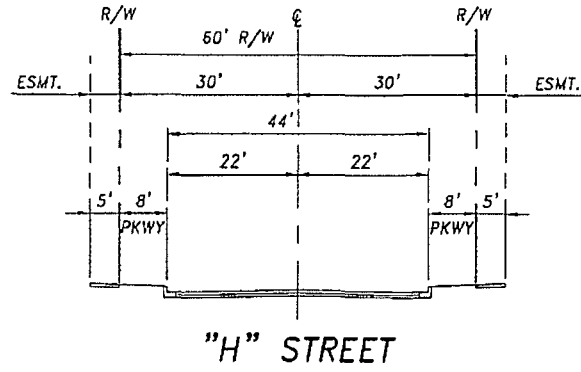
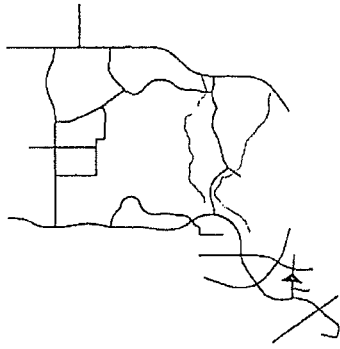
HUNSAKER & ASSOCIATES
 IRVINE, INC.
 PLANNING • ENGINEERING • SURVEYING
 Three Hughes • Irvine, CA 92618 • PH (949) 262-7070 • FX (949) 262-0779

APP. DATE IDENTIFIER
 03/23/09 P.D.V.
 03/23/09

HORIZONTAL SCALE: 1" = 30'

BACKBONE STREETS
MUIRLANDS &
BARRANCA

PREPARED FOR
Great Park
 NEIGHBORHOODS

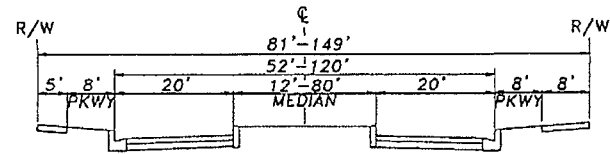
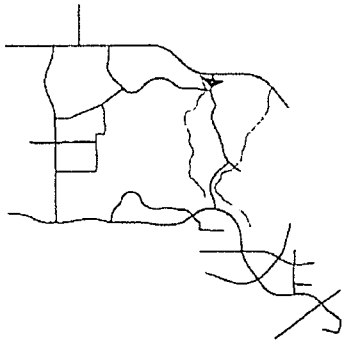


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 IRVINE, INC.
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 Three Hughes • Irvine, CA 92618 • TEL 949 843-1000 • FAX 949 843-0753

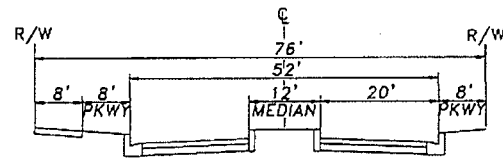
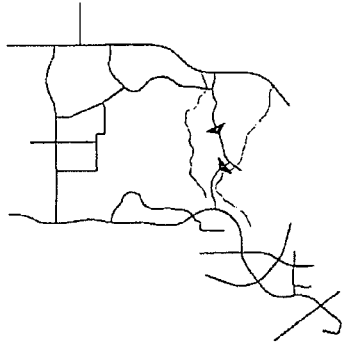
MAP DATE IDENTIFIER
 03/23/09 BY: D.V.
 03/23/09

HORIZONTAL SCALE: 1" = 30'

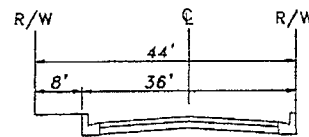
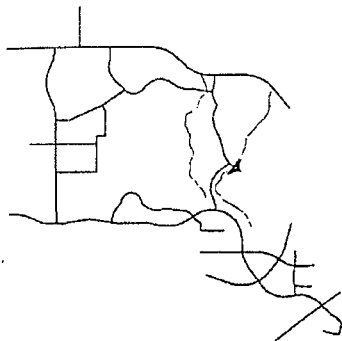
| | |
|---------------------------------------|-------------------------------------|
| BACKBONE STREETS | PREPARED FOR |
| "H" STREET & ROCKFIELD | Great Park NEIGHBORHOODS |



"C" STREET



"D" & "E" STREET



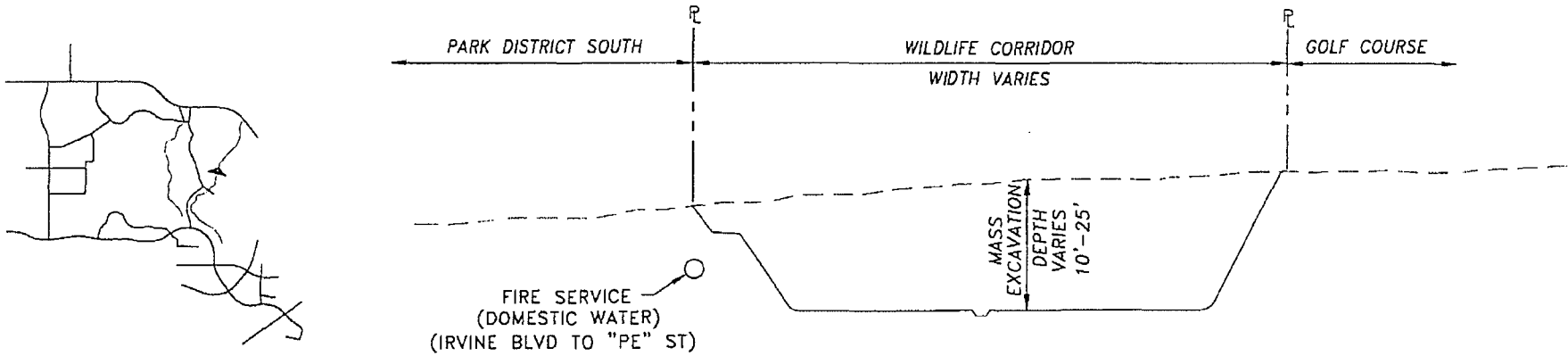
"PE" STREET



| | |
|----------------------|----------------------|
| MAP DATE: 03/23/09 | DATE: 03/23/09 |
| BY: [Signature] | BY: [Signature] |
| CHECKED: [Signature] | CHECKED: [Signature] |

HORIZONTAL SCALE: 1" = 30'

| | |
|---|------------------------------------|
| BACKBONE STREETS | PREPARED FOR |
| "C" STREET "D" & "E" STREET "PE" STREET | Great Park NEIGHBORHOODS |



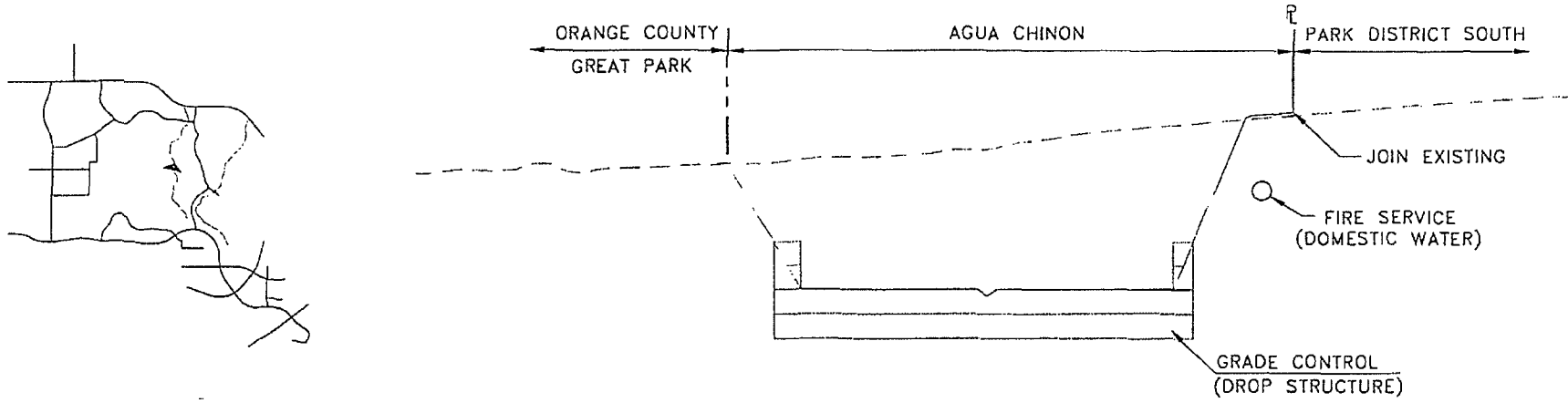
WILDLIFE CORRIDOR MASS EXCAVATION
 (FROM IRVINE BLVD TO BORREGO CHANNEL)



| |
|---------------------|
| MAP DATE IDENTIFIER |
| 11/17/08 |
| 07/08/09 |

HORIZONTAL SCALE: 1" = 100'

| | |
|-------------------|-----------------------------|
| BACKBONE STREETS | PREPARED FOR |
| WILDLIFE CORRIDOR | Great Park NEIGHBORHOODS |



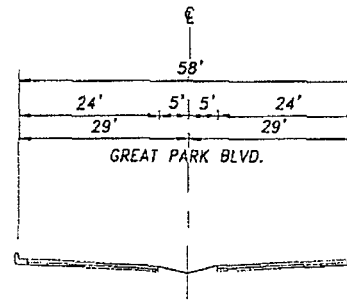
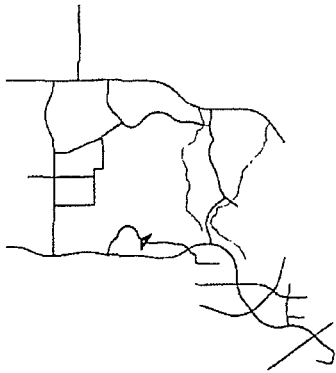
AGUA CHINON
(FROM IRVINE BLVD TO NORTH OF MARINE WAY)



| |
|---------------------|
| MAP DATE IDENTIFIER |
| 07/06/09 |

HORIZONTAL SCALE: 1" = 100'

| | |
|------------------|-----------------------------|
| BACKBONE STREETS | PREPARED FOR |
| AGUA CHINON | Great Park NEIGHBORHOODS |



***GREAT PARK BOULEVARD**

* NOTE: SECTION TAKEN FROM OCGP SCHEMATIC DESIGN

HUNSAKER & ASSOCIATES
 I A V I N E I N C.
 PLANNING • ENGINEERING • SURVEYING
 Three Heights • Irvine, CA 92618 • TEL: (949) 343-7000 • FAX: (949) 343-6729

MAP DATE CENTER
 03/23/09
 03/23/09

HORIZONTAL SCALE: 1" = 30'

| | |
|-----------------------------|------------------------------------|
| BACKBONE STREETS | PREPARED FOR |
| GREAT PARK BOULEVARD | Great Park NEIGHBORHOODS |

EXHIBIT E-1



LEGEND

- STREET FACILITIES - [Orange line symbol]
- TRAFFIC SIGNAL - [Yellow square symbol]
- TRAFFIC SIGNAL MODIFICATION - [Yellow square with diagonal line symbol]

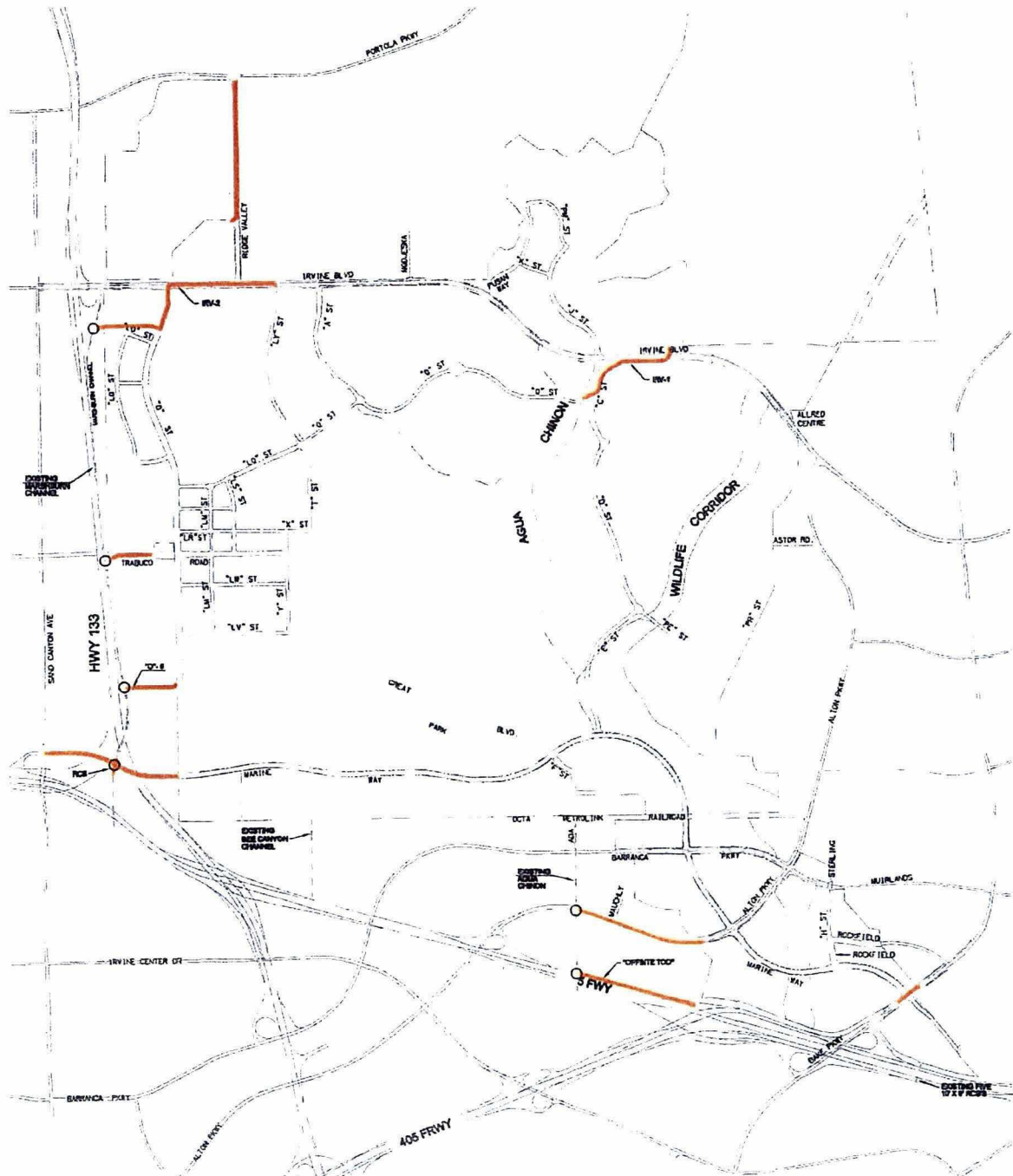
GROUP A FACILITIES
OFF-PROPERTY FACILITIES
STREETS, SIGNALS AND BRIDGES

ALL PROJECTS BY
RBF
CONSULTANTS

SCALE 1" = 100'

DATE
JULY 8, 2008
SHEET 1 OF 8

EXHIBIT E-1



LEGEND

- DRAINAGE FACILITIES - —
- EXISTING DRAINAGE FACILITY - - - -
- JOIN EXISTING DRAINAGE FACILITY - ○

GROUP A FACILITIES
OFF-PROPERTY FACILITIES
STORM DRAIN



DATE
 JULY 8, 2009
 SHEET 2 OF 8

EXHIBIT E-1



LEGEND

- SEWER FACILITIES - ———
- EXISTING SEWER PIPELINES - - - - -

GROUP A FACILITIES
OFF-PROPERTY FACILITIES
SEWER

ALL PROVIDED BY
RBF
CONSULTING
REGISTERED PROFESSIONAL ENGINEER
CITY OF IRVINE, CALIFORNIA



DATE
JULY 8, 2009
SHEET 3 OF 8

EXHIBIT E-1



LEGEND

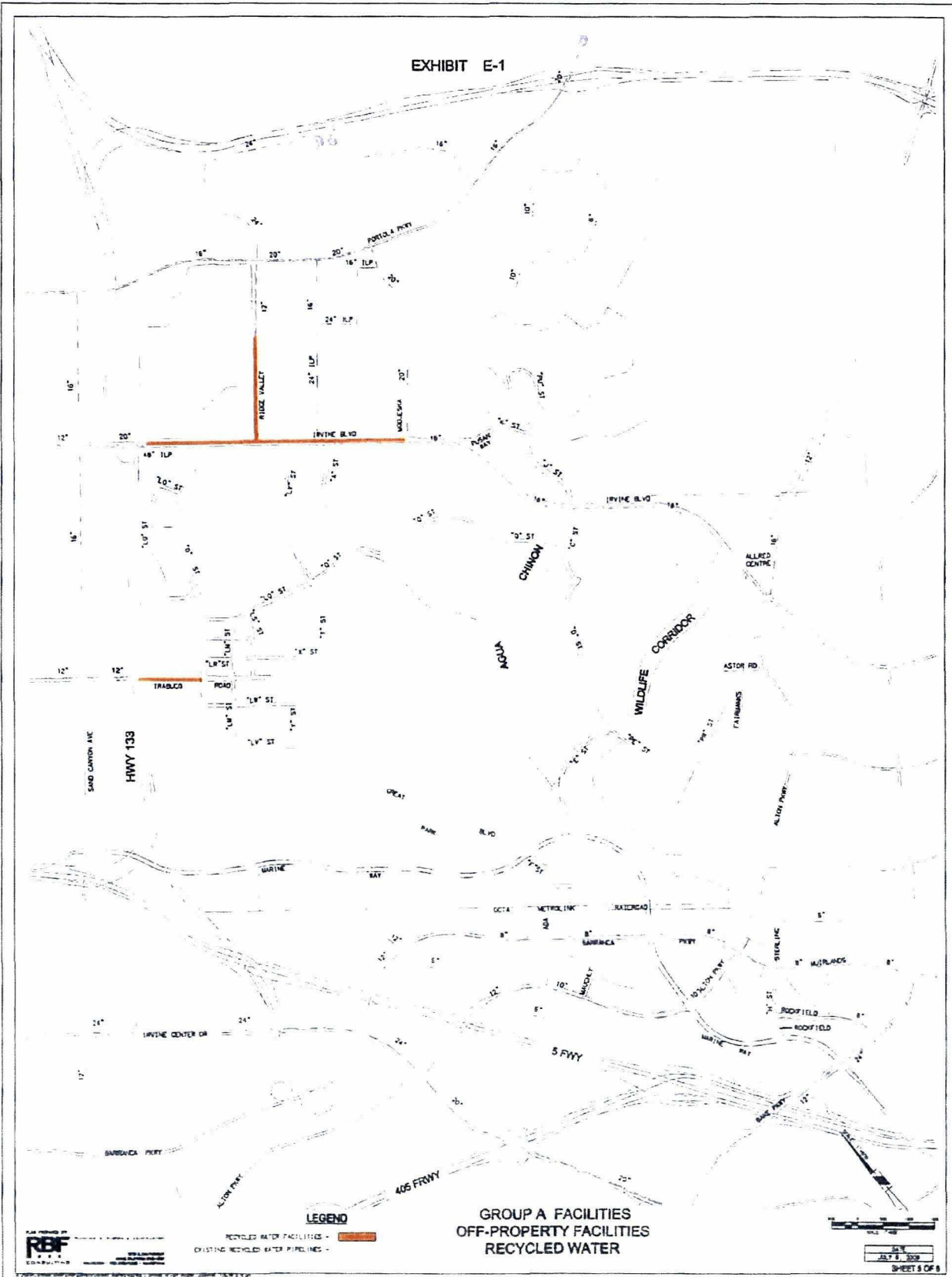
- DOMESTIC WATER FACILITIES - █
- EXISTING DOMESTIC WATER PIPELINES - ---
- PRESSURE REDUCING STATION - ▼

GROUP A FACILITIES
OFF-PROPERTY FACILITIES
DOMESTIC WATER



DATE
JULY 8, 2008
SHEET 4 OF 8

EXHIBIT E-1



LEGEND

- RECYCLED WATER FACILITIES - [Orange Rectangle]
- EXISTING RECYCLED WATER PIPELINES - [Dashed Line]

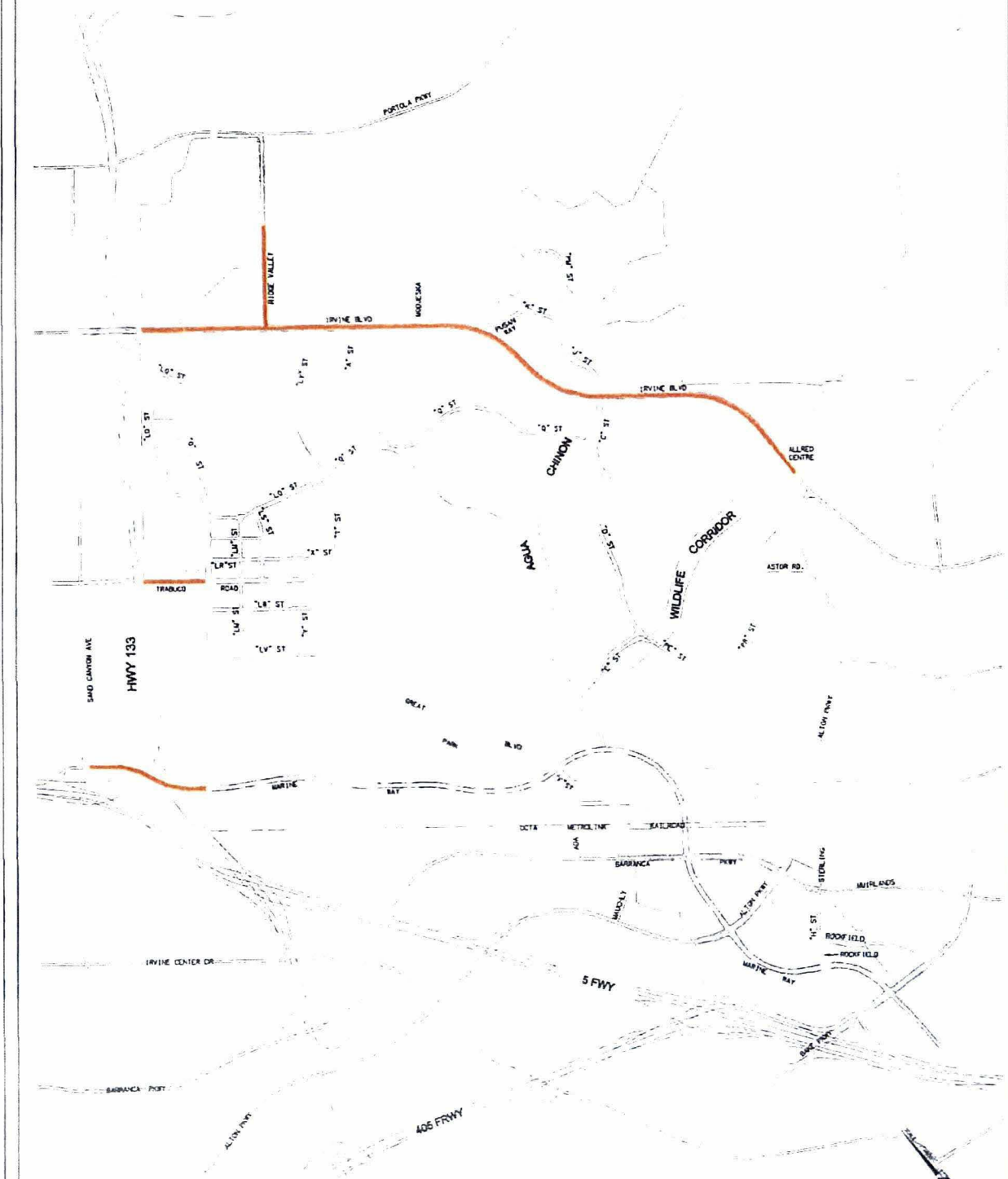
GROUP A FACILITIES
OFF-PROPERTY FACILITIES
RECYCLED WATER



DATE
JULY 8, 2009
SHEET 5 OF 8



EXHIBIT E-1



LEGEND
 DRY UTILITY FACILITIES - [Red Line]

GROUP A FACILITIES
 OFF-PROPERTY FACILITIES
 DRY UTILITY

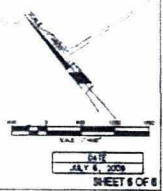
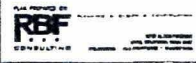
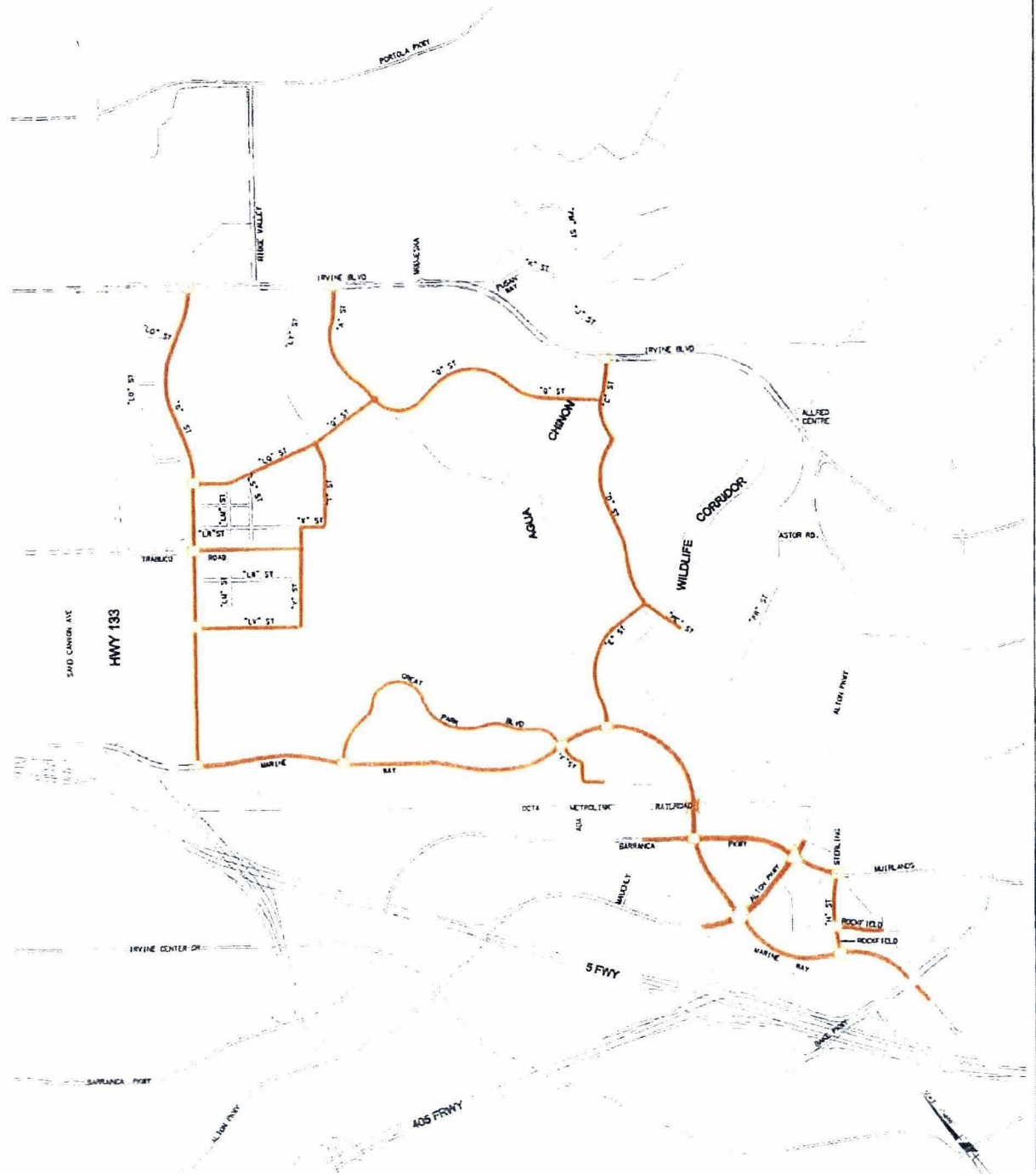


EXHIBIT E-2



LEGEND

- STREET FACILITIES - [Orange line]
- TRAFFIC SIGNAL - [Yellow circle]
- TRAFFIC SIGNAL ADDITION - [Yellow circle with 'A']
- BRIDGE - [Dashed line]

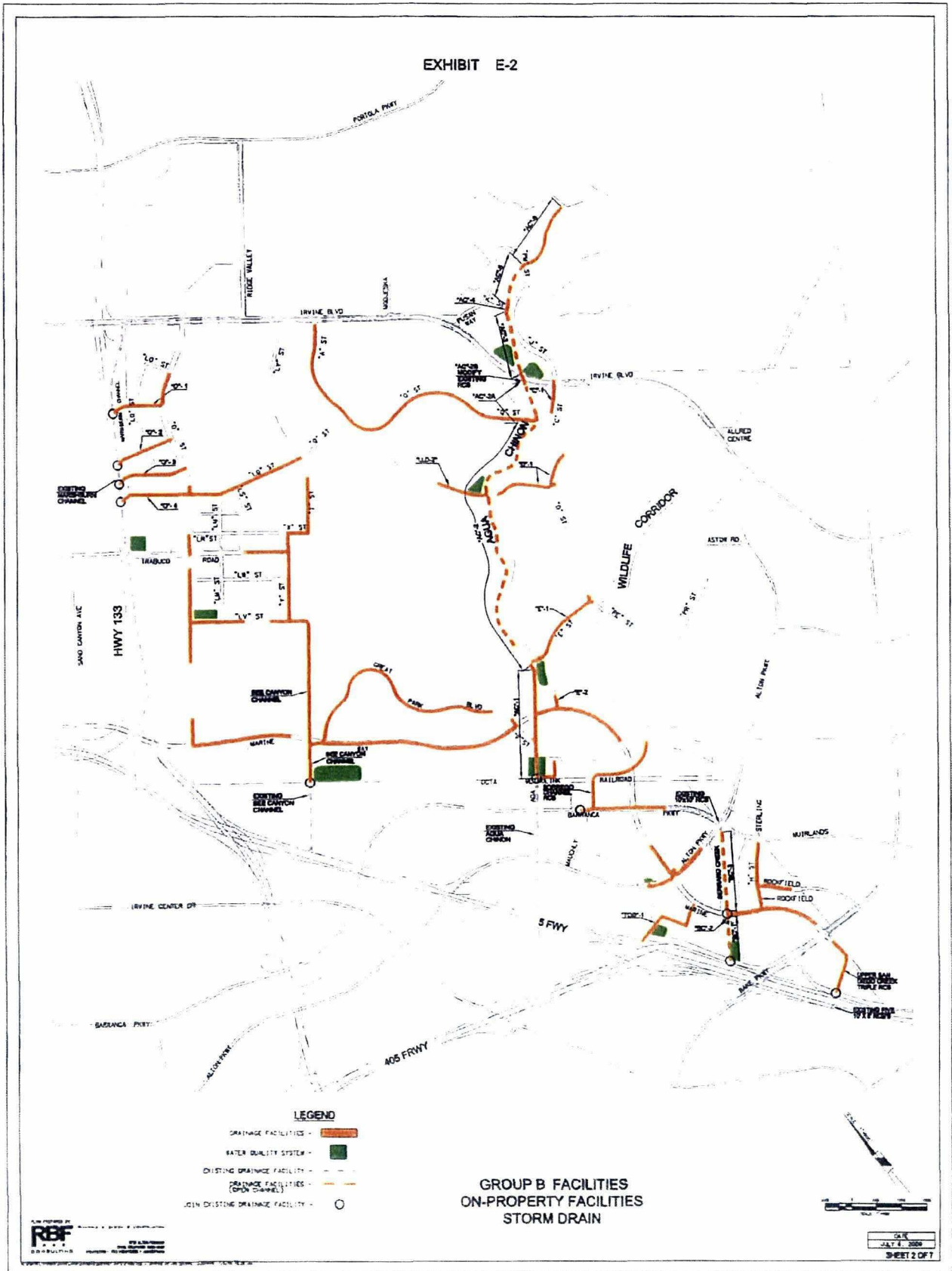
GROUP B FACILITIES
ON-PROPERTY FACILITIES
STREETS, SIGNALS AND BRIDGES

PREPARED BY
RBF
CONSULTING ENGINEERS
10000 S. TAYLOR AVE., SUITE 100
DANA POINT, CALIF. 92629
TEL: (714) 261-1111
FAX: (714) 261-1112



DATE
JULY 7, 2008
SHEET 1 OF 7

EXHIBIT E-2

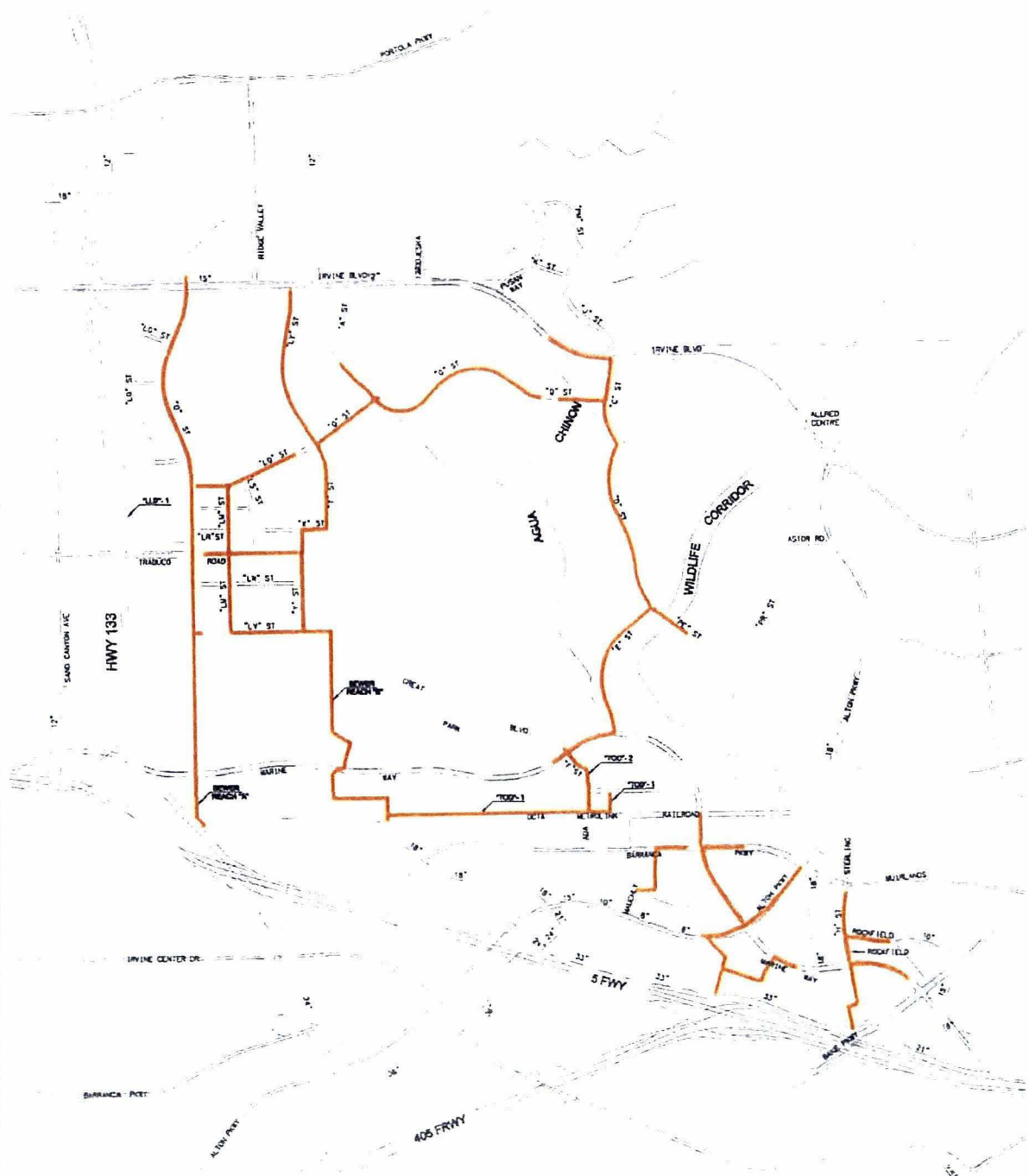


LEGEND

- DRAINAGE FACILITIES - [Orange line symbol]
- WATER QUALITY SYSTEM - [Green rectangle symbol]
- EXISTING DRAINAGE FACILITY - [Dashed orange line symbol]
- DRAINAGE FACILITIES (OPEN CHANNEL) - [Solid orange line symbol]
- JOIN EXISTING DRAINAGE FACILITY - [Circle symbol]

GROUP B FACILITIES
ON-PROPERTY FACILITIES
STORM DRAIN

EXHIBIT E-2



LEGEND

- SEWER FACILITIES - [Orange line symbol]
- EXISTING SEWER PIPELINES - [Dashed line symbol]

GROUP B FACILITIES
ON-PROPERTY FACILITIES
SEWER

RBF

 REGISTERED PROFESSIONAL ENGINEER

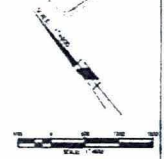
 CIVIL ENGINEERING

 10000 WILSON AVENUE, SUITE 100

 IRVINE, CALIFORNIA 92618

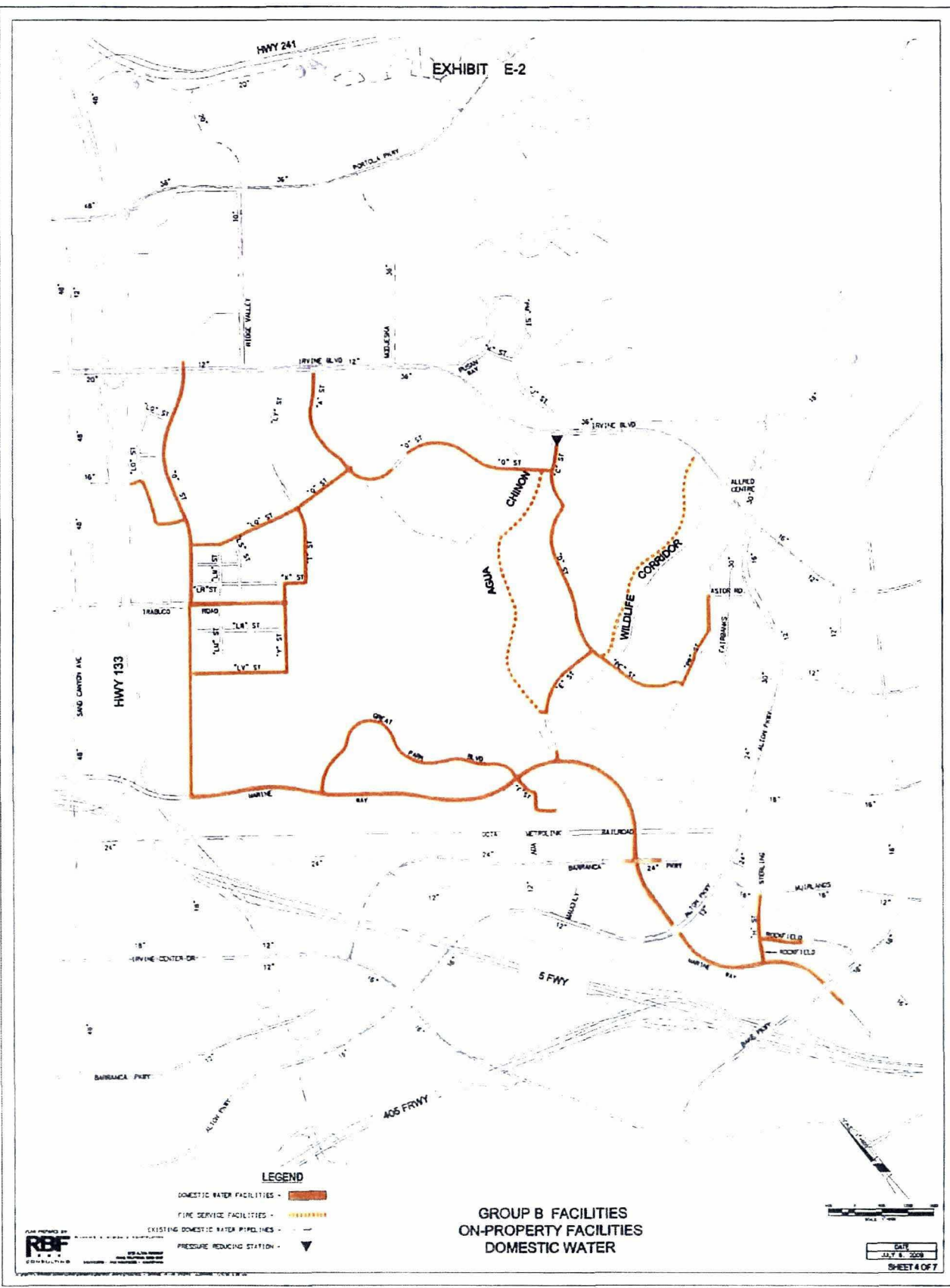
 (949) 453-8888

 WWW.RBFENGINEERS.COM



DATE
 JULY 8, 2008
 SHEET 3 OF 7

EXHIBIT E-2



LEGEND

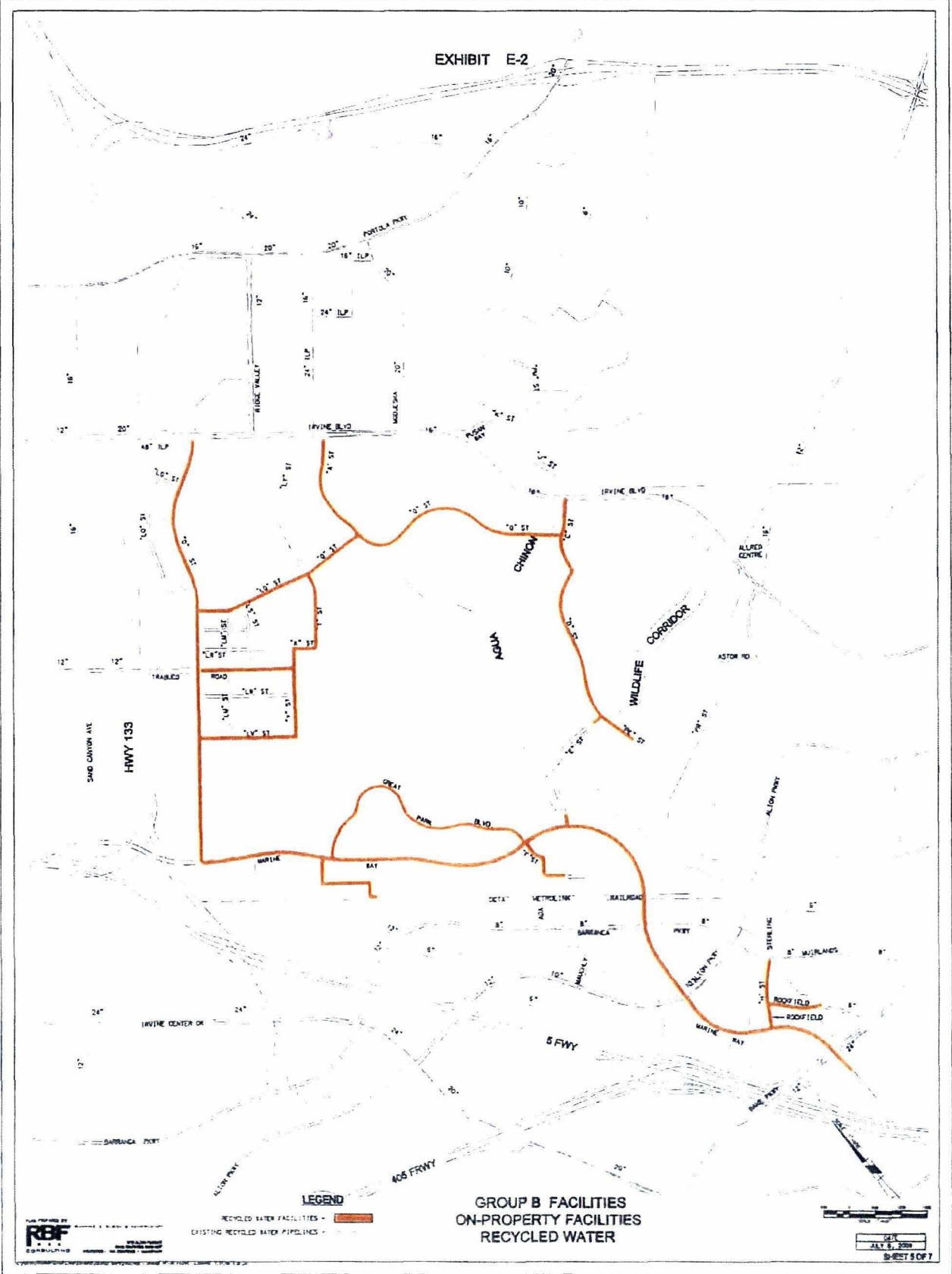
- DOMESTIC WATER FACILITIES - [Orange line symbol]
- FIRE SERVICE FACILITIES - [Yellow line symbol]
- EXISTING DOMESTIC WATER PIPELINES - [Dashed line symbol]
- PRESSURE REDUCING STATION - [Inverted triangle symbol]

GROUP B FACILITIES
ON-PROPERTY FACILITIES
DOMESTIC WATER



DATE
JULY 8, 2008
SHEET 4 OF 7

EXHIBIT E-2



LEGEND

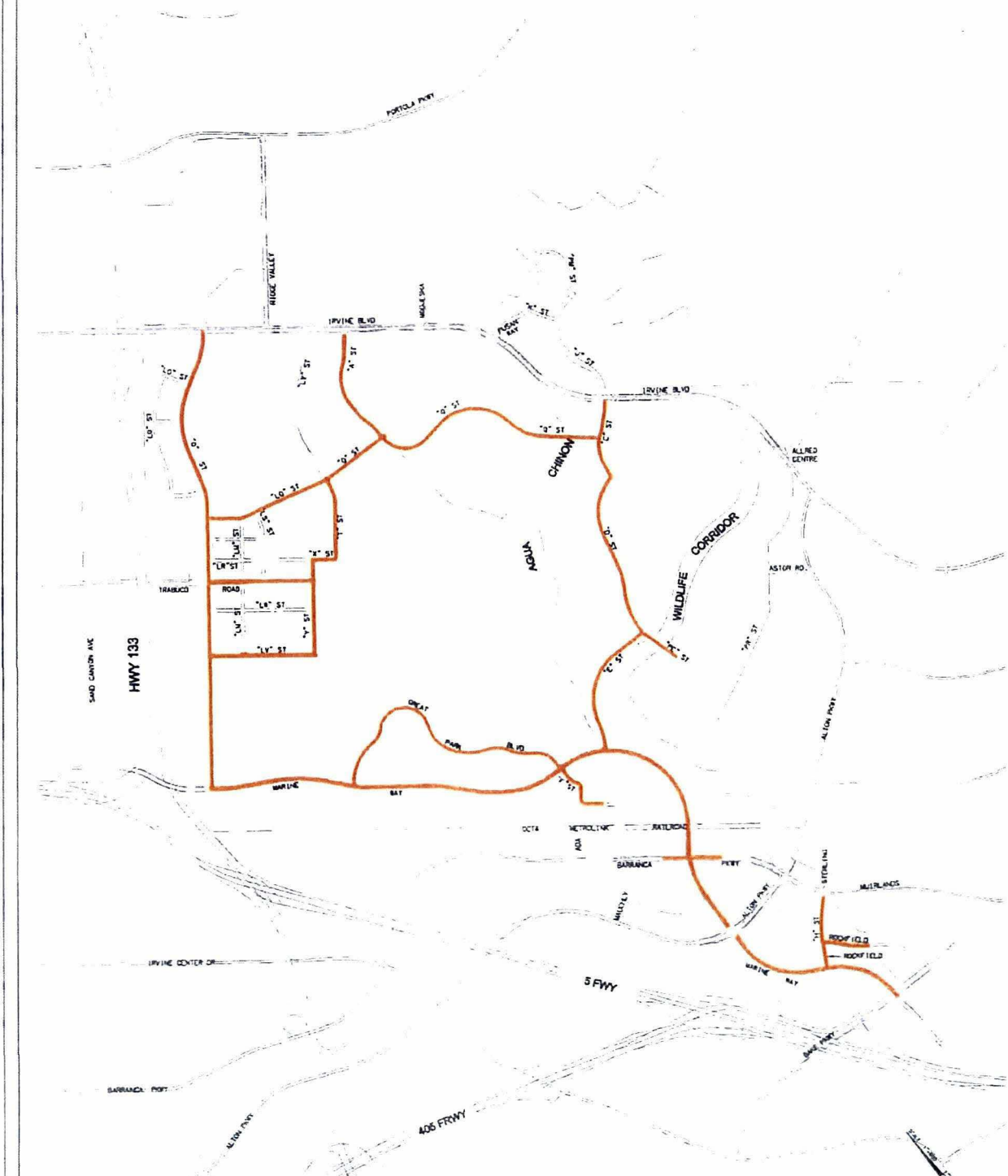
- RECYCLED WATER FACILITIES - [Orange line symbol]
- EXISTING RECYCLED WATER PIPELINES - [Dashed line symbol]

GROUP B FACILITIES
ON-PROPERTY FACILITIES
RECYCLED WATER



SCALE BAR
DATE: JULY 8, 2009
SHEET 8 OF 7

EXHIBIT E-2



LEGEND

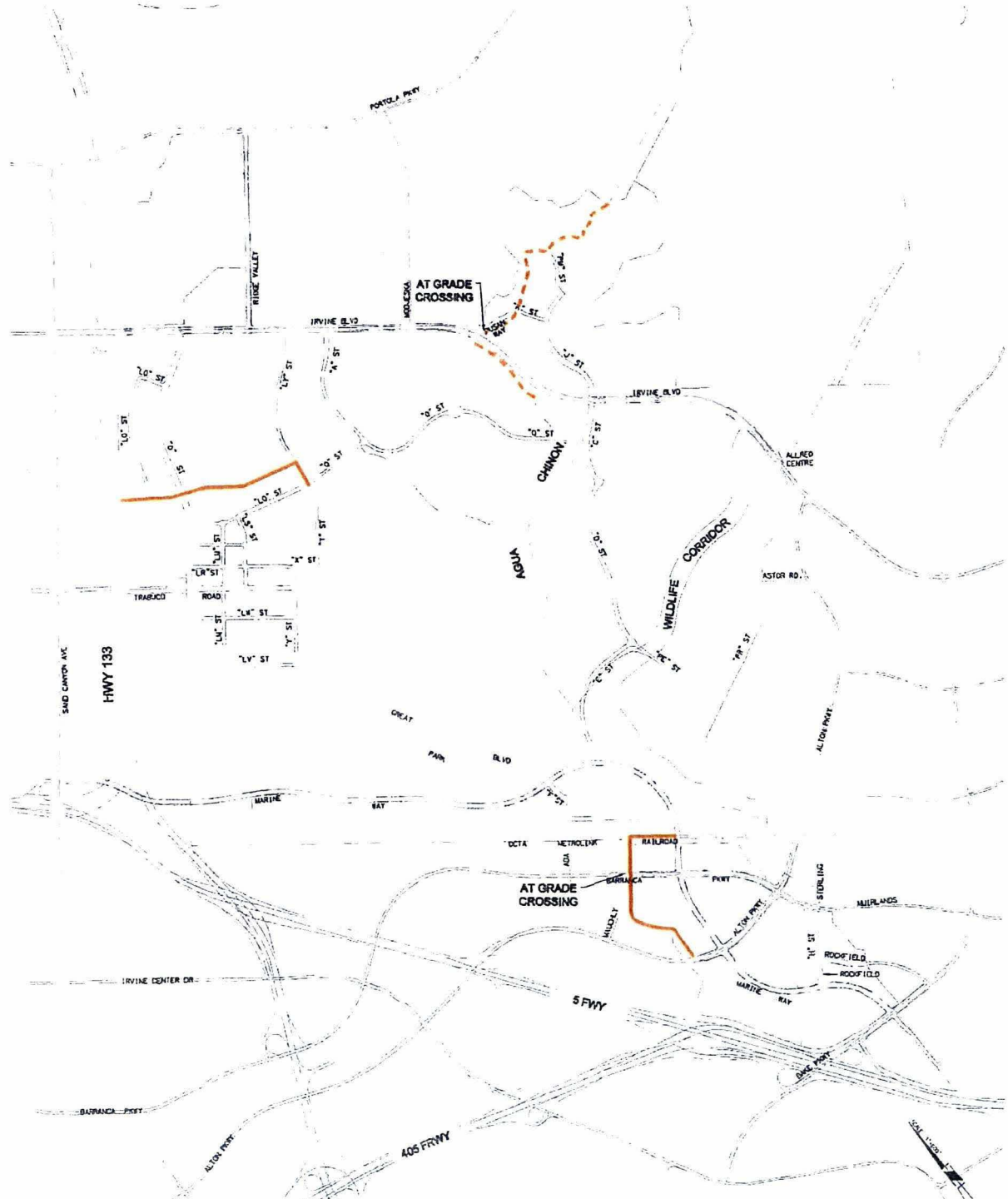
DRY UTILITY FACILITIES - [Orange Line]

GROUP B FACILITIES
ON-PROPERTY FACILITIES
DRY UTILITIES



DATE
JULY 8, 2009
SHEET 8 OF 7

EXHIBIT E-2

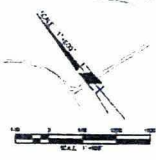


LEGEND

- REGIONAL TRAIL FACILITIES - [Orange line]
- REGIONAL RIDING/HIKING TRAIL - [Yellow line]
- TRAIL TO BE CONSTRUCTED BY OTHERS - [Dashed line]

**GROUP B FACILITIES
ON-PROPERTY FACILITIES
OFFSTREET TRAILS
(OUTSIDE OF STREET RIGHT OF WAY)**

PLAN PREPARED BY
RFI
CONSULTANTS
CORPORATION
10000 Irvine Blvd, Suite 100
Irvine, CA 92618
TEL: 949.453.1100
WWW.RFI-CORP.COM



DATE
JULY 9, 2008
SHEET 7 OF 7

Exhibit E-3
Heritage Fields LLC / Orange County Great Park
Group A and Group B Facilities
Narrative

July 2009

CURRENT ENTITLEMENT AND PENDING APPROVALS

Group A and Group B facilities described herein are based upon the following approvals and pending approvals;

- 1) Approved Amended VTTM 17008 (Reso 08-2921)
- 2) Approved Master Landscape and Trail Plan for VTTM 17008 (Reso 08-2922)
- 3) Approved Modification to OCGP Streetscape Design Guidelines (Reso 08-2923)
- 4) Approved VTTM 17283 (Reso 08-2924)
- 5) Approved LLD Non Res Master Plan and Design Guidelines (Reso 08-2925)
- 6) Pending approval TPM 2008-152 for PA 30 R & D and Auto Center
- 7) Pending approval PA 30 6 Ac Parcel
- 8) City and County approved San Diego Creek Flood Control Master Plan Update dated October 2, 2008 (County case number EC29320, City case number 00457521-EMC).
- 9) City and County approved PA 51 Marshburn Watershed Update, dated October 2, 2008 (County case number EC29320, City case number 00457521-EMC)
- 10) IRWD SAMP (March 17, 2009).
- 11) Approved Conceptual Project Water Quality Management Plan (WQMP), Updating the Integrated Master Plan of Drainage, Water Quality and Habitat Mitigation. (April 23, 2009)

GROUP A FACILITIES (OFF-PROPERTY FACILITIES)^{1 2 3 4}

A) OFF-PROPERTY STREETS AND SIGNALS

- 1) **Irvine Blvd** - Street widening as required from State Highway 133 to west of Alton Parkway to include additional lanes (as required), right of way acquisition, multiple left turning lanes, right turn lanes, grading, subgrade prep, base, paving, curb and gutter, median, sidewalks, access ramps, trails (within ROW), adjust utilities to grade, remove utility poles, relocation/removal of existing utilities, underground utility lines, signing, striping, grinding, ac overlay, traffic control and street lights, slurry seal.
- 2) **Irvine Blvd Traffic Signals**- Proposed Signal at Ridge Valley, and signal modifications at Modjeska, Allred Centre and Pusan Way. Includes Signal interconnect, advance detection, easements and telemetry.

¹ Street Sections as illustrated per "HF / OCGP Backbone Facility Cross Sections.

² Demolition as required to construct Backbone Infrastructure is included.

³ "Green Streets" and "Sustainability" features are not considered Off or On-Property Facilities.

⁴ City shall provide right of way and easements necessary on City or County property to implement Backbone Infrastructure when required at no cost to Heritage Fields.

- 3) **Marine Way⁵** – Street improvements as required from Sand Canyon to “O” Street including grading, right of way acquisition and related relocation costs, base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, trails, adjust utilities to grade, access ramps, street lights and remove utility poles, relocation of existing utilities, signing, striping, and underground utility lines.
- 4) **Marine Way Traffic Signals** – Proposed Traffic Signal modification at Sand Canyon and at existing Marine Way / Sand Canyon intersection. Includes Signal interconnect, advance detections, easements and telemetry.
- 5) **Existing Marine Way at Sand Canyon** - Street improvements as required for the modifications to existing Marine Way and Sand Canyon to a “right-in and right out” entrance including existing signal pole and equipment removal, modifications on Sand Canyon and providing access to the existing users.
- 6) **Existing Sand Canyon at Marine Way / I-5 Ramps** – Restriping of the existing Sand Canyon and I-5 Ramps. As required in the approved Bake Parkway – Marine Way circulation system amendment.
- 7) **Bake Parkway** – Street-widening improvements as required including right of way acquisition, daylight grading, base, paving, curb, subgrade prep, gutter, signing, grinding, ac overlay, sidewalk, joins, striping, access ramps, traffic control, removals/relocation of existing utilities and adjust manholes and valves to grade. Includes Traffic Signal at Marine Way.
- 8) **Rockfield and Bake Parkway Intersection** – Street improvements as required including right of way acquisition for the modification to the existing intersection of Rockfield and Bake Parkway. Includes modification to the existing traffic signal.
- 9) **NB I-5 Bake Parkway Off Ramp**- Street improvements as required to the NB I-5 Bake Parkway off ramp. Includes Off Ramp widening as required including daylight grading, base, paving, joins, ac overlay, asphalt curb, signing, striping and modification to the existing signal.

⁵ For that portion of the Marine Way right of way affecting the area currently occupied by OCTA, Heritage Fields' contribution for such right of way acquisition costs shall not exceed \$2 million dollars and its contribution for the costs to relocate existing improvements within such right of way area shall not exceed \$500,000 (for a total of \$2.5 million dollars), provided that either the City or Heritage Fields can elect to obtain a third-party appraisal of the OCTA right of way area at the time of acquisition (from an appraiser mutually approved by both Parties) in which case Heritage Fields' contribution shall equal the valuation set forth in such appraisal. City shall contribute all amounts for the OCTA Marine Way right of way acquisition costs and costs to relocate existing improvements to the extent the same exceed Heritage Fields' contribution obligations. Notwithstanding any provision to the contrary in the Amended and Restated Agreement to which this Exhibit is attached or the Amended MIA, City shall be responsible to deliver right of way for purposes of commencement of work on such segment of Marine Way when dictated by the Master Phasing Plan & Schedule as defined in the Amended MIA.

- 10) **Ridge Valley** –Project related street improvements as required from existing Portola Parkway to Irvine Blvd including right of way acquisition, grading, removals, base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, trails, adjust manhole, access ramps, street lights, grinding, ac overlay, traffic control, water quality, remove utility poles, and underground utility lines. Includes traffic signal modification to existing traffic signal on Portola Parkway at Ridge Valley.
- 11) **Trabuco Road** - Full width street improvements from State Highway 133 to "O" street including right of way acquisition, base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, adjust manhole, access ramps, grinding, ac overlay, traffic control, street lights, water quality, remove utility poles, relocate existing utilities and underground of existing overhead 66 KV SCE transmission lines along Trabuco Road.

B) OFF-PROPERTY STORM DRAIN FACILITIES: (Facilities subject to change based upon processing the final Basis of Design Reports)

- 1) **Irvine Blvd (IRV-1, IRV-2)**- Storm Drain as required from State Highway 133 to west of Alton Parkway including laterals, catch basins, junction structures, manholes, local depressions for street drainage and connections to existing downstream facilities. Includes storm drain outside of Irvine Blvd. required to connect to existing downstream facilities.
- 2) **“O” Street (O-6)** – Storm drain as required from Marshburn Channel through PA-40 to “O” street including junction structures and connections to existing downstream facilities.
- 3) **Marine Way**-Storm Drain as required from Sand Canyon to “O” street including laterals, catch basins, junction structures, manholes and local depressions for street drainage, and connections to existing downstream facilities. Includes Raceway improvements, the Marshburn Channel and Marine Way crossing and roadway drainage improvements. Right of way required to connect to existing downstream facilities.
- 4) **Bake Parkway**- Storm Drain as required from Bake Parkway to San Diego Creek including laterals, catch basins, junction structures, manholes and local depressions for street drainage, and connections to existing downstream facilities.
- 5) **Alton Parkway**– Storm Drain as required from the T.O.D to existing Agua Chinon including laterals, junction structures, manholes, catch basins, local depressions, and connections to existing downstream facilities.
- 6) **Ridge Valley**– Storm drain as required from existing Portola Parkway to Marshburn Basin including right of way acquisition storm drain junction structures, manholes, catch basins, local depressions and connections to existing downstream facilities.
- 7) **Trabuco Road** – Storm drain as required from Marshburn Channel along Trabuco Road to “O” street including laterals, junction structures, manholes, catch basins, local depressions and connections to existing downstream facilities.
- 8) **“Offsite” TOD**– Regional drainage system from southeast corner of the General Industrial Zoning District Portion of PA 30 south of Marine Way and following the rear of the existing properties fronting Technology Drive, and connection to Agua Chinon. Improvements include a base level drainage infrastructure to provide flood protection, including any required modifications to the exiting downstream Caltrans drainage system. Includes land and right of way acquisition.

C) OFF-PROPERTY SEWER FACILITIES: ⁶

- 1) **Marine Way**-Sewer mainline as required from Sand Canyon to Marshburn Channel Includes laterals, monitoring manholes, manholes, adjusting rims to grade, connection to downstream facilities and replacement of existing pavement and striping.
- 2) **Reach "A" Sewer** -Sewer mainline as required from the existing sleeve (Under the I-5 freeway just south of Technology Drive) to the south side of the railway right of way. Includes monitoring manholes, manholes, adjusting rims to grade, connection to downstream facilities and replacement of existing pavement and striping.
- 3) **Trabuco Road**– Sewer mainline as required from SR 133 to "O" Street. Includes laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities.

D) OFF-PROPERTY DOMESTIC AND RECYCLED WATER FACILITIES: ⁶

- 1) **Irvine Blvd**- Domestic water main as required from State Highway 133 to "O" street includes tees and mainline stubs, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, connection to existing facilities and replacement of existing pavement and striping.
- 2) **Irvine Blvd**- Recycled water mains as required from State Highway 133 to Modjeska includes tees and mainline stubs, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, connection to existing facilities and replacement of existing pavement and striping.
- 3) **Marine Way**- Domestic water main as required from Sand Canyon to "O" street includes tees and mainline stubs, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, connection to existing facilities, and replacement of existing pavement and striping.
- 4) **Ridge Valley**– Domestic and recycled water mains as required from point of connection south of Portola to Irvine Blvd includes tees and mainline stubs, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, connection to existing facilities, pressure reducing, and replacement of existing pavement and striping
- 5) **Trabuco Road**– Domestic and recycled water mains as required from west of SR 133 (through Caltrans Bridge) to "O" street includes tees and mainline stubs, valves, air vac, blow off, fittings, fire hydrant assembly, tees, thrust blocks, concrete cap, irrigation water service and connection to existing facilities.

⁶ Regional IRWD Facilities are considered Off-property facilities.

- 6) **Astor Road**– Domestic water main as required from Borrego Channel to Fairbanks includes tees, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, connection to existing facilities, and pressure reducing.

E) OFF-PROPERTY LANDSCAPE, AMENITIES, IRRIGATION SYSTEM, AND PLANTINGS IN THE FOLLOWING RIGHT-OF-WAY

- 1) **Irvine Blvd.** from State Highway 133 to Alton Parkway.
- 2) **Marine Way** from Sand Canyon to "O" street.
- 3) **Bake Parkway.**
- 4) **Ridge Valley** from existing Portola to Irvine Blvd.
- 5) **Trabuco Road** from State Highway 133 to "O" street.

F) OFF-PROPERTY DRY UTILITIES

Facilities include CATV, telephone, electric, gas and may include relocation or conversion of transmission lines including trenching, shading, conduit risers, pullboxes, vaults, hand holes, etc., in the following streets:

- 1) **Irvine Blvd.** from State Highway 133 to west of Alton Parkway.
- 2) **Marine Way** from Sand Canyon to "O" street.
- 3) **Ridge Valley** from point of connection south of Portola Parkway to Irvine Blvd.
- 4) **Trabuco Road** from State Highway 133 to "O" street.

GROUP B FACILITIES (ON-PROPERTY FACILITIES)^{1 2 3 4}

A) ON-PROPERTY STREET AND SIGNALS

- 1) **Marine Way** – Street improvements as required from “O” street to Bake Parkway including grading, right of way acquisition, base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, trails, adjust utilities to grade, access ramps, street lights and remove utility poles, relocation of existing utilities, signing, striping, and underground utility lines.
- 2) **Marine Way at railroad bridge** – Bridge improvements including railway improvements, grading, abutments, access ramps, lighting, drainage, utility crossings, sidewalks, trails and right of way acquisition.
- 3) **Marine Way Traffic Signals** – Proposed Traffic Signals at “O”, “F”, “E”, Great Park Blvd., Barranca, Alton, and Rockfield. Includes Signal interconnect, advance detection, easements, and telemetry.
- 4) **Irvine Blvd Traffic Signals**- Proposed Traffic Signals at “O”, “A” street, “C” street. Includes Signal interconnect, advance detection, easements, and telemetry.
- 5) **Barranca Parkway/Muirlands Boulevard** - Street improvements as required from east of Ada to Sterling, including grading, base, paving, curb, median, subgrade prep, gutter, striping, access ramps, traffic control, grinding, ac overlay, sidewalk, joins and adjust existing utilities to grade. Also includes modifications to Barranca due to the Marine Way / Railway overcrossing and a modification to existing Traffic Signal on Barranca at Alton.
- 6) **Muirlands and Sterling Traffic signal** – Proposed traffic signal at Muirlands and Sterling ave. Signal interconnect, advanced detection, easements, and telemetry.
- 7) **Alton Parkway** - Street improvements, mostly comprised of widening of existing, as required from west of Marine Way to east of Barranca Parkway including base, paving, curb, medians, sidewalks, grinding, ac overlay, traffic control, subgrade prep, gutter, signing and striping, access ramps, and adjust existing utilities to grade.
- 8) **Rockfield Blvd** - Street improvements as required from existing Rockfield to Marine Way including right of way acquisition, base, paving, curb, subgrade prep, gutter, median, signing and striping, sidewalks, trails (within ROW), adjust manhole, access ramps, street lights and remove utility poles, and underground utility lines. Includes traffic signal at “H” Street.

¹ Street Sections as illustrated per “HF / OCGP Backbone Facility Cross Sections.

² Demolition as required to construct Backbone Infrastructure is included.

³ “Green Streets” and “Sustainability” features are not considered Off or On-Property Facilities.

⁴ City shall provide right of way and easements necessary on City or County property to implement Backbone Infrastructure when required at no cost to Heritage Fields.

- 9) **"F" Street** - Full width street improvements including base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, adjust manhole, access ramps, street lights, water quality, and underground utility lines.
- 10) **"O" Street (Trabuco to Irvine Blvd)**- Full width street improvements from Trabuco to Irvine Blvd including right of way acquisition, base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, trails, adjust manhole, access ramps, street lights, water quality, remove utility poles, relocate existing utilities and underground utility lines.
- 11) **"O" Street (Trabuco to Marine Way)**- Half width street improvements from Trabuco road to Marine Way including right of way acquisition, base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, adjust manhole, access ramps, street lights, water quality, remove utility poles, relocate existing utilities and underground of 66KV SCE Transmission line from Trabuco to approximately 2500 lf south of Trabuco.
- 12) **"O" Street Traffic Signals**– Proposed traffic signals at Trabuco Road", "L-Q", and "L-V". Signal interconnect, advance detection, easements, and telemetry
- 13) **Trabuco Road** - Full width street improvements from "O" street to "Y" street including base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, adjust manhole, access ramps, grinding, ac overlay, traffic control, street lights, and water quality.
- 14) **"L-V" Street** - Full width street improvements including base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, adjust manhole, access ramps, street lights, and water quality.
- 15) **"A" Street** - Full width street improvements including base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, adjust manhole, access ramps, street lights, and water quality.
- 16) **"Y" Street** - Full width street improvements including base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, adjust manhole, access ramps, street lights, and water quality.
- 17) **"X" Street** - Full width street improvements including base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, adjust manhole, access ramps, street lights, and water quality.
- 18) **"T" Street** - Full width street improvements including base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, adjust manhole, access ramps, street lights, and water quality.
- 19) **"Q" Street** - Full width street improvements including base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, adjust manhole, access ramps, street lights, and water quality.
- 20) **"C" Street** - Full width street improvements including base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, adjust manhole, access ramps, street lights, and water quality.

- 21) **"D" Street** - Full width street improvements including base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, adjust manhole, access ramps, street lights, and water quality.
- 22) **"E" Street** - Full width street improvements including base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, adjust manhole, access ramps, street lights, and water quality.
- 23) **"P-E" Street** - Full width street improvements including base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, adjust manhole, access ramps, street lights, and water quality.
- 24) **"H" Street** - Full width street improvements including base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, adjust manhole, access ramps, street lights, and water quality.
- 25) **"L-Q" Street** - Full width street improvements including base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, adjust manhole, access ramps, street lights, and water quality.
- 26) **Great Park Blvd** - Full width street improvements including base, paving, curb, subgrade prep, gutter, striping, sidewalks, adjust manhole, access ramps, street lights, and water quality for paved surface. Modification to Extraction Wells and Shallow Ground Water Unit is not included.

B) ON-PROPERTY STORM DRAIN FACILITIES: (Facilities subject to change based upon Processing the Basis of Design Reports)

- 1) **Marine Way**-Storm Drain as required from "O" street to Bake Parkway including laterals, catch basins, junction structures, manholes and local depressions for street drainage, and connections to existing downstream facilities. Includes storm drain outside of Marine Way.
- 2) **Barranca Parkway**- Storm Drain as required from east of Ada to east of Alton Parkway including laterals, catch basins, junction structures, manholes, and local depressions for street drainage, and connections to existing downstream facilities.
- 3) **Alton Parkway**- Storm Drain as required from west of Barranca Parkway to west property line of the T.O.D.including laterals, junction structures, manholes, catch basins, local depressions, and connections to existing downstream facilities.
- 4) **Rockfield Blvd** – Storm drain as required from Marine Way to "H" street including storm drain mainlines and connections to downstream facilities.
- 5) **"H" Street** – Storm drain as required from Rockfield Blvd to Muirlands. Includes storm drain from "H" st to existing storm drain (east property line of the TOD). Includes laterals, junction structures, manholes, catch basins, local depressions and connections to downstream facilities.
- 6) **"O" Street (O-1, O-2, O-3, O-4)**– Storm drain as required from L-G street to Trabuco Road including junction structures, manholes, catch basins, local depressions and connections to existing downstream facilities.
- 7) **"L-Q" Street**– Storm drain as required from "O" street to "L-Y" street including laterals, junction structures, manholes, catch basins, local depressions and connections to downstream facilities.
- 8) **"O" Street (O-6)**– Storm drain as required from PA-40 to "L-R" street within "O" street including junction structures, manholes, catch basins, local depressions and connections to downstream facilities.
- 9) **"O" Street to Marine Way**– Storm drain as required within "O" street, south of O-6, to Marine Way including junction structures, manholes, catch basins, local depressions and connections to existing downstream facilities.
- 10) **Trabuco Road** – Storm drain as required from "O" street to "Y" street including laterals, junction structures, manholes, catch basins, local depressions and connections to existing downstream facilities.
- 11) **"L-V" Street** – Storm drain as required between "O" street and "Y" street including laterals, junction structures, manholes, catch basins, local depressions and connections to downstream facilities.

- 12) **"T" Street** – Storm drain as required from south of "L-Q" street to "X" street including laterals, junction structures, manholes, catch basins, local depressions and connections to existing downstream facilities.
- 13) **"X" Street** – Storm drain as required from "Y" street to "T" street including laterals, junction structures, manholes, catch basins, local depressions and connections to existing downstream facilities.
- 14) **"Y" Street** – Storm drain as required from "X" street to "L-V" street including laterals, junction structures, manholes, catch basins, local depressions and connections to downstream facilities.
- 15) **"Bee Canyon Channel (Through OCGP)"** – Storm drain facility. Approximate limits are from Marine Way to "Y" street including laterals, junction structures, manholes, and connections to existing storm facilities and connections to downstream facilities.
- 16) **"Bee Canyon" Channel at Marine Way** – Regional storm drain facility (Double 7'x10' RCB) to facilitate storm drain connections, and construction of a regional facility from OCFCD connection south of the railway to Marine Way including laterals, junction structures, manholes, and connections to existing downstream facilities.
- 17) **"A" Street** – Storm drain as required from Irvine Blvd to "Q" street including laterals, junction structures, manholes, catch basins, local depressions and connections to downstream facilities.
- 18) **"Q" Street** – Storm drain as required including laterals, junction structures, manholes, catch basins, local depressions and connections to downstream facilities.
- 19) **"AC-1" Agua Chinon** – Regional storm drain facility (12'x12' RCB) as required from existing OCFCD Agua Chinon box to a proposed inlet structure, north of Marine Way. This will include required laterals, junction structures, manholes, and modification to existing downstream facilities and connections to the existing OCFCD system.
- 20) **"AC-2" Agua Chinon** – Regional drainage system as required from "AC-1" to the south edge of "Q" street consisting of open channel, soft bottom channel required to provide flood protection, grade control devices, flowline stabilization, access, maintenance, and required infrastructure for the establishment of jurisdictional habitat. Cross section as illustrated per "HF / OCGP Backbone Facility Cross Sections".
- 21) **"AC-2a" Agua Chinon** – Regional storm drain facility as required from "AC-2", under "Q" street to the existing culvert south of Irvine Blvd as required to provide flood protection, grade control devices, flowline stabilization, access, maintenance and connections to downstream facilities.
- 22) **"AC-2b" Agua Chinon** – Modifications to the existing culvert under Irvine Blvd. Includes modifications to the existing entrance and outlet walls.

- 23) **“AC-3” Agua Chinon** – Regional drainage system as required from Irvine Blvd to “K” street including modification to the Irvine Blvd undercrossing required to provide flood protection, grade control devices, flowline stabilization, access, maintenance, required infrastructure for the establishment of jurisdictional habitat. and connections to downstream facilities.
- 24) **“AC-4” Agua Chinon** – Regional storm drain facility (6’x8’ RCB) for the undercrossing of “K” street. Improvements include a culvert crossing to provide flood protection and connections to downstream facilities.
- 25) **“AC-5” Agua Chinon** – Regional storm drain facility (6’x8’ RCB) from “K” street to “P-M” street. Improvements include a RCB channel to provide flood protection, access, maintenance, and connections to downstream facilities.
- 26) **“AC-6” Agua Chinon** – Regional storm drain facility (6’x8’ RCB) from “P-M” street to north property line. Improvements include a RCB to provide flood protection, including an inlet structure north of the property line of Park District North.
- 27) **“C” Street (C-1)**– Storm drain as required within “C” street to connect to Agua Chinon including laterals junction structures, manholes, catch basins, local depressions and connections to downstream facilities.
- 28) **“D” Street (D-1)**– Storm drain as required within “D” street and outside of “D” Street to connect to Agua Chinon including laterals junction structures, manholes, catch basins, local depressions and connections to downstream facilities.
- 29) **“E” Street (E-1,E-2)**– Storm drain as required within “E” street and outside of “E” Street to connect to Agua Chinon including junction structures, manholes, catch basins, local depressions and connections to downstream facilities. Includes storm drain within “E” Street to Marine Way.
- 30) **“F” Street**– Storm drain as required from “F” street to Agua Chinon including junction structures, manholes, catch basins, local depressions and connections to downstream facilities.
- 31) **Borrego Channel** – Regional storm drain facility as required from the Wildlife Corridor, under Marine Way, to existing Borrego Channel includes replacement of existing Borrego Channel to meet OCFCD standards and to provide flood protection, right of way acquisition, flood control maintenance and access facilities and connections to downstream facilities.
- 32) **“TOD-1”** Regional drainage system from Marine Way, through portion of the General Industrial Zoning District Portion of PA 30 south of Marine Way. Improvements include a base level drainage infrastructure to provide flood protection, including required modifications to the existing downstream Caltrans drainage system.
- 33) **“SC-1” Serrano Creek** – Regional drainage system from existing I-5 culvert to Marine Way. Improvements include a open channel with flowline stabilization, grade control devices in order to provide flood protection, including any required modifications to the existing Caltrans culvert.

- 34) **"SC-2" Serrano Creek** – Regional drainage system undercrossing at Marine Way. Improvements include culvert crossing to provide flood protection, access and maintenance facilities.
- 35) **"SC-3" Serrano Creek** – Regional drainage system from Marine Way to Alton Parkway. Improvements include a soft bottom open channel with grade control devices to provide flood protection, including required modifications to outlet structure of the culvert at Alton Parkway, access and maintenance facilities.
- 36) **Upper San Diego Creek** – Regional drainage system as required from an existing culvert at I-5 to the easterly property line. Improvements include a RCB to provide flood protection and required modifications to the existing Caltrans entrance structure.
- 37) **Bee Canyon water quality system-** Water quality treatment systems as required to protect the backbone drainage facilities. This includes base level drainage infrastructure to provide treatment, access and maintenance facilities, and outlets to downstream facilities. Final locations are subject to final approval of a detailed Water Quality Management Plan.
- 38) **Agua Chinon water quality system-** Water quality treatment systems as required to protect the backbone drainage facilities. This includes base level drainage infrastructure to provide treatment, access and maintenance facilities, and outlets to downstream facilities. Final locations are subject to final approval of a detailed Water Quality Management Plan.
- 39) **Serrano Creek water quality system-** Water quality treatment systems as required to protect the backbone drainage facilities. This includes base level drainage infrastructure to provide treatment, access and maintenance facilities, and outlets to downstream facilities. Final locations are subject to final approval of a detailed Water Quality Management Plan.
- 40) **Great Park Blvd** – Storm drain as required within Great Park Blvd. to provide conveyance of roadway runoff including laterals junction structures, manholes, catch basins, local depressions and connections to downstream facilities.
- 41) **Backbone water quality treatment systems-** Water quality treatment systems as required to protect the backbone drainage facilities. This includes base level drainage infrastructure to provide treatment, access and maintenance facilities, and outlets to downstream facilities. Final locations are subject to final approval of a detailed Water Quality Management Plan.

C) ON-PROPERTY SEWER FACILITIES:

- 1) **Irvine Blvd-** Sewer mainline as required from "C" street to just west of "C" street includes laterals, monitoring manholes, manholes, adjusting rims to grade, connection to downstream facilities and replacement of existing pavement and striping.
- 2) **Marine Way-**Sewer mainline as required between "O" street and Bake Parkway. Includes laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities.
- 3) **Alton Parkway-** Relocation of the existing 18" sewer mainline within Serrano Creek to Alton Parkway from the southwest corner of the TOD to the intersection of Alton Parkway and Barranca Parkway. Includes laterals, monitoring manholes, manholes, adjusting rims to grade, connection to downstream facilities and replacement of existing pavement and striping.
- 4) **Barranca Parkway-**Sewer mainline as required from east of Ada to Alton Parkway includes laterals, monitoring manholes, manholes, adjusting rims to grade, connection to downstream facilities and replacement of existing pavement and striping. Includes offsite street connection to existing sewer in Mauchly.
- 5) **Rockfield Blvd-** Sewer mainline as required from existing Rockfield Blvd to Marine Way. Includes laterals, monitoring manholes, manholes, adjusting rims to grade, connection to downstream facilities and replacement of existing pavement and striping.
- 6) **"TOD-1" Sewer north of railroad tracks -** Sewer mainline as required from Sewer Reach "B", adjacent to and parallel with the north side of the railroad tracks, to "F" street. Includes all-weather access, laterals, monitoring manholes, manholes, and connection to downstream facilities.
- 7) **"TOD-2" Sewer mainline** as required from "TOD-1" to Marine Way. Includes laterals, monitoring manholes, manholes, and connection to downstream facilities.
- 8) **"O" Street-** Sewer mainline as required. Includes all-weather access, laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities.
- 9) **Trabuco Road-** Sewer mainline as required between "O" street and "Y" street. Includes laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities.
- 10) **"L-V" Street-** Sewer mainline as required. Includes laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities.

- 11) **Sewer Reach "B" (through OCGP)** - Sewer mainline as required from existing point of connection just south of the railway to "L-V" street. Includes all-weather access, laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities.
- 12) **Sewer Reach "A" (south of Marine Way)** - Sewer mainline as required from just south of the railway to Marine Way. Includes all-weather access, laterals, monitoring manholes, manholes, adjusting rims to grade, sleeving and connection to downstream facilities.
- 13) **"A" Street**– Sewer mainline as required. Includes laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities.
- 14) **"L-Y" Street**– Sewer mainline as required from "O" st to Irv Blvd, Includes laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities.
- 15) **"Y" Street**– Sewer mainline as required. Includes laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities.
- 16) **"X" Street**– Sewer mainline as required. Includes laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities
- 17) **"Q" Street** – Sewer mainline as required. Includes laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities.
- 18) **"T" Street** – Sewer mainline as required. Includes laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities.
- 19) **"C" Street** – Sewer mainline as required. Includes laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities.
- 20) **"D" Street** – Sewer mainline as required. Includes laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities.
- 21) **"E" Street** – Sewer mainline as required. Includes laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities.
- 22) **"P-E" Street** -Sewer mainline as required. Includes laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities.
- 23) **"H" Street**– Sewer mainline as required. Includes laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities.

- 24) **“L-Q” Street**– Sewer mainline as required. Includes laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities.
- 25) **“L-M” Street**–Sewer mainline as required. Includes laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities.

D) ON-PROPERTY DOMESTIC AND RECYCLED WATER FACILITIES:

- 1) **Marine Way**- Domestic and recycled water mains as required from “O” street to Bake Parkway includes tees and mainline stubs, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, connection to existing facilities, and replacement of existing pavement and striping. Includes recycled water main from a point of connection north of railroad to Marine Way.
- 2) **Barranca Parkway**- Domestic and recycled water facilities as required from east of Ada to east of Alton Parkway includes tees and mainline stubs, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, connection to existing facilities, replacement of existing pavement and striping.
- 3) **Rockfield Blvd**– Domestic and recycled water mains as required from existing Rockfield Blvd to Marine Way includes tees and mainline stubs, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, connection to existing facilities, and replacement of existing pavement and striping.
- 4) **“F” Street**– Domestic and recycled water mains as required includes tees and mainline stubs, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, and connection to existing facilities.
- 5) **“O” Street** – Domestic and recycled water mains as required includes tees and mainline stubs, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, and connection to existing facilities, pressure reducing and boosting.
- 6) **Trabuco Road**– Domestic and recycled water mains as required from “O” street to “Y” street includes tees and mainline stubs, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, and connection to existing facilities.
- 7) **“A” Street**– Domestic and recycled water mains as required includes tees and mainline stubs, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, and connection to existing facilities.

- 8) **“Y” Street**– Domestic and recycled water mains as required includes tees and mainline stubs, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, and connection to existing facilities.
- 9) **“X” Street**– Domestic and recycled water mains as required includes tees and mainline stubs, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, and connection to existing facilities.
- 10) **“L-V” Street**– Domestic and recycled water mains as required includes tees and mainline stubs, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, and connection to existing facilities.
- 11) **“T” Street**– Domestic and recycled water mains as required includes tees and mainline stubs, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, and connection to existing facilities.
- 12) **“P-R” Street**– Domestic water main as required includes tees and mainline stubs, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, and connection to existing facilities.
- 13) **“Q” Street**– Domestic and recycled water mains as required includes laterals, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, and connection to existing facilities.
- 14) **“C” Street**– Domestic and recycled water mains as required includes laterals, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, and connection to existing facilities.
- 15) **“D” Street**– Domestic and recycled water mains as required includes laterals, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, connection to existing facilities, and pressure reducing.
- 16) **“E” Street**– Domestic water main as required includes laterals, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, and connection to existing facilities.
- 17) **“P-E” Street**– Domestic and recycled water mains as required includes laterals, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, and connection to existing facilities.
- 18) **“H” Street**– Domestic and recycled water mains as required includes laterals, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, connection to existing facilities, and replacement of existing pavement and striping.
- 19) **“L-Q” Street**– Domestic and recycled water mains as required includes laterals, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, and connection to existing facilities.

- 20) **"L-O" Street**– Domestic water mains as required from the TCA property to "O" street includes laterals, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, and connection to existing facilities.
- 21) **Agua Chinon Fire service line**- Fire service main and appurtenances as required from "E" street to "Q" street per OCFA requirements.
- 22) **Great Park Blvd** - Domestic and recycled water mains as required includes laterals, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, and connection to existing facilities.

E) ON-PROPERTY LANDSCAPE, AMENITIES, IRRIGATION SYSTEM, AND PLANTINGS IN THE FOLLOWING RIGHT-OF-WAY

- 1) **Marine Way** from "O" street to Bake Parkway.
- 2) **Barranca Parkway** from east of Ada to east of Alton Parkway.
- 3) **Alton Parkway** from south of Marine Way to Barranca Parkway.
- 4) **Rockfield Blvd.** from existing Rockfield to Marine Way.
- 5) **"F" Street**
- 6) **"O" Street (Trabuco to Irvine Blvd)**
- 7) **"O" Street (Trabuco to Marine Way)**
- 8) **Trabuco Road** from "O" street to OCGP.
- 9) **"L-V" Street**
- 10) **"A" Street**
- 11) **"Y" Street**
- 12) **"Q" Street**
- 13) **"T" Street**
- 14) **"X" Street**
- 15) **"P-E" Street**
- 16) **"C" "D" and "E" Street**
- 17) **"Off street Trail"** (in the TOD between Barranca and Alton Parkway)
- 18) **"Off street riding/hiking Trail"** in Park District, north of Irvine Blvd.
- 19) **"Off street riding/hiking Trail"** within the LLD, south of the LLD.
- 20) **"H" Street**
- 21) **"L-Q" Street**
- 22) **Great Park Blvd (median only).**

F) ON-PROPERTY DRY UTILITIES

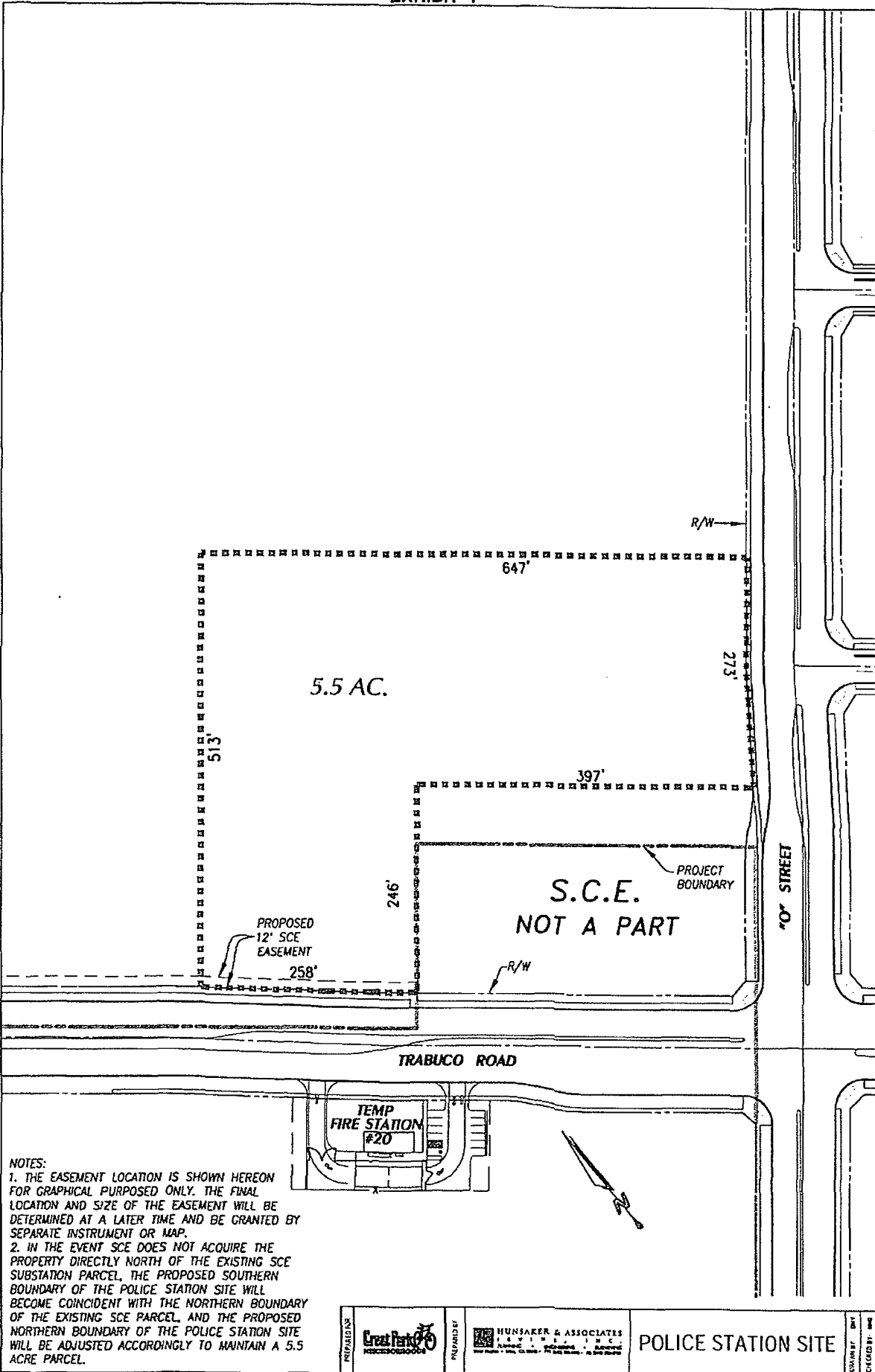
Facilities include CATV, telephone, electric, gas and may include relocation of regional or transmission lines including trenching, shading, conduit risers, pullboxes, vaults, hand holes, etc., in the following streets:

- 1) Marine Way from "O" street to Bake Parkway.
- 2) Rockfield Blvd. from existing Rockfield to Marine Way.
- 3) "F" Street
- 4) "O" Street (Trabuco to Irvine Blvd)
- 5) "O" Street (Trabuco to Marine Way)
- 6) Trabuco Road from "O" street to OCGP.
- 7) "L-V" Street
- 8) "A" Street
- 9) "Y" Street
- 10) "Q" Street
- 11) "T" Street
- 12) "X" Street
- 13) "P-E" Street
- 14) "C", "D", and "E" Street
- 15) "H" Street
- 16) "L-Q" Street
- 17) Barranca Parkway portion of east of Ada to east of Alton Parkway.
- 18) Great Park Blvd

G) Wildlife Corridor- Mass excavation for the Wildlife Corridor from Irvine Blvd to Borrego Channel. Improvements include required demolition and Fire service main and appurtenances as required from "P-E" street to Irvine Blvd per OCFA requirements. . (See WLC section as illustrated per the "HF / OCGP Backbone Facility Cross Sections").

H) Runway Demolition – Shall include all services necessary to support and manage runway demolition and recycling services as defined in the Amended and Restated Master Implementation Agreement.

EXHIBIT 'F'



NOTES:

1. THE EASEMENT LOCATION IS SHOWN HEREON FOR GRAPHICAL PURPOSES ONLY. THE FINAL LOCATION AND SIZE OF THE EASEMENT WILL BE DETERMINED AT A LATER TIME AND BE GRANTED BY SEPARATE INSTRUMENT OR MAP.
2. IN THE EVENT SCE DOES NOT ACQUIRE THE PROPERTY DIRECTLY NORTH OF THE EXISTING SCE SUBSTATION PARCEL, THE PROPOSED SOUTHERN BOUNDARY OF THE POLICE STATION SITE WILL BECOME COINCIDENT WITH THE NORTHERN BOUNDARY OF THE EXISTING SCE PARCEL, AND THE PROPOSED NORTHERN BOUNDARY OF THE POLICE STATION SITE WILL BE ADJUSTED ACCORDINGLY TO MAINTAIN A 5.5 ACRE PARCEL.

| | | | |
|--|--|-----------------------------------|---|
| | | <p>POLICE STATION SITE</p> | <p>DATE: JUN 28, 2009 09:21:33 PM FILE: C:\GDP\Heritage Files\ROP - Review\5-AC_Police_Exit_Maps\5-AC</p> |
|--|--|-----------------------------------|---|

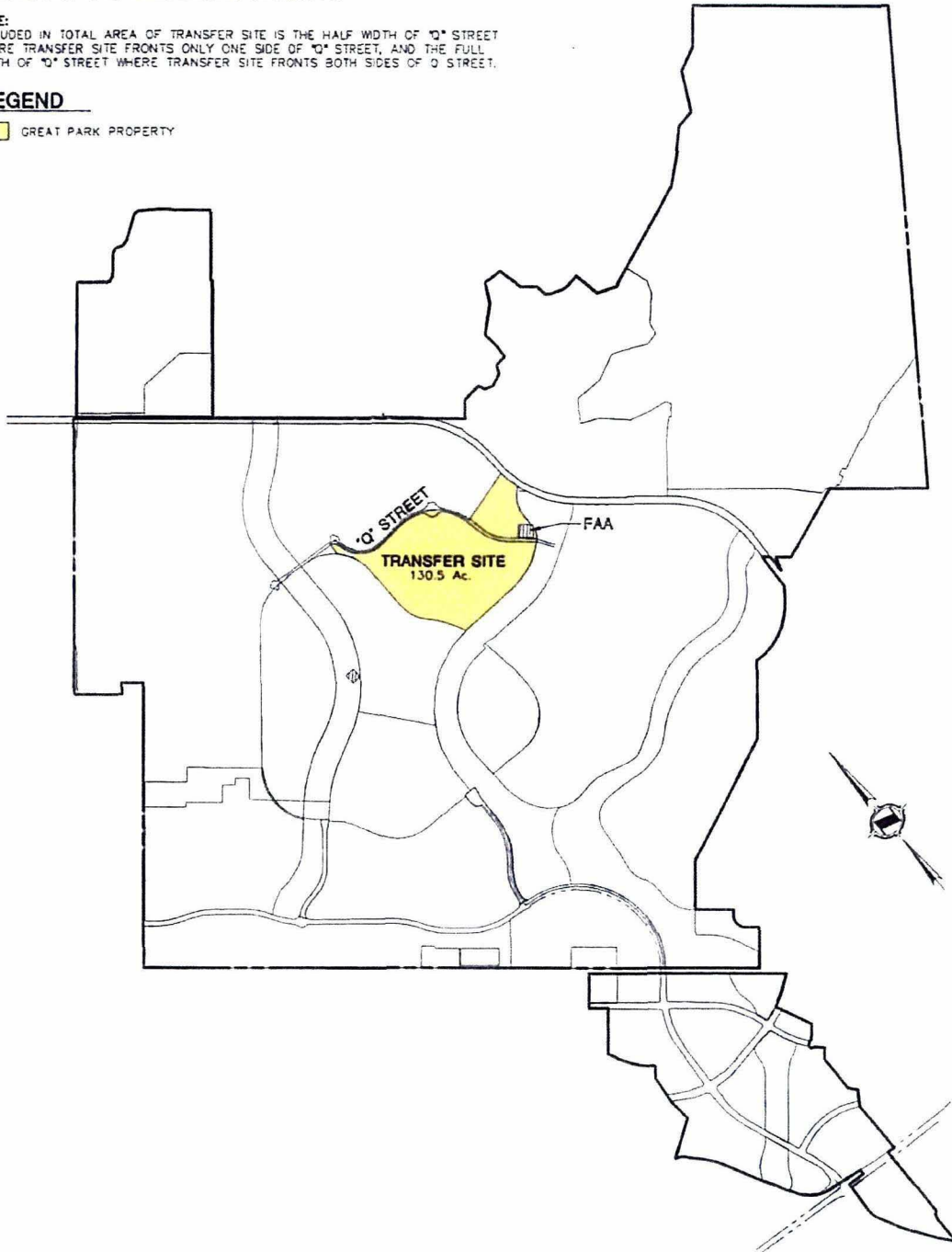
EXHIBIT 'G'

ACREAGE SUMMARY
 TOTAL ACREAGE TO BE TRANSFERRED TO CITY: 130.5 Ac.

NOTE:
 INCLUDED IN TOTAL AREA OF TRANSFER SITE IS THE HALF WIDTH OF 'O' STREET WHERE TRANSFER SITE FRONTS ONLY ONE SIDE OF 'O' STREET, AND THE FULL WIDTH OF 'O' STREET WHERE TRANSFER SITE FRONTS BOTH SIDES OF 'O' STREET.

LEGEND

 GREAT PARK PROPERTY




| | | |
|---|--|-----------------|
|  HUNSAKER & ASSOCIATES IRVINE, I N C . PLANNING • ENGINEERING • SURVEYING <small>Three Hughes • Irvine, CA 92618 • Tel: (949) 585-1910 • Fax: (949) 583-6759</small> | ARDA TRANSFER SITE <small>IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA</small> | |
| | DATE: 3/06/08 REV: 8/04/09 DRG BY: K. LYNCH | SCALE: 1"=2000' |
| C:\KORY\Heritage Fields\EXH-G.dwg | | |

EXHIBIT "H"

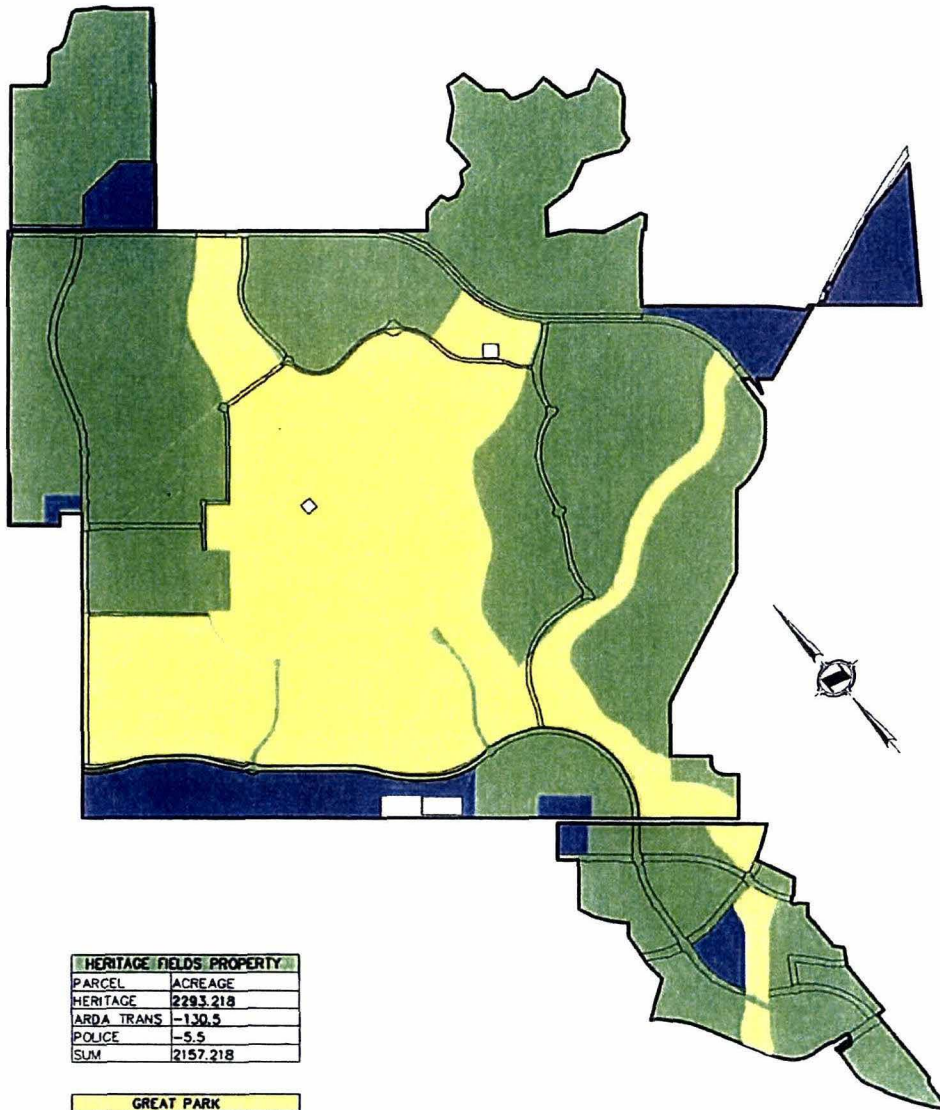
ACREAGE SUMMARY

TOTAL HERITAGE FIELDS ACREAGE: 2,157,218 Ac.
 TOTAL GREAT PARK ACREAGE: 1,247,699 Ac.
 TOTAL NON-PARK ACREAGE: 299,977 Ac.
 TOTAL ACREAGE: 3,704,894 Ac.

EXHIBIT EXPLANATION:
 THIS EXHIBIT SHOWS FINAL ACREAGES AFTER PROPOSED ARDA AND
 POLICE STATION TRANSFERS.

LEGEND

- HERITAGE FIELD PROPERTY
- GREAT PARK PROPERTY
- NON-PARK PROPERTY



| HERITAGE FIELDS PROPERTY | |
|--------------------------|----------|
| PARCEL | ACREAGE |
| HERITAGE | 2293,218 |
| ARDA TRANS | -130.5 |
| POLICE | -5.5 |
| SUM | 2157,218 |

| GREAT PARK | |
|------------|----------|
| PARCEL | ACREAGE |
| EXHIBIT B | 1117,199 |
| ARDA TRANS | 130.5 |
| SUM | 1247,699 |

| NON-PARK | |
|-----------|---------|
| PARCEL | ACREAGE |
| EXHIBIT D | 294,477 |
| POLICE | 5.5 |
| SUM | 299,977 |

| | | |
|--|---|---------------|
| HUNSAKER & ASSOCIATES IRVINE, INC. PLANNING • ENGINEERING • SURVEYING <small>Three Hughes • Irvine, CA 92618 • PH (949) 583-1030 • FX (949) 583-0729</small> | HERITAGE FIELDS PROPERTY | |
| | <small>IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA</small> | |
| DATE: 2/28/08 REV. DATE: 8/04/09 DWN BY: KML | SCALE: 1"=2000' | W.O. 1855-80X |
| C:\KORY\Heritage Fields\EXH-H.dwg | | |

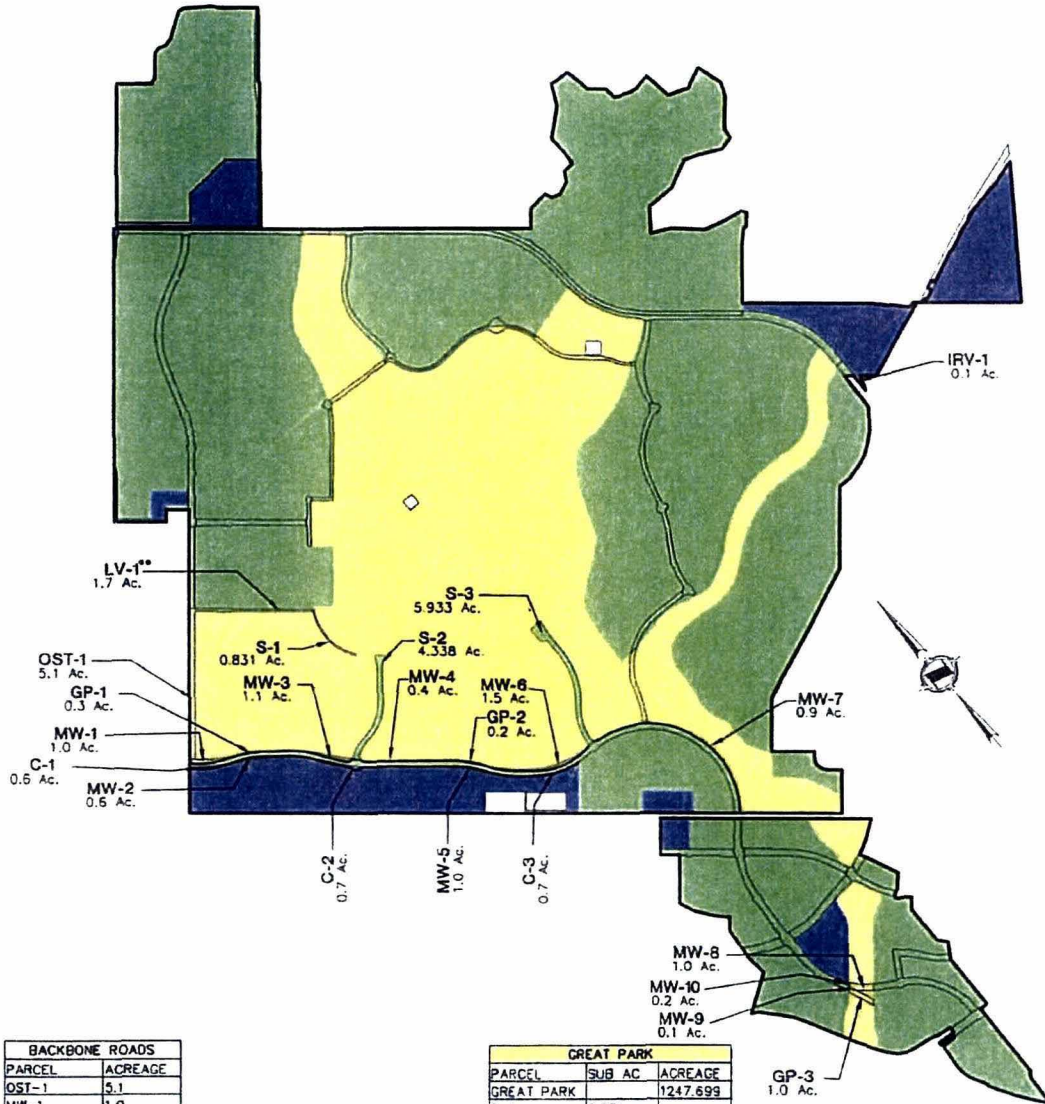
EXHIBIT H-1

ACREAGE SUMMARY
 TOTAL HERITAGE FIELDS ACREAGE: 2,142.516 Ac.
 TOTAL GREAT PARK ACREAGE: 1,247.601 Ac.
 TOTAL NON-PARK ACREAGE: 300.077 Ac.
 TOTAL ACREAGE IN BACKBONE ROADS: 13.0 Ac.
 TOTAL ACREAGE IN NON-BACKBONE ROADS: 1.7 Ac.
 TOTAL ACREAGE: 3,704.894 Ac.

EXHIBIT EXPLANATION:
 THIS EXHIBIT SHOWS FINAL ACREAGES AFTER REALIGNMENT OF MARINE WAY, O STREET AND LV STREET FROM ORIGINAL MASTER PLAN AND GRANT OF S1, S2 AND S3 AND REMNANTS OF OLD MARINE WAY TO THE GREAT PARK AND THE CITY.

LEGEND

- HERITAGE FIELD PROPERTY
- GREAT PARK PROPERTY
- NON-PARK PROPERTY



| BACKBONE ROADS | |
|----------------|---------|
| PARCEL | ACREAGE |
| OST-1 | 5.1 |
| MW-1 | 1.0 |
| MW-2 | 0.6 |
| MW-3 | 1.1 |
| MW-4 | 0.4 |
| MW-5 | 1.0 |
| MW-6 | 1.5 |
| MW-7 | 0.9 |
| MW-8 | 1.0 |
| MW-9 | 0.1 |
| MW-10 | 0.2 |
| IRV-1 | 0.1 |
| SUM | 13.0* |

| NON-BACKBONE ROADS | |
|--------------------|---------|
| PARCEL | ACREAGE |
| LV-1** | 1.7 |

| HERITAGE FIELDS PROPERTY | | |
|--------------------------|--------|----------|
| PARCEL | SUB AC | ACREAGE |
| HERITAGE | | 2157.218 |
| S-1 | -0.831 | |
| S-2 | -4.338 | |
| S-3 | -5.933 | |
| C-1 | -0.6 | |
| C-2 | -0.7 | |
| C-3 | -0.7 | |
| GP-1 | -0.3 | |
| GP-2 | -0.2 | |
| GP-3 | -1.0 | |
| MW-9 | -0.1 | |
| NET CHANGE | | -14.702 |
| SUM | | 2142.516 |

| GREAT PARK | | |
|------------|--------|----------|
| PARCEL | SUB AC | ACREAGE |
| GREAT PARK | | 1247.699 |
| S-1 | 0.831 | |
| S-2 | 4.338 | |
| S-3 | 5.933 | |
| LV-1 | -1.7 | |
| OST-1 | -5.1 | |
| MW-1 | -1.0 | |
| MW-3 | -1.1 | |
| MW-4 | -0.4 | |
| MW-6 | -1.5 | |
| MW-7 | -0.9 | |
| MW-8 | -1.0 | |
| GP-1 | 0.3 | |
| GP-2 | 0.2 | |
| GP-3 | 1.0 | |
| NET CHANGE | | -0.098 |
| SUM | | 1247.601 |

| NON-PARK | | |
|------------|--------|---------|
| PARCEL | SUB AC | ACREAGE |
| CITY | | 299.977 |
| C-1 | 0.6 | |
| C-2 | 0.7 | |
| C-3 | 0.7 | |
| MW-2 | -0.6 | |
| MW-5 | -1.0 | |
| MW-10 | -0.2 | |
| IRV-1 | -0.1 | |
| NET CHANGE | | 0.100 |
| SUM | | 300.077 |

* THIS 13 AC. IS A PORTION OF THE 198.2 AC. OF BACKBONE ROADS SHOWN ON EXHIBIT H-2.

** SHOWN HEREON FOR INFORMATION ONLY

HUNSAKER & ASSOCIATES
 IRVINE, INC.
 PLANNING • ENGINEERING • SURVEYING
 Three Highways • Irvine, CA 92618 • P.O. BOX 583-900 • TEL: (949) 583-0779

DATE: 1/23/09 REV: 8/04/09 DWN BY: K. LYNCH

HERITAGE FIELDS PROPERTY

IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA

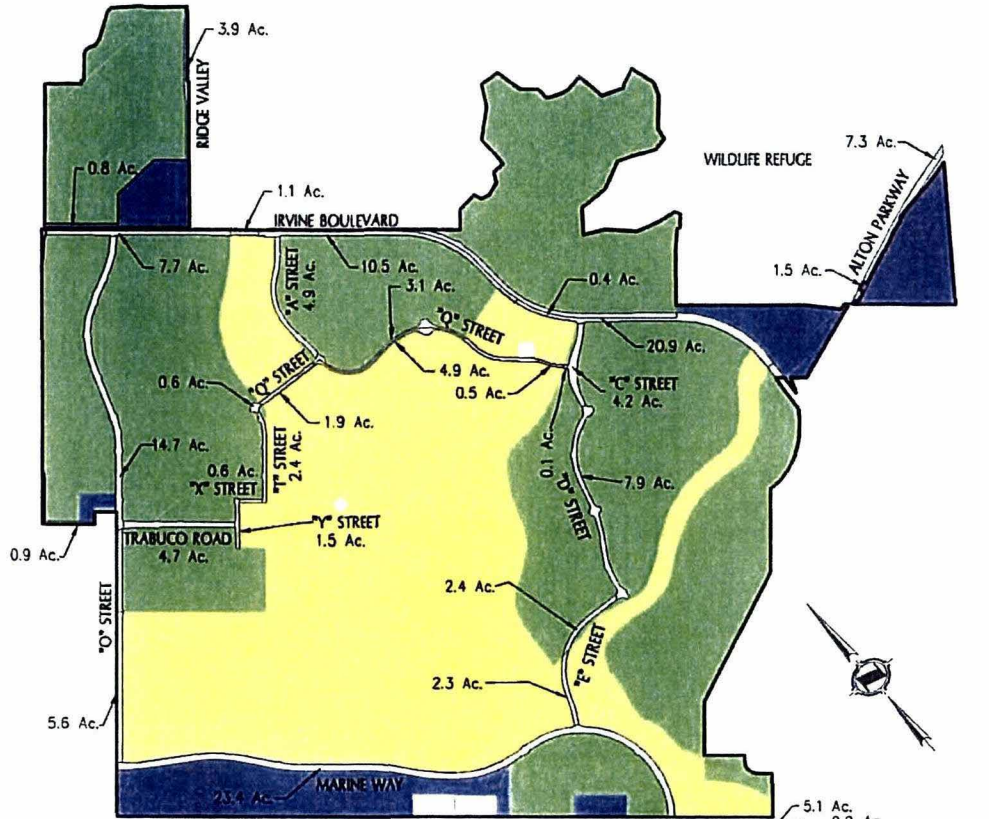
SCALE: 1"=2000' W.O. 1856-80X

C:\KORY\Heritage Fields\EXH-H-1.DWG

EXHIBIT H-2

ACREAGE SUMMARY
 TOTAL HERITAGE FIELDS ACREAGE: 1,979.416 Ac.
 TOTAL GREAT PARK ACREAGE: 1,238.001 Ac.
 TOTAL NON-PARK ACREAGE: 298.577 Ac.
 TOTAL ACREAGE IN BACKBONE ROADS: 196.2 Ac.
 TOTAL ACREAGE OF BACKBONE ROADS IN WILDLIFE REFUGE: -7.3 Ac.*
 TOTAL ACREAGE: 3,704.894 Ac. PER EXHIBIT "A"

EXHIBIT EXPLANATION:
 THIS EXHIBIT SHOWS FINAL ACREAGES LESS BACKBONE ROADS.
 * 7.3 ACRES OF ALTON LIES WITHIN THE WILDLIFE REFUGE AND IS NOT INCLUDED IN THE 3,704.894 ACRES.
 ** SEE EXHIBIT H-1 FOR LOCATION AND DETAILS

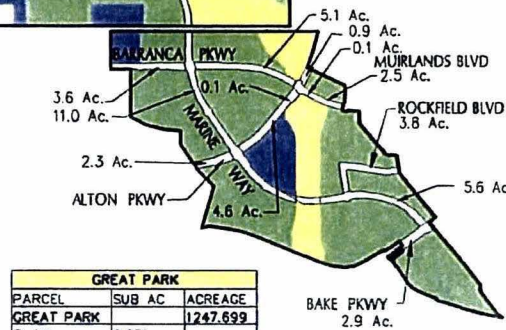


LEGEND

- HERITAGE FIELD PROPERTY
- GREAT PARK PROPERTY
- NON-PARK PROPERTY

| BACKBONE ROADS | | |
|----------------|--------|---------|
| PARCEL | SUB AC | ACREAGE |
| ALTON WLD | 7.3* | |
| ALTON | | 9.4 |
| IRVINE BLVD | 41.4 | |
| IRVINE (H-1) | 0.1** | |
| IRVINE TOTAL | 41.5 | |
| BAKE PKWY | 2.9 | |
| BARRANCA | 8.7 | |
| MUIRLANDS | 2.6 | |
| MARINE WAY | 40.0 | |
| MARINE (H-1) | 7.8** | |
| MARINE TOT | 47.8 | |
| RIDGE VALLEY | 3.9 | |
| TRABUCO | 5.6 | |
| ROCKFIELD | 3.8 | |
| O ST | 20.3 | |
| O ST (H-1) | 5.1** | |
| O ST TOTAL | 25.4 | |
| A ST | 4.9 | |
| C ST | 4.2 | |
| D ST | 7.9 | |
| E ST | 4.7 | |
| Q ST | 11.1 | |
| T ST | 2.4 | |
| X ST | 0.6 | |
| Y ST | 1.5 | |
| SUM | 196.2 | |

| HERITAGE FIELDS PROPERTY | | |
|--------------------------|----------|----------|
| PARCEL | SUB AC | ACREAGE |
| HERITAGE | | 2157.218 |
| S-1** | -0.831 | |
| S-2** | -4.338 | |
| S-3** | -5.933 | |
| C-1** | -0.6 | |
| C-2** | -0.7 | |
| C-3** | -0.7 | |
| GP-1** | -0.3 | |
| GP-2** | -0.2 | |
| GP-3** | -1.0 | |
| TRANSFERS | -14.602 | |
| MW-9** | -0.1 | |
| IRVINE BLVD | -39.9 | |
| ALTON | -7.8 | |
| BAKE PKWY | -2.9 | |
| BARRANCA | -8.7 | |
| MUIRLANDS | -2.5 | |
| MARINE WAY | -40.0 | |
| RIDGE VALLEY | -3.9 | |
| TRABUCO | -5.6 | |
| ROCKFIELD | -3.8 | |
| O ST | -20.3 | |
| A ST | -4.9 | |
| C ST | -4.2 | |
| D ST | -7.9 | |
| E ST | -2.4 | |
| Q ST | -3.8 | |
| T ST | -2.4 | |
| X ST | -0.6 | |
| Y ST | -1.5 | |
| ROADS | -163.2 | |
| NET CHANGE | -177.802 | |
| SUM | 1979.416 | |



| GREAT PARK | | |
|-------------|----------|----------|
| PARCEL | SUB AC | ACREAGE |
| GREAT PARK | | 1247.699 |
| S-1** | 0.831 | |
| S-2** | 4.338 | |
| S-3** | 5.933 | |
| C-1** | 0.3 | |
| GP-2** | 0.2 | |
| GP-3** | 1.0 | |
| TRANSFERS | 12.602 | |
| QST-1** | -5.1 | |
| MW-1** | -1.0 | |
| MW-3** | -0.4 | |
| MW-4** | -1.5 | |
| MW-7** | -0.9 | |
| MW-8** | -1.0 | |
| IRVINE BLVD | -1.5 | |
| ALTON | -0.1 | |
| MUIRLANDS | -0.1 | |
| E ST | -2.3 | |
| Q ST | -7.3 | |
| ROADS | -22.3 | |
| NET CHANGE | -9.698 | |
| SUM | 1238.001 | |

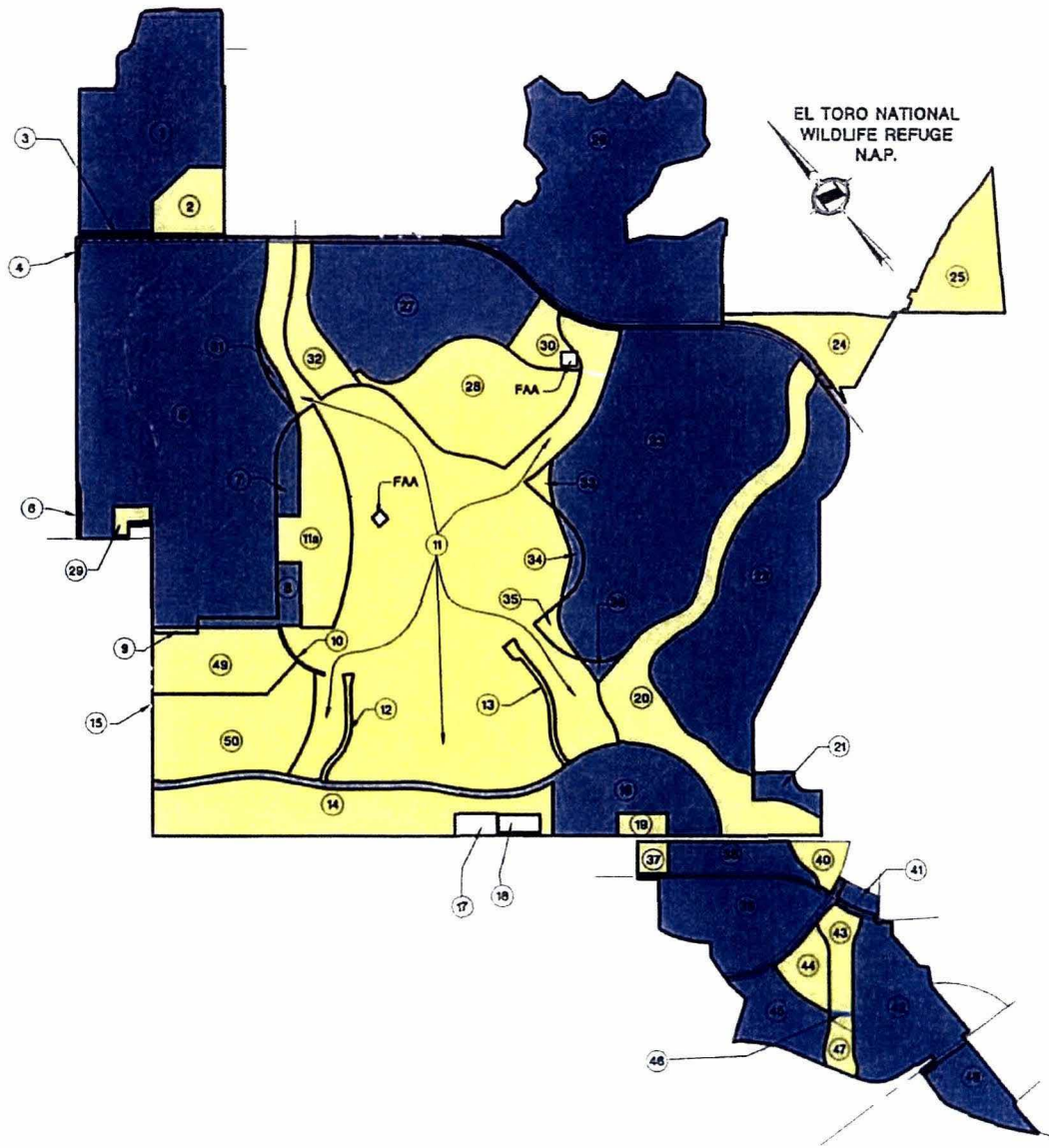
| NON-PARK | | |
|------------|---------|---------|
| PARCEL | SUB AC | ACREAGE |
| CITY | | 299.977 |
| C-1** | 0.6 | |
| C-2** | 0.7 | |
| C-3** | 0.7 | |
| TRANSFERS | 2.0 | |
| MW-2** | -0.6 | |
| MW-5** | -1.0 | |
| MW-10** | -0.2 | |
| IRV-1** | -0.1 | |
| ALTON | -1.5 | |
| ROADS | -3.4 | |
| NET CHANGE | -1.400 | |
| SUM | 298.577 | |


| | | | | |
|--|---------------------------------|--------------------|--|-----------------|
| <p>HUNSAKER & ASSOCIATES IRVINE, INC. PLANNING • ENGINEERING • SURVEYING Three Highways • Irvine, CA 92618 • P.O. Box 543-1010 • (714) 449-5433-0739</p> | HERITAGE FIELDS PROPERTY | | IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA | |
| | DATE: 1/23/09 | REV. DATE: 8/04/09 | DRG. BY: K. LYNCH | SCALE: 1"=2000' |
| C:\KORY\Heritage Fields\Exhibit H-2.dwg | | | | SHEET 1 OF 1 |

EXHIBIT 'I'

LEGEND

- ① INDICATES PROPERTY IDENTIFICATION NUMBERS
- INDICATES PROPERTY IDENTIFICATION PARCEL LINES
- INDICATES PROPOSED CITY PARCELS
- INDICATES PROPOSED HERITAGE FIELDS PROPERTY



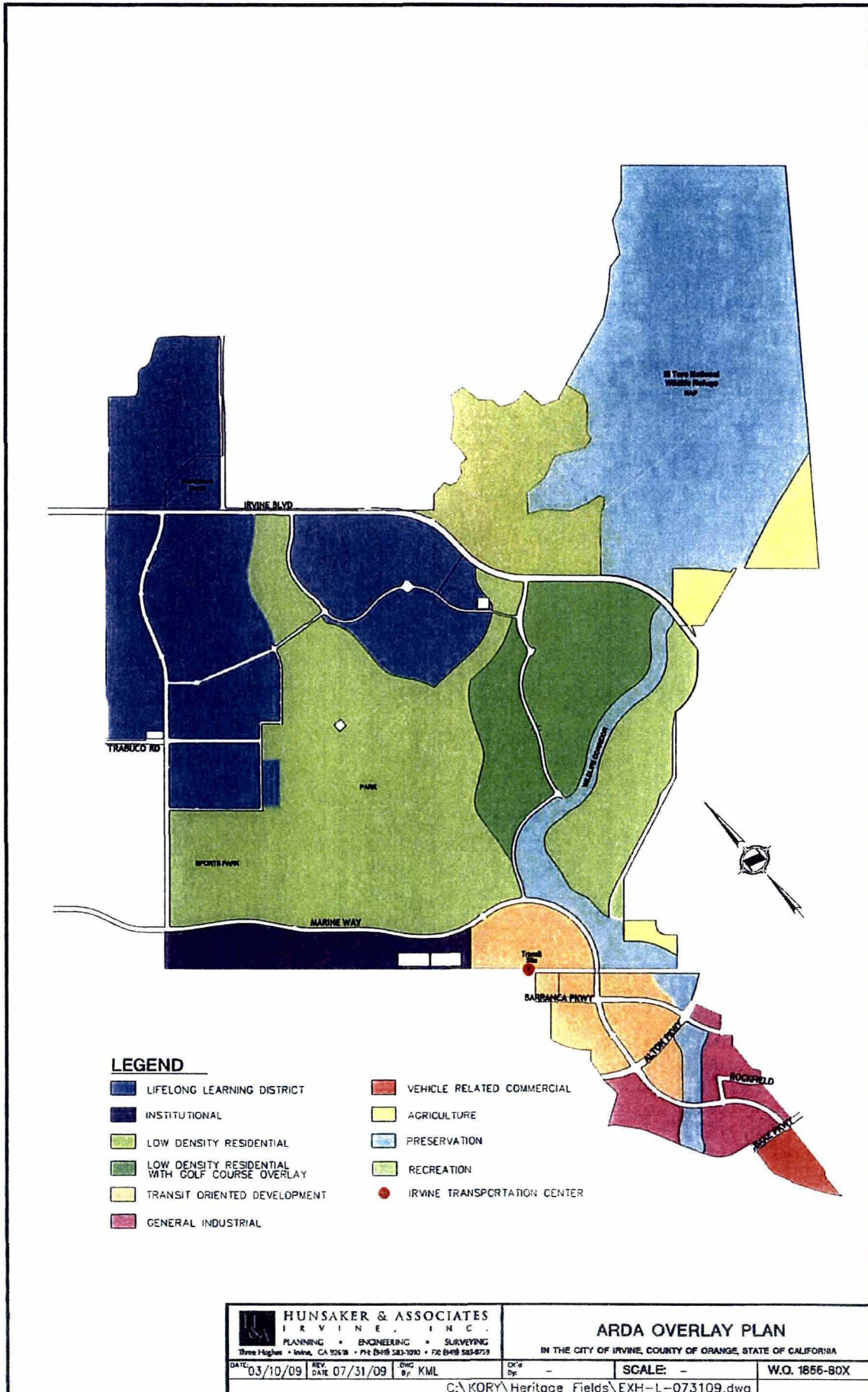
| | | | |
|---|---------------------|--|-------------------|
|  HUNSAKER & ASSOCIATES IRVINE, INC. PLANNING • ENGINEERING • SURVEYING Three Hughes • Irvine, CA 92618 • P: (949) 583-1010 • F: (949) 583-0759 | | PROPERTY IDENTIFICATION MAP IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA | |
| DATE: 03/18/08 | REV. DATE: 07/27/09 | DWG. BY: K. LYNCH | SCALE: 1" = 2000' |
| | | | W.O. 1855-80T |
| C:\KORY\Heritage Fields\ROP+ Revised\EXH-1.dwg | | | SHEET 1 OF 1 |

(RESERVED)

EXHIBIT J

(RESERVED)

EXHIBIT "L"



LEGEND

- LIFELONG LEARNING DISTRICT
- INSTITUTIONAL
- LOW DENSITY RESIDENTIAL
- LOW DENSITY RESIDENTIAL WITH GOLF COURSE OVERLAY
- TRANSIT ORIENTED DEVELOPMENT
- GENERAL INDUSTRIAL
- VEHICLE RELATED COMMERCIAL
- AGRICULTURE
- PRESERVATION
- RECREATION
- IRVINE TRANSPORTATION CENTER

HUNSAKER & ASSOCIATES
 IRVINE, INC.
 PLANNING • ENGINEERING • SURVEYING
 Three Highways • Irvine, CA 92618 • P: (949) 583-1070 • F: (949) 583-8759

ARDA OVERLAY PLAN
 IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA

| | | | |
|----------------|---------------------|---------------|---------|
| DATE: 03/10/09 | REV. DATE: 07/31/09 | DWG. BY: KML | DATE: - |
| SCALE: - | | W.O. 1856-80X | |

Exhibit 'L'

ARDA OVERLAY PLAN MAXIMUM INTENSITY STANDARDS FOR THE ORANGE COUNTY GREAT PARK (PLANNING AREAS 30 & 51)

| Land Use Type | ARDA Overlay Plan | | | Other Details |
|---|-------------------|----------------|------------------|--|
| | Acres | Dwelling Units | Square Feet | |
| Park District | | | | |
| Low Density Residential - North of Irvine | 269 | 470 | | |
| Low Density Residential - South of Irvine | 358 | 630 | | |
| Golf Course | 211 | | 25,000 | 18 Holes |
| Lifelong Learning District | | | | |
| Institutional (Education) | 108 | | 1,452,600 | Uses permitted by Sec. 3-37-39 8.1 |
| Agriculture | 168 | | | |
| Commercial Recreation | 268 | | 708,000 | Includes 130.5 Ac ARDA Transfer Site |
| Elementary School - Expo | 13 | | 40,000 | 650 Students |
| Retail | 29 | | 225,000 | |
| Medical & Science | 67 | | 1,000,000 | |
| Multi-Use Residential (Senior) | 261 | 800 | | |
| ETHIC | 10 | 165 | | |
| Multi-Use Residential | 7 | 60 | | |
| | | | 50,000 | Cemetery related building development A total of 73 acres of cemetery use is conditionally permitted in 8.1A of LLD |
| Institutional | | | | |
| Institutional | 100 | | 300,000 | County Facilities |
| Institutional | 25 | | 122,500 | |
| Transit Oriented Development District: | | | | |
| Transit Oriented Development | 173 | 1,500 | 150,000 | 75,000 Retail; 75,000 Office |
| Research & Development | 118 | | 1,600,000 | |
| Auto Sales, Parking, & Storage | 32 | | 102,000 | |
| Agriculture | 12 | | | |
| Other City Uses: | | | | |
| Marshburn Basin & Channel | 34 | | | |
| Music/Alton | 100 | | | |
| TOD Station Related Public Uses | 16 | | | 375 Parking Spaces |
| Remote Airport Terminal | 10 | | 9,000 | 675 Parking Spaces |
| Remote Airport Terminal Maintenance | 9 | | 44,500 | |
| Police Sub-Station | 5.5 | | | |
| Open Space & Recreational Uses | | | | |
| Open Space / Park | 348 | | | Per OCGP Master Plan - 9/27/07 |
| Cultural / Institutional | 175 | | 468,000 | |
| Sports Park | 154 | | 26,000 | |
| Drainage Corridor | 262 | | | |
| Wildlife Corridor | 174 | | | |
| Other Agency Uses: | | | | |
| Habitat Preserve | 962 | | | |
| Cal Trans Right of Way | 2.8 | | | |
| FAA 2 | 0.9 | | | |
| FAA 4 | 1.6 | | | |
| Home 1 | 6.5 | | 131,500 | McKinney Act Warehousing |
| Home 2 | 5.2 | | 131,500 | McKinney Act Warehousing |
| Roadways | | | | |
| Roadways | 196 | | | |
| TOTAL | 4,692 | 3,625 | 6,585,600 | |

Form of LIFOC Conveyance

EXHIBIT "M"

ASSIGNMENT OF LEASE

RECORDED AT THE REQUESTED OF AND
WHEN RECORDED RETURN TO

CITY OF IRVINE
City Hall
One Civic Center Plaza
P.O. Box 19575
Irvine, CA 92623-9525
Attn.: City Manager

(Space Above Line for Recorder's Use)

THIS ASSIGNMENT OF LEASE (this "Assignment") is made as of _____, 2005, by Heritage Fields El Toro, LLC, a Delaware limited liability company ("Assignor"), to and in favor of the CITY OF IRVINE, a charter municipal corporation ("Assignee").

WITNESSETH:

A. Assignor is the current owner of fee title to a portion of the former USMCAS El Toro ("**Former Base Project**"). Assignor also is the holder of a leasehold estate to the land more particularly described on Exhibit A attached hereto (the "**Transfer Parcel**"), which is located on the Former Base Project and has been leased under a "Lease in Furtherance of Conveyance" ("**LIFOC**") that was granted by the United States Department of Navy ("**Navy**").

B. Assignor and Assignee are parties to that certain Amended and Restated Development Agreement dated _____, 2009 and recorded in the official records of Orange County, California on _____, 2009 as Instrument No. _____ (the "**Development Agreement**"). The Development Agreement requires that Assignor convey fee title to the Transfer Parcel if and when Assignor acquires fee title from the Navy. The Development Agreement also requires that, pending Assignor's receipt of fee title from the Navy, Assignor assign its leasehold interest in and to the Transfer Parcel to Assignee, provided that the Navy consents to the assignment of the leasehold estate and that the LIFOC being assigned to the City is separate and distinct from other LIFOCs affecting other real property currently leased by the Navy to Assignor..

ARTICLE 1
DEFINITIONS

Section 1.1 Defined Terms and Rules of Construction. All capitalized terms used herein shall have the meaning of the same defined terms set forth in the Development Agreement. Article and Section captions used in this Assignment are for convenience only and shall not affect the construction of this Assignment. The words "Assignor", "Assignee", and "lessee", wherever used herein, shall include the persons named herein and designated as such and their respective successors and assigns, and all words and phrases shall be taken to include the singular or plural and masculine, feminine or neuter gender, as may fit the case.

No rules of construction against the drafter of this Assignment shall apply in any interpretation or enforcement of this Assignment, any documents or certificates executed pursuant hereto, or any provisions of any of the foregoing.

ARTICLE 2
TERMS AND CONDITIONS

Section 2.1 Assignment of Leases. Assignor hereby absolutely, unconditionally and irrevocably assigns, transfers, and conveys to Assignee all of Assignor's right, title and interest in and to the leasehold estate in the Transfer Parcel, which leasehold estate was created pursuant to the LIFO described on Exhibit "B" attached hereto (the "Lease"), except to the extent it may be limited by the terms contained in the LIFO entered into between the United States of America and Assignor (or its predecessor in interest) with respect to the Transfer Parcel.

Section 2.2 Enforcement of Assignment. Assignor does hereby empower Assignee, its agents or attorneys whether or not there has been any event of default or breach under the Development Agreement, to collect, sue for, settle, compromise and give acquaintances for all of the rents that may become due under any and all subleases under the Lease, and avail itself of and pursue all remedies for the enforcement of the Lease and any and all subleases, and Assignor's rights in and under the Lease and all any subleases as Assignor might have pursued but for this Assignment.

Section 2.3 Lease Warranties. Assignor warrants that:

(a) The Lease is in full force and effect, and that a copy thereof heretofore delivered to Assignee is a true and correct copy; and

(b) Assignor has not heretofore assigned or pledged the same or any interest therein (except for such assignment or pledge that is released concurrent with the delivery of this Assignment to Assignee), and, to the actual knowledge of Assignor, no default exists on the part of the lessee under the Lease (the "Lessee"), or Assignor, as lessor, in the performance on the part of either Assignor or Lessee, of the terms, covenants, provisions or agreements in the Lease;

Section 2.4 Transfer of Conveyance Deed Rights Upon Expiration of LIFOCs. Assignor absolutely, unconditionally and irrevocably covenants that following the date on which the Navy or an affiliate agency of the United States Government, executes and delivers to Assignor a Quitclaim deed conveying the Transfer Parcel, the Assignor shall execute and deliver

to Assignee a Grant Deed for that property in substantially the same form as the Quitclaim deed delivered by the Navy. Assignee understands that the deed may include restrictions, covenants, land use controls or other encumbrances required by the Navy with respect to environmental remediation of the property.

Section 2.5 Termination Upon Conveyance. This assignment shall terminate upon conveyance by deed of any conveyed portion of the Transfer Parcel. All references in the LIFO to the Leased Premises shall be deemed to exclude such conveyed portions and this Assignment shall continue in full force and effect with respect to the remainder of the Leased Premises.

ARTICLE 3 MISCELLANEOUS

Section 3.1 Extension and Renewals of Leases. This Assignment shall include any extensions and renewals of the Lease and any subleases or assignments of the Lease, and any reference herein to the Lease shall be construed as including any such extensions, renewals, subleases and assignments.

Section 3.2 No Third Parties Benefited. This Assignment is made for the purpose of defining and setting forth certain obligations, rights and duties of Assignor and Assignee, and is made for the protection of Assignee. There are no third party beneficiaries under this Assignment.

Section 3.3 Notices. All notices, demands, or other communications under this Assignment shall be in writing and shall be deemed to have been given and/or received: (i) upon delivery if personally delivered; (ii) three days after deposited in the United States Mail, postage pre-paid, by certified or registered mail; or (iii) on the next business day after deposit with a nationally recognized overnight delivery service marked for delivery the next business day, addressed to the party for whom it is intended at its address hereinafter set forth:

If to Assignee:

City of Irvine City Hall
One Civic Center Plaza
Irvine, CA 92623-9525
Attn.: City Manager

With a copy to:

Rutan & Tucker LLP
611 Anton Boulevard
14th Floor
Costa Mesa, CA 92626
Attn.: Jeff Melching, Esq.

If to Assignor:

Heritage Fields El Toro, LLC
7130 Trabuco Road
Irvine, California 92618
Attention: Division President
Allen Matkins Leck Gamble Mallory &
Natsis LLP
1900 Main Street, 5th Floor
Irvine, California 92614-7321
Attn.: Michael Alvarado, Esq.

Any party may designate a change of address by written notice to the others, given at least ten (10) days before such change of address is to become effective.

Section 3.4 Attorney's Fees and Expenses; Enforcement. In any judicial proceeding, arbitration, or mediation between Assignor and Assignee seeking enforcement of any of the terms and provisions of this Assignment (collectively, an "Action"), the prevailing Party in such Action shall recover all of its actual and reasonable costs and expenses (whether or not the same would be recoverable pursuant to Code of Civil Procedure Section 1033.5 or Civil Code Section 1717 in the absence of this Assignment), including expert witness fees, attorney's fees, and costs of investigation and preparation prior to the commencement of the Action. However, such recovery shall not exceed the dollar amount of the actual costs and expenses of the party from whom such recovery is sought for such same Action ("Non-Prevailing Party's Expenses"), and such prevailing party shall not recover any costs and expenses in excess of the Non-Prevailing Party's Expenses. The right to recover such costs and expenses shall accrue upon commencement of the Action, regardless of whether the Action is prosecuted to a final judgment or decision.

Section 3.5 Successors and Assigns. This Assignment shall be binding upon and inure to the benefit of Assignor, Assignee, and their respective successors and permitted assigns.

Section 3.6 Time. TIME IS OF THE ESSENCE of each and every term of this Assignment.

Section 3.7 Governing Law. This Assignment shall be governed by, and construed and enforced in accordance with the laws of the State of California. Assignor and all persons obligated to Assignee under this Assignment consent to the jurisdiction of the Superior Court of the State of California for the County of Orange, or the United States District Court for the Central District of California, Santa Ana Division, and waive any right to change of venue or removal of the case to another jurisdiction.

Section 3.8 Entire Agreement. This Assignment and the Development Agreement embody the final, entire agreement among the Parties hereto and supersede any and all prior commitments, agreements, representations and understandings, whether written or oral, relating to the subject matter hereof and may not be contradicted or varied by evidence of prior, contemporaneous, or subsequent oral agreements or discussions of the Parties hereto. There are no unwritten oral agreements among the Parties hereto. The Assignment shall not be modified except by written instrument executed by all Parties.

Section 3.9 Counterparts. This Assignment, and any subsequent modifications, amendments, waivers, consents or supplements thereof, if any, may be executed in any number of counterparts, each of which when executed and delivered shall be deemed to be an original and all such counterparts together, shall constitute one and the same instrument.

[Signature Page Follows]

IN WITNESS WHEREOF, Assignor has executed this Assignment as of the date written above.

HERITAGE FIELDS EL TORO, LLC,
a Delaware limited liability company

By: Heritage Fields LLC,
a Delaware limited liability company
Its: Sole Member

By: Lennar-LNR Heritage Fields, LLC,
a Delaware limited liability company
Its: Administrative Member

By: Lennar Homes of California, Inc.,
a California corporation
Its: Managing Member

By: _____
Name: _____
Title: _____

EXHIBIT "A"

METES AND BOUNDS DESCRIPTION OF TRANSFER PARCEL

[Separate metes and bounds description to be attached based upon applicable Transfer Parcel]

EXHIBIT "B"

DESCRIPTION OF LIFOC DOCUMENT

[Separate LIFOC document to be described here based upon applicable Transfer Parcel]

EXHIBIT "C"

NAVY CONSENT TO ASSIGNMENT

[To be attached based upon terms of consent granted by Navy]

CERTIFICATE OF ACCEPTANCE

This to certify that the interest in real property conveyed by the foregoing Assignment of Lease, from Heritage Fields El Toro, LLC, a Delaware limited liability company, to the City of Irvine ("City") is hereby accepted by the undersigned officer of the City, on behalf of the City, pursuant to authority conferred by Resolution No. _____ adopted by the City on _____, 20____, and City consents to the recordation thereof by its undersigned duly authorized.

CITY OF IRVINE

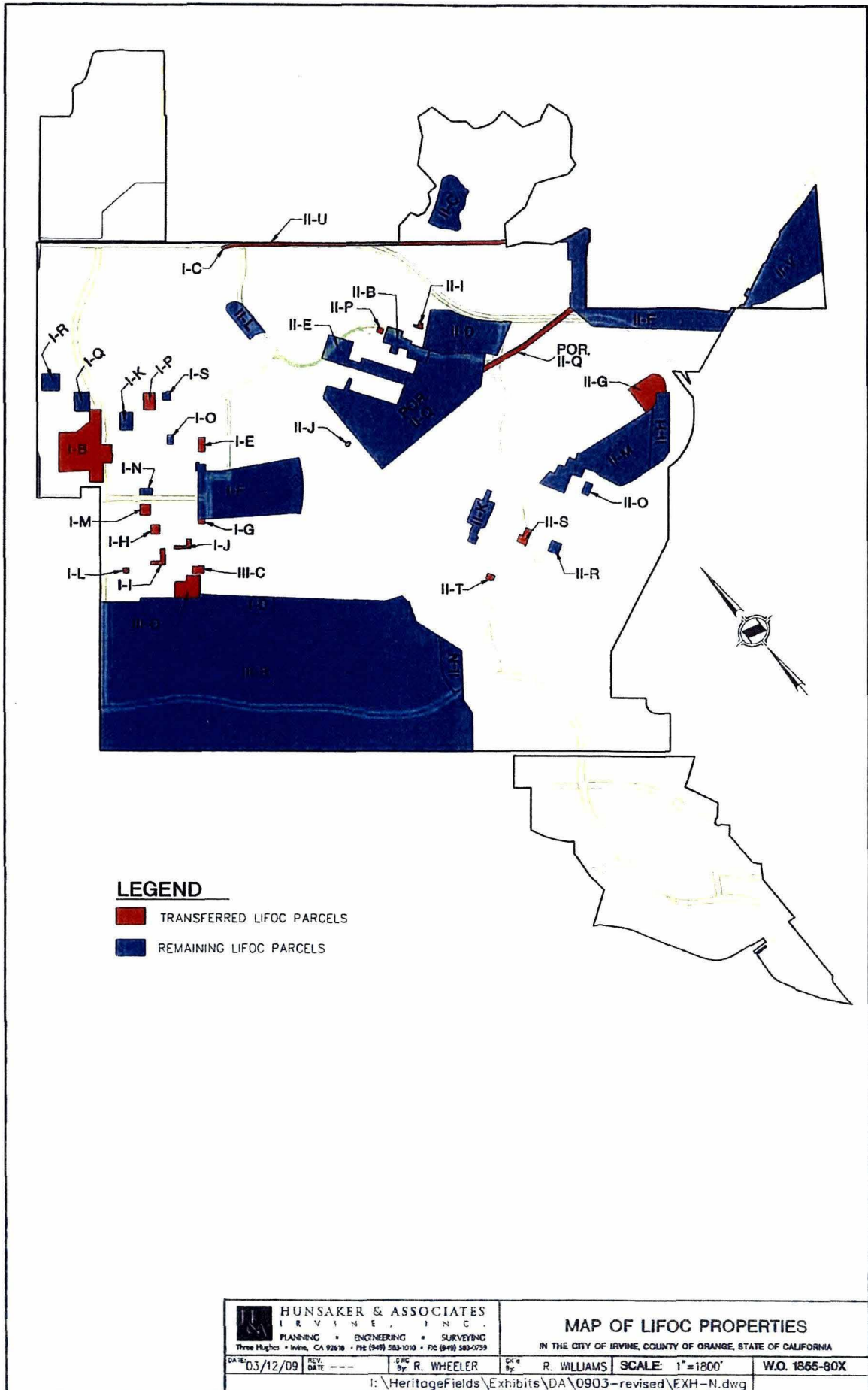
By: _____

Its: _____

ATTEST:

City Clerk

EXHIBIT 'N'



LEGEND

- TRANSFERRED LIFOC PARCELS
- REMAINING LIFOC PARCELS


| | | | |
|---|----------------|--|----------------------|
|  HUNSAKER & ASSOCIATES IRVINE, INC. PLANNING • ENGINEERING • SURVEYING Three Hughes • Irvine, CA 92618 • P# (949) 583-1010 • F# (949) 583-0739 | | MAP OF LIFOC PROPERTIES IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA | |
| DATE: 03/12/09 | REV. DATE: --- | DWG. By: R. WHEELER | CHK. By: R. WILLIAMS |
| | | SCALE: 1"=1800' | W.O. 1855-80X |
| I:\HeritageFields\Exhibits\DA\0903-revised\EXH-N.dwg | | | |

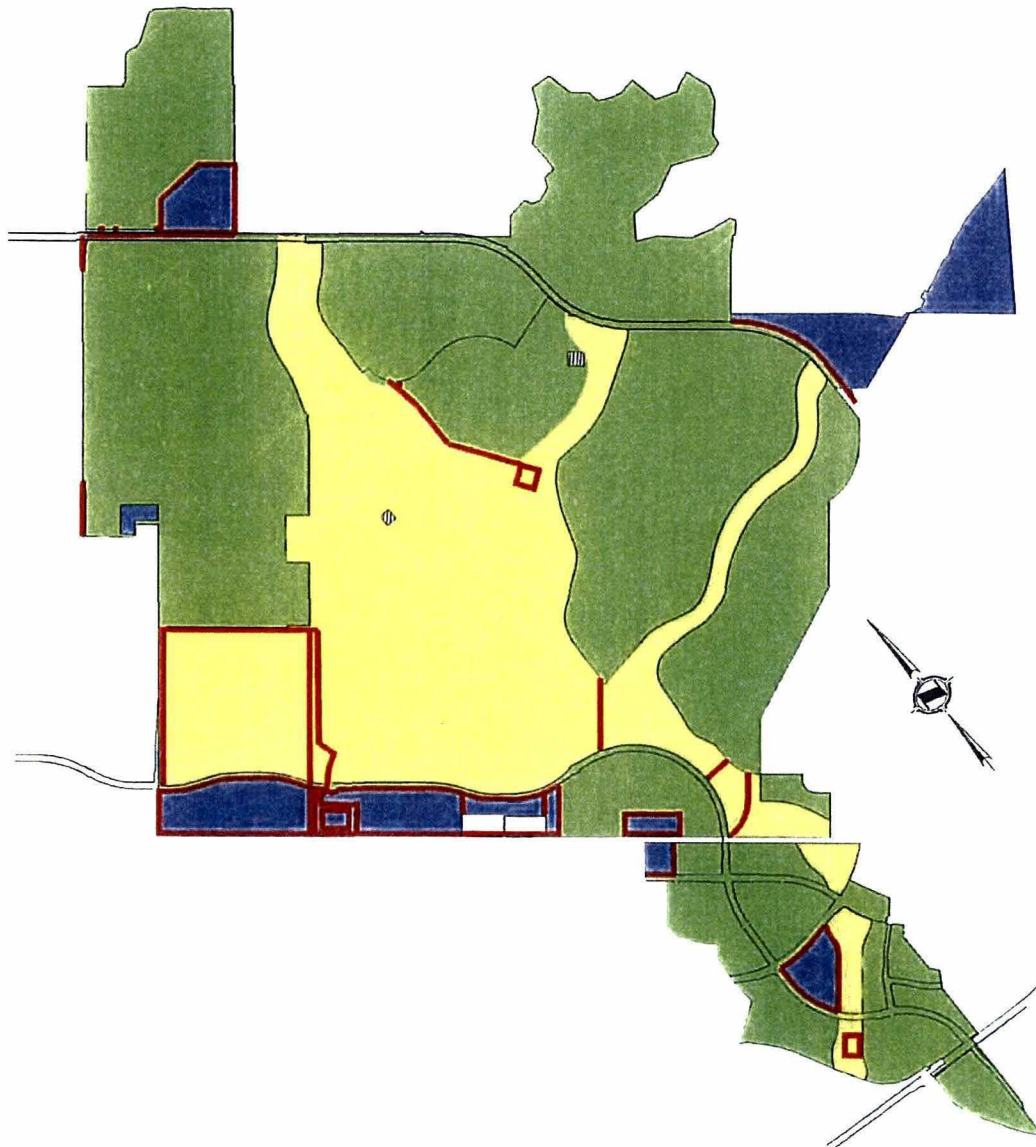
EXHIBIT 'O'

EXHIBIT EXPLANATION:
THIS EXHIBIT SHOWS EASEMENTS AND RIGHTS OF WAY FOR ACCESS AND INFRASTRUCTURE TO BE CONVEYED BY THE CITY TO OTHER AGENCIES.

NOTE:
THE LOCATIONS SHOWN HEREON ARE NOT INTENDED AS ACTUAL EASEMENT LOCATIONS BUT ARE ONLY AN INDICATION OF GENERAL AREA WHERE AN EASEMENT TO BE GRANTED BY SEPARATE INSTRUMENT OR MAP AS POTENTIALLY NEEDED.

LEGEND

- HERITAGE FIELD PROPERTY
- GREAT PARK PROPERTY
- NON-PARK CITY PROPERTY
- INDICATES FAA PARCELS
- APPROXIMATE LOCATION OF PROPOSED EASEMENT AND R/W




| | | | |
|---|--------------------|---|-----------------|
|  HUNSAKER & ASSOCIATES IRVINE, INC. PLANNING * ENGINEERING * SURVEYING Three Hughes • Irvine, CA 92618 • P: (949) 583-9070 • F: (949) 583-0759 | | PROPOSED EASEMENT AND RIGHT OF WAY IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA | |
| DATE: 3/14/08 | REV DATE: 07/08/09 | DWG BY: KML | SCALE: 1"=2000' |
| | | C:\KORY\Heritage Fields\ROP+ Revised\EXH-O.dwg | W.O. 1856-80X |

EXHIBIT P

RECORDED AT THE REQUEST OF AND
WHEN RECORDED RETURN TO:

CITY OF IRVINE
One Civic Center Plaza
P.O. Box 19575
Irvine, CA 92623-9575
Attn: City Clerk

(Space Above Line for Recorder's Use)

Free recording Requested per Government Code Section
6103

In accordance with Section 11922 of the California
Revenue and Taxation Code, transfer of the property to
the City of Irvine is exempt from the payment of a
documentary transfer tax.

GRANT DEED

(Police Site)

FOR VALUABLE CONSIDERATION, the receipt of which is hereby acknowledged, Heritage Fields El Toro, LLC, a Delaware limited liability company, hereby grants to the CITY OF IRVINE, a California charter city, that certain real property located in the City of Irvine, County of Orange, State of California, described in the legal description attached hereto as Exhibit "A" and incorporated herein by this reference, subject to all matters of record (including, without limitation, that certain Amended and Restated Development Agreement dated _____, 2009 and recorded in the official records of Orange County, California on _____, 2009 as Instrument No. _____).

Dated: _____, 20__

[signature follows on next page]

[signature page to Grant Deed]

HERITAGE FIELDS EL TORO, LLC,
a Delaware limited liability company

By: Heritage Fields LLC, a Delaware limited
liability company
Its: Sole Member

By: Lennar-LNR Heritage Fields LLC, a
Delaware limited liability company
Its: Administrative Member

By: Lennar Homes of California, Inc., a
California corporation
Its: Managing Member

By: _____
Name: _____
Title: _____

CERTIFICATE OF ACCEPTANCE

This is to certify that the interest in real property conveyed by the foregoing Grant Deed, from Heritage Fields El Toro, LLC, a Delaware limited liability company, to the City of Irvine ("City") is hereby accepted by the undersigned officer of the City, on behalf of the City, pursuant to authority conferred by Resolution No. ____ adopted by the City on _____, 20 __, and City consents to the recordation thereof by its undersigned duly authorized officer.

CITY OF IRVINE

By: _____

Its: _____

ATTEST:

Deputy City Clerk

EXHIBIT Q

RECORDED AT THE REQUEST OF AND
WHEN RECORDED RETURN TO:

CITY OF IRVINE
One Civic Center Plaza
P.O. Box 19575
Irvine, CA 92623-9575
Attn: City Clerk

(Space Above Line for Recorder's Use)

Free recording Requested per Government Code Section
6103

In accordance with Section 11922 of the California
Revenue and Taxation Code, transfer of the property to
the City of Irvine is exempt from the payment of a
documentary transfer tax.

GRANT DEED

(ARDA Transfer Site)

FOR VALUABLE CONSIDERATION, the receipt of which is hereby acknowledged,
Heritage Fields El Toro, LLC, a Delaware limited liability company, hereby grants to the CITY
OF IRVINE, a California charter city, that certain real property located in the City of Irvine,
County of Orange, State of California, described in the legal description attached hereto as
Exhibit "A" and incorporated herein by this reference, subject to all matters of record (including,
without limitation, that certain Amended and Restated Development Agreement dated
_____, 2009 and recorded in the official records of Orange County, California on _____,
2009 as Instrument No. _____).

Dated: _____, 20__

[signature follows on next page]

[signature page to Grant Deed]

HERITAGE FIELDS EL TORO, LLC,
a Delaware limited liability company

By: Heritage Fields LLC, a Delaware limited
liability company
Its: Sole Member

By: Lennar-LNR Heritage Fields LLC, a
Delaware limited liability company
Its: Administrative Member

By: Lennar Homes of California, Inc., a
California corporation
Its: Managing Member

By: _____
Name: _____
Title: _____

CERTIFICATE OF ACCEPTANCE

This is to certify that the interest in real property conveyed by the foregoing Grant Deed, from Heritage Fields El Toro, LLC, a Delaware limited liability company, to the City of Irvine ("City") is hereby accepted by the undersigned officer of the City, on behalf of the City, pursuant to authority conferred by Resolution No. ____ adopted by the City on _____, 20 __, and City consents to the recordation thereof by its undersigned duly authorized officer.

CITY OF IRVINE

By: _____

Its: _____

ATTEST:

Deputy City Clerk

Exhibit R-1

Indexed GA

| <u>Fiscal Year</u> | <u>Amount</u> |
|--|--|
| 2009-2010 | \$2,000,000 |
| 2010-2011 | \$3,000,000 |
| 2011-2012 | \$4,000,000 |
| 2012-2013 | \$4,000,000 |
| 2013-2014 | \$5,000,000 |
| 2014-2015 | \$9,500,000 |
| Each Fiscal Year Thereafter, Commencing in Fiscal Year 2015-2016 | Increase Amount in Prior Fiscal Year by 3%. |

Exhibit R-2

Guaranteed Maintenance Amount Indexed by 2%

| <u>Fiscal Year</u> | <u>Amount</u> |
|--|--|
| 2009-2010 | \$2,000,000 |
| 2010-2011 | \$3,000,000 |
| 2011-2012 | \$4,000,000 |
| 2012-2013 | \$4,000,000 |
| 2013-2014 | \$5,000,000 |
| 2014-2015 | \$9,500,000 |
| Each Fiscal Year Thereafter, Commencing in Fiscal Year 2015-2016 | Increase Amount in Prior Fiscal Year by 2%. |

**RATE AND METHOD OF APPORTIONMENT FOR
CITY OF IRVINE COMMUNITY FACILITIES DISTRICT No. 2009-3
IMPROVEMENT AREA No. 1 (GREAT PARK)**

A Special Tax shall be levied on all Assessor's Parcels of Taxable Property in Improvement Area No. 1 of City of Irvine Community Facilities District No. 2009-3 (Great Park) ("CFD No. 2009-3 (IA No. 1)") and collected each Fiscal Year commencing in Fiscal Year 20XX-20XX, in an amount determined through the application of this Rate and Method of Apportionment as described below. All of the real property in CFD No. 2009-3 (IA No. 1), unless exempted by law or by the provisions hereof, shall be taxed for the purposes, to the extent and in the manner herein provided.

A. DEFINITIONS

The terms hereinafter set forth have the following meanings:

"Acre" or "Acreage" means the land area in acres of an Assessor's Parcel as shown on an Assessor's Parcel Map, or if the land area is not shown on an Assessor's Parcel Map, the land area in acres shown on the applicable final map, parcel map, condominium plan, or other map or plan recorded with the County. The square footage of an Assessor's Parcel is equal to the Acreage of such parcel multiplied by 43,560.

"Act" means, collectively, the Mello-Roos Community Facilities Act of 1982, being Chapter 2.5, Part 1, Division 2 of Title 5 of the California Government Code, the City Charter, and the City Municipal Code, codified and uncodified.

"Administrative Expenses" means the following actual or reasonably estimated costs directly related to the administration of CFD No. 2009-3 (IA No. 1), including but not limited to: the costs of computing the Special Taxes and preparing the annual Special Tax collection schedules (whether by the City or designee thereof or both); the costs of collecting the Special Taxes (whether by the City or otherwise); the costs of remitting the Special Taxes to the Trustee; the costs of the Trustee (including its legal counsel) in the discharge of the duties required of it under the Indenture; the costs to the City, CFD No. 2009-3 (IA No. 1) or any designee thereof of complying with arbitrage rebate requirements with respect to the Special Tax and CFD No. 2009-3 (IA No.1) Bonds; the costs to the City, CFD No. 2009-3 (IA No. 1) or any designee thereof of complying with disclosure requirements of the City, CFD No. 2009-3 (IA No. 1) or obligated persons associated with applicable federal and state securities laws and the Act; the costs associated with preparing Special Tax disclosure statements and responding to public inquiries regarding the Special Taxes; the costs of the City, CFD No. 2009-3 (IA No. 1) or any designee thereof related to an appeal of the Special Tax; the costs of the City, CFD No. 2009-3 (IA No. 1) or any designee thereof related to the recalculation of the Value Limitation in accordance with Section C.1 below and the Buydown of Outstanding Bonds in accordance with Section D.4 below; the costs associated with the release of funds from an escrow account; and the City's annual administration fees and third party expenses related to CFD No. 2009-3 (IA No.1) Bonds. Administrative Expenses shall also include amounts estimated by the CFD Administrator or advanced by the City or CFD No. 2009-3 (IA No. 1) for any other

administrative purposes of CFD No. 2009-3 (IA No. 1), including attorney's fees and other costs related to commencing and pursuing to completion any foreclosure of delinquent Special Taxes.

"Affordable Housing" means residential dwelling units, located on one or more Assessor's Parcels for which a building permit for new construction was issued after January 1, 2008 and on or before May 1 of the Fiscal Year preceding the Fiscal Year for which the Special Taxes are being levied, that are subject to deed restrictions, resale restrictions, and/or regulatory agreements recorded in favor of the City providing affordable housing for households with incomes below 80% of the County of Orange median income, and are therefore exempt from the Special Tax.

"Amended and Restated Development Agreement" means the Amended and Restated Development Agreement, dated MM/DD/YYYY, by and among the City, the Developer and the Irvine Redevelopment Agency.

"Assessor's Parcel" means a lot or parcel to which an assessor's parcel number is assigned as determined from an Assessor's Parcel Map or the applicable assessment roll.

"Assessor's Parcel Map" means an official map of the County Assessor of the County designating parcels by Assessor's Parcel number.

"Attached Residential Property" means Assessor's Parcels of Developed Property for which building permits have been issued for attached residential units.

"Authorized Facilities" means Group A Facilities, Group B Facilities, and Group C Facilities as identified in the Amended and Restated Development Agreement.

"Authorized Services" means those services authorized to be financed by CFD No. 2009-3.

"Auto Center Property" means all Assessor's Parcels of Developed Property for which a building permit(s) permitting the construction of one or more non-residential facilities has been issued by the City which is primarily used for: selling automobiles, or for any other uses that are consistent with auto center land use designations as determined by the City.

"Bond Costs" means for (i) any bond issue sold by any Other Improvement Area in CFD No. 2009-3 and (ii) all Subordinate CFD No. 2009-3 (IA No. 1) Bonds, all debt service payments, administrative expenses, and amounts required to establish or replenish any bond reserve funds, and any other use of Special Taxes for such bond issues required by the indenture, fiscal agent agreement, or other agreement governing the terms of such bond issue.

"Bond Index" means the national Bond Buyer Revenue Bond Index, commonly referenced as the 25-Bond Revenue Index. In the event the Bond Index ceases to be published, the index used shall be based on a comparable index for revenue bonds maturing in 30 years with an average rating equivalent to Moody's A1 and S&P's A-plus, as reasonably determined by the CFD Administrator.

"Bond Yield" means the yield of the latest series of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds issued. For purposes of this calculation, the yield on such latest series of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds shall be the yield calculated at the time such last

Non-Subordinate series of CFD No. 2009-3 (IA No. 1) Bonds were issued, pursuant to Section 148 of the Internal Revenue Code of 1986, as amended, for the purpose of the tax certificate executed in connection with the issuance of such latest series of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds.

"Buydown of Outstanding Bonds" means a mandatory buydown of Outstanding Bonds made by a property owner to compensate for a loss of Special Tax revenues resulting from the construction of fewer residential dwelling units, smaller residential dwelling units, or a modified number of Acres anticipated for the construction of Non-Residential Property, as determined in accordance with Section D below.

"CFD Administrator" means an official of the City, or designee thereof, responsible for determining the Special Tax Requirement, and providing for the levy and collection of the Special Taxes.

"CFD No. 2009-3" means City of Irvine Community Facilities District No. 2009-3 (Great Park).

"CFD No. 2009-3 (IA No. 1)" means Improvement Area No. 1 of CFD No. 2009-3 as identified on the boundary map for CFD No. 2009-3 and further set forth in the Resolution of Formation.

"CFD No. 2009-3 (IA No. 1) Bonds" means any bonds or other debt (as defined in Section 53317(d) of the Act), whether in one or more series, issued by CFD No. 2009-3 (IA No. 1) and secured by the Special Tax levy on property within the boundaries of CFD No. 2009-3 (IA No. 1) under the Act .

"City" means the City of Irvine.

"Commercial Property" means all Assessor's Parcels of Developed Property for which a building permit(s) permitting the construction of one or more non-residential facilities has been issued by the City which is primarily used for: the sale of general merchandise, hard goods, personal services, and other items directly to consumers, or other uses that are consistent with commercial land use designations as determined by the City.

"Council" means the City Council of the City which serves at the legislative body of CFD No. 2009-3.

"County" means the County of Orange.

"Debt Service Coverage" means the debt service coverage percentage identified in the additional bonds test or parity bonds test section of the Indenture for Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds.

"Detached Residential Property" means Assessor's Parcels of Developed Property for which building permits have been issued for detached residential units.

"Developed Property" means, for each Fiscal Year, all Taxable Property, exclusive of Taxable Public Property and Taxable Property Owner Association Property, for which a building permit for construction was issued after January 1, 2009 and on or before May 1 of the Fiscal Year preceding the Fiscal Year for which the Special Taxes are being levied.

"Developed Property Special Tax Requirement" means the Maximum Special Tax on Developed Property.

"Developer" means Heritage Fields El Toro LLC, a Delaware limited liability company, and its successors and assigns.

"Discount Rate" means (i) prior to the issuance of the first series of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds, the Bond Index, and (ii) subsequent to the issuance of the first series of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds, the Bond Yield.

"Final Mapped Property" means, for each Fiscal Year, all Taxable Property, exclusive of Developed Property, Taxable Property Owner Association Property and Taxable Public Property, located in a Final Subdivision as of January 1 of the Fiscal Year preceding the Fiscal Year for which the Special Taxes are being levied, but no earlier than January 1, 2009.

"Final Mapped Property/Undeveloped Property Special Tax Requirement" means that amount required, if any, in any Fiscal Year to (i) pay debt service on CFD No. 2009-3 (IA No. 1) Bonds payable in the calendar year commencing in such Fiscal Year, (ii) pay any amounts required to establish or replenish any reserve funds for all CFD No. 2009-3 (IA No. 1) Bonds, (iii) pay for Administrative Expenses, (iv) pay for reasonably anticipated Special Tax delinquencies based on the delinquency rate for the Special Tax levy in the previous Fiscal Year, (v) pay the Guaranteed Amount, and (vi) pay Bond Costs for Other Improvement Area Bonds to the extent that Special Taxes secure an issue of Other Improvement Area Bonds, less (vii) an amount equal to the Developed Property Special Tax Requirement, less (viii) a credit for funds available to reduce the annual Special Tax levy, as determined by the CFD Administrator, so long as the amount required is not less than zero.

"Final Subdivision" means a subdivision of property which occurred prior to January 1 of the Fiscal Year preceding the Fiscal Year for which the Special Taxes are being levied, by recordation of a final map, parcel map, or lot line adjustment, approved by the City pursuant to the Subdivision Map Act (California Government Code Section 66410 et seq.) or recordation of a condominium plan pursuant to California Civil Code Section 1352 that, in either case, creates individual lots for which building permits may be issued without further subdivision.

"Fiscal Year" means the period starting July 1 and ending on the following June 30.

"Floor Area Ratio" means for Non-Residential – Commercial Property – 0.317; for Non-Residential – Industrial Property – 0.325; for Non-Residential – Institutional Property – 0.361; for Non-Residential – Office Property – 0.326; for Non-Residential – Auto Center – 0.084; and for Other Non-Residential Property – 0.308.

"Future Annexation Area" means the property designated as Future Annexation Area on the boundary map for CFD No. 2009-3 (IA No. 1), as identified in Exhibit C, and anticipated to become subject to the Special Tax.

"Guaranteed Amount" means for any Fiscal Year, the lesser of (i) the Pro Rata Share for CFD No. 2009-3 (IA No. 1) of the annual amounts set forth in Exhibit B, or (ii) the sum of (a) Pro

Rata Share for CFD No. 2009-3 (IA No. 1) of the amount needed to finance Authorized Services in such Fiscal Year as determined by the City, and (b) the Bond Costs associated with any Subordinate Bonds issued on behalf of CFD No. 2009-3 (IA No. 1). Notwithstanding the above, the Guaranteed Amount may exceed the Pro Rata Share for CFD No. 2009-3 (IA No. 1) as discussed in Section E.2. The Guaranteed Amount collected in CFD No. 2009-3 (IA No. 1) may be used to finance Authorized Services and to pay Bond Costs associated with Subordinate Bonds issued on behalf of CFD No. 2009-3 (IA No. 1).

"Indenture" means the indenture, fiscal agent agreement, trust agreement, resolution or other instrument pursuant to which CFD No. 2009-3 (IA No. 1) Bonds are issued, as modified, amended and/or supplemented from time to time, and any instrument replacing or supplementing the same.

"Industrial Property" means all Assessor's Parcels of Developed Property for which a building permit(s) permitting the construction of one or more non-residential facilities has been issued by the City which is primarily used for: manufacturing, production, research and development, storage and/or processing of goods, or for any other uses that are consistent with industrial land use designations as determined by the City.

"Institutional Property" means all Assessor's Parcels of Developed Property for which a building permit(s) permitting the construction of one or more non-residential facilities has been issued by the City which is primarily used for: education, including libraries and museums, or for any other uses that are consistent with institutional land use designations as determined by the City.

"Intermediate Maximum Special Tax" means the intermediate Maximum Special Tax, determined in accordance with Section C herein, that can be levied in any Fiscal Year on any Assessor's Parcel of Final Mapped Property or Undeveloped Property.

"Land Use Class" means any of the classes listed in Table 1, Table 2 or Exhibit A, herein.

"Maximum Special Tax" means the maximum Special Tax, determined in accordance with Section C below, that can be levied in any Fiscal Year on any Assessor's Parcel of Taxable Property.

"Moderate Affordable Senior Units" means residential development that is designed for, and restricted to, persons or couples of whom one member is age 55 or older that is located on one or more Assessor's Parcels of Residential Property that are subject to deed restrictions, resale restrictions, and/or regulatory agreements recorded in favor of the City providing affordable housing for households with incomes below 120% of the County of Orange median income (but not less than 80% of the County of Orange median income).

"Moderate Affordable Units" means dwelling units, other than Moderate Affordable Senior Units, that are located on one or more Assessor's Parcels of Residential Property that are subject to deed restrictions, resale restrictions, and/or regulatory agreements recorded in favor of the

City providing affordable housing for households with incomes below 120% of the County of Orange median income (but not less than 80% of the County of Orange median income).

"Non-Residential Floor Area" means the total building square footage of the non-residential building(s) located on an Assessor's Parcel, measured from outside wall to outside wall, not including space devoted to stairwells, public restrooms, lighted courts, vehicle parking and areas incident thereto, and mechanical equipment incidental to the operation of such building. The determination of Non-Residential Floor Area shall be made by reference to the building permit(s) issued for such Assessor's Parcel and/or to the appropriate records kept by the Department of Planning and Land Use, as reasonably determined by the CFD Administrator.

"Non-Residential Property" means all Assessor's Parcels of Developed Property for which a building permit permitting the construction of one or more non-residential units or facilities has been issued by the City or other governmental agency.

"Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds" means any issue(s) of CFD No. 2009-3 (IA No. 1) Bonds that are not Subordinate CFD No. 2009-3 (IA No. 1) Bonds.

"Office Property" means all Assessor's Parcels of Developed Property for which a building permit(s) permitting the construction of one or more non-residential facilities has been issued by the City which is primarily used for: professional/medical offices, or for any other uses that are consistent with office land use designations as determined by the City.

"Other Improvement Area" means an improvement area located within CFD No. 2009-3, other than CFD No. 2009-3 (IA No.1).

"Other Improvement Area Bonds" means all bonds issued on behalf of Other Improvement Areas that are secured by the Special Taxes in the manner and for the duration set forth in one or more indentures, fiscal agent agreements, or other agreements governing the terms of such bonds.

"Other Non-Residential Property" means all Non-Residential Property, other than Auto Center Property, Commercial Property, Industrial Property, Institutional Property, and Office Property.

"Outstanding Bonds" means all Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds which are outstanding under an Indenture.

"Overlapping Liens" means projected ad valorem property taxes and all direct and overlapping assessments, taxes, special taxes, and charges on the secured tax-roll of the County for each parcel/unit of Taxable Property at the time of CFD No. 2009-1 formation, excluding however, the Special Taxes assessed or levied pursuant to this Rate and Method of Apportionment.

"Prepayable Portion of the Special Tax" shall have the meaning set forth in Section I.

"Pro Rata Share" means the ratio calculated by dividing the anticipated Maximum Special Tax to be levied at build out in CFD No. 2009-3 (IA No. 1) by the anticipated Maximum Special Tax to be levied at build out for all improvement areas within CFD No. 2009-3. So long as there are no CFD No. 2009-3 (IA No. 1) Bonds outstanding, or Special Taxes being pledged to the payment of Bond Costs for Other Improvement Area Bonds, the City may recalculate the Pro

Rata Share to reflect development assumptions which differ from those identified in Table 2 of the rate and method of apportionment for any improvement area of CFD No. 2009-3. Notwithstanding the foregoing, the City shall not recalculate the Pro Rata Share to incorporate any prepayments of the Prepayable Portion of the Special Tax.

"Property Owner Association Property" means, for each Fiscal Year, (i) any property within the boundaries of CFD No. 2009-3 (IA No. 1) for which the owner of record, as determined from the County Assessor's secured tax roll for the Fiscal Year in which the Special Tax is being levied, is a property owner's association, including any master or sub-association, (ii) any property located in a Final Subdivision and which, as determined from such Final Subdivision, is or will be open space, a common area recreation facility, or a private street, or (iii) any property which, as of the May 1 preceding the Fiscal Year for which the Special Tax is being levied, has been conveyed, irrevocably dedicated, or irrevocably offered to a property owner's association, including any master or sub-association, provided such conveyance, dedication, or offer is submitted to the CFD Administrator by May 1 preceding the Fiscal Year for which the Special Tax is being levied.

"Proportionately" means, for Developed Property, that the ratio of the actual Special Tax levy to the Maximum Special Tax is equal for all Assessor's Parcels of Developed Property. For Final Mapped Property, "Proportionately" means that the ratio of the actual Special Tax levy per acre to the Maximum Special Tax per acre is equal for all Assessor's Parcels of Final Mapped Property. For Undeveloped Property, "Proportionately" means that the ratio of the actual Special Tax levy per acre to the Maximum Special Tax per acre is equal for all Assessor's Parcels of Undeveloped Property. The term "Proportionately" may similarly be applied to other categories of Taxable Property as listed in Section E below. Notwithstanding the above, a disproportionate levy shall be permissible for any Assessor's Parcels in CFD No. 2009-3 (IA No. 1) to cover any delinquencies by a property owner and to cover any Guaranteed Amount shortfalls generated by delinquencies, as discussed in Section E.2.

"Public Property" means, for each Fiscal Year, any property within the boundaries of CFD No. 2009-3 (IA No. 1) that (i) is owned by, irrevocably offered or dedicated to, or leased to, the federal government, the State, the County, the City, or any local government or other public agency, or (ii) is encumbered by a public easement making impractical its use for any purpose other than that set forth in the easement.

"Rate and Method of Apportionment" means this Rate and Method of Apportionment for City of Irvine CFD No. 2009-3 (IA No. 1).

"Residential Floor Area" means all of the square footage of living area within the perimeter of a residential structure, not including any carport, walkway, garage, overhang, patio, enclosed patio, or similar area. The determination of Residential Floor Area for an Assessor's Parcel shall be made by reference to the building permit(s) issued for such Assessor's Parcel.

"Residential Property" means all Assessor's Parcels of Developed Property for which a building permit permitting the construction thereon of one or more residential dwelling units has been issued by the City, or other governmental agency.

"Resolution of Formation" means the resolution establishing CFD No. 2009-3.

"Senior Housing" means all residential development, other than Moderate Affordable Senior Units, that is designed for, and restricted to, persons or couples of whom one member is age 55 or older.

"Special Tax" or "Special Taxes" means the sum of the special taxes to be levied in each Fiscal Year on each Assessor's Parcel of Taxable Property within CFD No. 2009-3 (IA No. 1) to fund the Special Tax Requirement.

"Special Tax Requirement" means the sum of the Developed Property Special Tax Requirement, the Final Mapped Property/Undeveloped Property Special Tax Requirement and the Taxable Property Owner Association Property/ Taxable Public Property Special Tax Requirement.

"State" means the State of California.

"Subordinate CFD No. 2009-3 (IA No. 1) Bonds" means any CFD No. 2009-3 (IA No. 1) Bonds that are subordinate to any current or future CFD No. 2009-3 (IA No. 1) Bonds and that meet the requirements set forth in the Amended and Restated Development Agreement.

"Supplemental Improvement Area" means any Other Improvement Area that has been specifically designated as additional collateral for CFD No. 2009-3 (IA No. 1) Bonds as authorized in the Indenture. The Supplemental Improvement Area shall be retained as additional collateral and security for CFD No. 2009-3 (IA No. 1) Bonds until conditions for the release of the special taxes in the Supplemental Improvement Area, as set forth in the Indenture, are satisfied.

"Taxable Property" means all of the Assessor's Parcels within the boundaries of CFD No. 2009-3 (IA No. 1) which are not exempt from the Special Tax pursuant to applicable law or Section F below.

"Taxable Property Owner Association Property" means all Assessor's Parcels of Property Owner Association Property that are not exempt pursuant to Section F below.

"Taxable Property Owner Association Property/Taxable Public Property Special Tax Requirement" means that amount required, if any, in any Fiscal Year to (i) pay debt service on the CFD No. 2009-3 (IA No. 1) Bonds payable in the calendar year commencing in such Fiscal Year, (ii) pay any amounts required to establish or replenish any reserve funds for all CFD No. 2009-3 (IA No. 1) Bonds, (iii) pay for Administrative Expenses, (iv) pay for reasonably anticipated Special Tax delinquencies based on the delinquency rate for the Special Tax levy in the previous Fiscal Year, and (v) pay Bond Costs for Other Improvement Area Bonds to the extent that Special Taxes secure an issue of Other Improvement Area Bonds, less (vi) an amount equal to the Developed Property Special Tax Requirement, less (vii) an amount equal to the Final Mapped Property/Undeveloped Property Special Tax Requirement, less (viii) a credit for funds available to reduce the annual Special Tax levy, as determined by the CFD Administrator, so long as the amount required is not less than zero.

"Taxable Public Property" means all Assessor's Parcels of Public Property that are not exempt pursuant to Section F below.

"Trustee" means the trustee or fiscal agent under the Indenture.

"Undeveloped Property" means, for each Fiscal Year, all Taxable Property not classified as Developed Property, Final Mapped Property, Taxable Property Owner Association Property, or Taxable Public Property.

"Value Limitation" means, collectively (i) that the amount of the Maximum Special Taxes for Residential Property within each Land Use Class, when combined with all Overlapping Liens, including a sufficient amount to pay the assumed Irvine Ranch Water District assessments (subject to the limitations set forth in the Amended and Restated Development Agreement), shall collectively not exceed two percent (2%) of the expected base sales price (i.e., the base sales price without any optional upgrades included) of the lowest priced residential unit in such Land Use Class, based upon the anticipated sales prices to end users at the time of calculation; (ii) that the amount of the special taxes for each Non-Residential Property Land Use Class identified in Table 1 and expressed as an amount per square foot of Non-Residential Floor Area, shall not exceed the product of (a) one and one hundred thirty-nine thousandths percent (1.139%) and (b) the per square foot value of land (as determined by the third-party appraisal described in Section C.1) located within CFD No. 2009-3 (IA No. 1) for each Non-Residential Property Land Use Class, divided by the Floor Area Ratio for the applicable Land Use Class, and (iii) the amount of the special taxes for each Non-Residential Property Land Use Class set forth in Table 1 herein and expressed as an amount per Acre, shall not exceed the product of (a) the amount per square foot of Non-Residential Floor Area calculated in (ii) above for each Non-Residential Property Land Use Class, (b) the Floor Area Ratio for the applicable Land Use Class, and (c) 43,560.

B. ASSIGNMENT TO LAND USE CATEGORIES

Each Fiscal Year, all Taxable Property within CFD No. 2009-3 (IA No. 1) shall be classified as Developed Property, Final Mapped Property, Undeveloped Property, Taxable Property Owner Association Property, or Taxable Public Property, and shall be subject to Special Taxes in accordance with this Rate and Method of Apportionment determined pursuant to Sections C and E herein.

C. MAXIMUM SPECIAL TAX RATE

1. Special Tax

Residential Property shall be assigned to Land Use Classes 1 through 31 as listed in Table 1 herein based on the Residential Floor Area for each unit. Non-Residential Property shall be assigned to Land Use Classes 32 through 37. Prior to the issuance of the first series of CFD No. 2009-3 (IA No. 1) Bonds, the Maximum Special Taxes for Residential Property and the special taxes for Non-Residential Property (set forth in Table 1) shall be reduced in accordance with, and subject to the conditions set forth in this Section C.1, without the need for any proceedings to make changes permitted under the Act.

Upon the earlier of (i) one hundred twenty (120) calendar days before the projected execution date of a bond purchase agreement for the first series of CFD No. 2009-3 (IA No. 1) Bonds, or (ii) upon the written request of the Developer, two hundred seventy (270) calendar days before

the projected date of issuance of the first building permit permitting the construction of a non-model residential building for each Land Use Class within CFD No. 2009-3 (IA No. 1), a third-party consultant selected by the City shall be engaged to recalculate the Value Limitation for Residential Property, and, if the City determines that the Maximum Special Taxes for Residential Property for any Land Use Class (as reflected in Table 1) will cause the overall tax burden (including Overlapping Liens) on Residential Property to exceed the recalculated Value Limitation for any Residential Property Land Use Class, then the Maximum Special Tax for Residential Property for any Land Use Class (as reflected in Table 1) that exceeds its recalculated Value Limitation shall be reduced to the amount necessary to comply with its recalculated Value Limitation. The reduction shall occur within thirty (30) calendar days of the completion of the third-party consultant's report.

Upon the earlier of (i) one hundred and twenty (120) calendar days before the projected execution date of a bond purchase agreement for the first series of CFD No. 2009-3 (IA No. 1) Bonds, or (ii) upon written request of the Developer, two hundred seventy (270) calendar days before the projected date of issuance of the first building permit permitting the construction of a non-residential building for each Land Use Class within CFD No. 2009-3 (IA No. 1), a third-party appraiser selected by the City shall be engaged to recalculate the Value Limitation for Non-Residential Property within CFD No. 2009-3 (IA No. 1), and, based upon the report of the appraiser, if the City so determines that the per square foot and per Acre special taxes, as reflected in Table 1, herein, exceed the recalculated Value Limitation for Non-Residential Property for any Land Use Class, then the per square foot and per Acre special tax for each Non-Residential Property Land Use Class (as reflected in Table 1) that exceeds its recalculated Value Limitation shall be reduced to the amount necessary to comply with its recalculated Value Limitation, provided, however, that the Maximum Special Taxes for Non-Residential Property do not fall below \$0.40 per square foot of Non-Residential Floor Area. The reduction shall occur within thirty (30) calendar days of the completion of the third-party appraisal's report.

Notwithstanding the above, if, and to the extent, the recalculation of the Maximum Special Tax for Residential Property and per square foot and per Acre special taxes for Non-Residential Property is triggered by the projected issuance of a building permit, the recalculation(s) shall only be completed for those Land Use Classes for which a building permit is expected to be issued within 270 days. If, and to the extent, the recalculation of the Maximum Special Tax for Residential Property and per square foot and per Acre special taxes for Non-Residential Property is triggered by the projected execution of a bond purchase agreement within 120 days, the recalculation(s) shall be completed for all Land Use Classes within CFD No. 2009-3 (IA No. 1) that have not previously experienced a reduction in their Maximum Special Taxes (for Residential Property) or their special taxes (for Non-Residential Property).

Notwithstanding the above, the City and Developer may confer and mutually agree to reduce the Maximum Special Tax on Developed Property for Senior Housing, Moderate Affordable Senior Units, and/or Moderate Affordable Units, as identified in Table 1.

Each special tax reduction for a Land Use Class pursuant to this Section C.1., shall be calculated separately, as reasonably determined by the CFD Administrator, without regard to special tax reductions in any other Land Use Class, and it shall not be required that such reduction be proportionate to reductions among other special tax reductions. If the special taxes for a Land Use Class do not require reduction as set forth in this Section C.1., then those special taxes shall not be reduced irrespective of any reductions made to other special taxes. The reductions

required pursuant to this Section C.1 shall be reflected in an amended notice of Special Tax lien which the City shall cause to be recorded by executing a certificate in substantially the form attached herein as Exhibit A. Notwithstanding the foregoing, under no circumstances may the special taxes be reduced under this Section C.1 during the time that the Special Taxes have been pledged to the payment of Bond Costs for Other Improvement Area Bonds.

a. **Developed Property**

(1). Maximum Special Tax

The Maximum Special Tax that may be levied and escalated as explained further in Section C.1.a.(2) below in any Fiscal Year for each Assessor's Parcel classified as Developed Property is shown below in Table 1.

TABLE 1
Maximum Special Tax for Developed Property
Improvement Area No. 1 of CFD No. 2009-3
Fiscal Year 20XX-20XX

| Land Use Class | Description | Maximum Special Tax |
|----------------|---|---------------------|
| 1 | DETACHED RESIDENTIAL PROPERTY (=> 5,700 SF) | \$XX,XXX |
| 2 | DETACHED RESIDENTIAL PROPERTY (5,450 SF - 5,699 SF) | \$ XX,XXX |
| 3 | DETACHED RESIDENTIAL PROPERTY (5,200 SF - 5,449 SF) | \$ XX,XXX |
| 4 | DETACHED RESIDENTIAL PROPERTY (4,950 SF - 5,199 SF) | \$ XX,XXX |
| 5 | DETACHED RESIDENTIAL PROPERTY (4,700 SF - 4,949 SF) | \$ XX,XXX |
| 6 | DETACHED RESIDENTIAL PROPERTY (4,450 SF - 4,699 SF) | \$ XX,XXX |
| 7 | DETACHED RESIDENTIAL PROPERTY (4,200 SF - 4,449 SF) | \$ XX,XXX |
| 8 | DETACHED RESIDENTIAL PROPERTY (3,950 SF - 4,199 SF) | \$X,XXX |
| 9 | DETACHED RESIDENTIAL PROPERTY (3,700 SF - 3,949 SF) | \$ X,XXX |
| 10 | DETACHED RESIDENTIAL PROPERTY (3,450 SF - 3,699 SF) | \$ X,XXX |
| 11 | DETACHED RESIDENTIAL PROPERTY (3,200 SF - 3,449 SF) | \$ X,XXX |
| 12 | DETACHED RESIDENTIAL PROPERTY (2,950 SF - 3,199 SF) | \$ X,XXX |
| 13 | DETACHED RESIDENTIAL PROPERTY (2,700 SF - 2,949 SF) | \$ X,XXX |
| 14 | DETACHED RESIDENTIAL PROPERTY (2,450 SF - 2,699 SF) | \$ X,XXX |
| 15 | DETACHED RESIDENTIAL PROPERTY (2,200 SF - 2,449 SF) | \$ X,XXX |
| 16 | DETACHED RESIDENTIAL PROPERTY (1,950 SF - 2,199 SF) | \$ X,XXX |
| 17 | DETACHED RESIDENTIAL PROPERTY (1,700 SF - 1,949 SF) | \$ X,XXX |
| 18 | DETACHED RESIDENTIAL PROPERTY (< 1,700 SF) | \$ X,XXX |
| 19 | ATTACHED RESIDENTIAL PROPERTY (=> 2,600 SF) | \$ X,XXX |

| Land Use Class | Description | Maximum Special Tax |
|----------------|---|---|
| 20 | ATTACHED RESIDENTIAL PROPERTY (2,400 SF - 2,599 SF) | \$ X,XXX |
| 21 | ATTACHED RESIDENTIAL PROPERTY (2,200 SF - 2,399 SF) | \$ X,XXX |
| 22 | ATTACHED RESIDENTIAL PROPERTY (2,000 SF - 2,199 SF) | \$ X,XXX |
| 23 | ATTACHED RESIDENTIAL PROPERTY (1,800 SF - 1,999 SF) | \$ X,XXX |
| 24 | ATTACHED RESIDENTIAL PROPERTY (1,600 SF - 1,799 SF) | \$ X,XXX |
| 25 | ATTACHED RESIDENTIAL PROPERTY (1,400 SF - 1,599 SF) | \$ X,XXX |
| 26 | ATTACHED RESIDENTIAL PROPERTY (1,200 SF - 1,399 SF) | \$ X,XXX |
| 27 | ATTACHED RESIDENTIAL PROPERTY (< 1,200 SF) | \$ X,XXX |
| 28 | SENIOR HOUSING | \$ X,XXX |
| 29 | MODERATE AFFORDABLE UNITS | \$ X,XXX |
| 30 | MODERATE AFFORDABLE SENIOR UNITS | \$XXX |
| 31 | AFFORDABLE | \$0 |
| 32 | NON-RESIDENTIAL - COMMERCIAL PROPERTY | \$1.50 per square foot of Non-Residential Floor Area or \$20,713 per Acre, when applied, whichever is greater |
| 33 | NON-RESIDENTIAL- INDUSTRIAL PROPERTY | \$1.50 per square foot of Non-Residential Floor Area or \$21,236 per Acre, when applied, whichever is greater |
| 34 | NON-RESIDENTIAL- INSTITUTIONAL PROPERTY | \$1.50 per square foot of Non-Residential Floor Area or \$23,588 per Acre, when applied, whichever is greater |
| 35 | NON-RESIDENTIAL - OFFICE PROPERTY | \$1.50 per square foot of Non-Residential Floor Area or \$21,301 per Acre, when applied, whichever is greater |

| Land Use Class | Description | Maximum Special Tax |
|----------------|--------------------------------|---|
| 36 | NON-RESIDENTIAL – AUTO CENTER | \$5.02 per square foot of Non-Residential Floor Area or \$18,368 per Acre, when applied, whichever is greater |
| 37 | OTHER NON-RESIDENTIAL PROPERTY | \$1.50 per square foot of Non-Residential Floor Area or \$20,125 per Acre, when applied, whichever is greater |

(2). Increase in the Maximum Special Tax

The Fiscal Year 20XX-20XX Maximum Special Tax, identified in Table 1 above, as such Table may be amended and restated in full pursuant to this Rate and Method of Apportionment, shall increase thereafter (i) commencing on July 1, 20XX and on July 1 of each Fiscal Year thereafter through the Fiscal Year in which the fortieth anniversary of the date on which the first series of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds were sold occurs, by an amount equal to two percent (2%) of the amount in effect for the previous Fiscal Year; and (ii) commencing in the Fiscal Year following the fortieth anniversary of the date on which the first series of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds were sold, by an amount equal to three percent (3%) of the Maximum Special Tax as determined following the partial termination of the Special Tax as set forth in Section J, and on July 1 of each Fiscal Year thereafter by an amount equal to three percent (3%) of the amount in effect for the previous Fiscal Year.

(3). Multiple Land Use Classes

In some instances an Assessor's Parcel of Developed Property may contain more than one Land Use Class. The Maximum Special Tax levied on an Assessor's Parcel shall be the sum of the Maximum Special Tax for all Land Use Classes located on that Assessor's Parcel. The CFD Administrator's allocation to each type of property shall be final.

b. **Final Mapped Property, Undeveloped Property, Taxable Property Owner Association Property, and Taxable Public Property**

(1). Intermediate Maximum Special Tax

The Fiscal Year 20XX-20XX Intermediate Maximum Special Tax for each Assessor's Parcel of Final Mapped Property and Undeveloped Property shall be \$[] per Acre, and shall increase thereafter, commencing on July 1, 20XX and on July 1 of each Fiscal

Year thereafter, by an amount equal to two percent (2%) of the Intermediate Maximum Special Tax for the previous Fiscal Year.

(2). Maximum Special Tax

The Fiscal Year 20XX-20XX Maximum Special Tax for each Assessor's Parcel of Final Mapped Property, Undeveloped Property, Taxable Property Owner Association Property, and Taxable Public Property shall be \$[] per Acre, and shall increase thereafter, commencing on July 1, 2010 and on July 1 of each Fiscal Year thereafter, by an amount equal to two percent (2%) of the Maximum Special Tax for the previous Fiscal Year.

D. BUYDOWN OF OUTSTANDING BONDS

All of the requirements of this Section D, which describes the need for a Buydown of Outstanding Bonds ("Buydown") that may result from a change in development as determined pursuant to this Section D, shall only apply after the issuance of the first series of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds. Prior to the issuance of the first series of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds, the terms of the Buydown shall not apply. The terms of the Buydown shall not apply to any Subordinate CFD No. 2009-3 (IA No. 1) Bonds.

The following additional definitions apply to this Section D:

"Buydown Requirement" means the total amount needed to be collected to calculate and prepay Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds necessary to be prepaid in order to authorize (i) the issuance of residential building permits, or (ii) the approval of a Final Subdivision for non-residential development listed in a request for a Letter of Compliance, as calculated under this Section D.

"Certificate of Satisfaction of Buydown" means a certificate from the CFD Administrator stating that the property described in such certificate has met the Buydown Requirement for such property as calculated under this Section D.

"Letter of Compliance" means a letter from the CFD Administrator authorizing (i) the issuance of residential building permits, or (ii) the approval of a Final Subdivision for non-residential development based on the prior submittal of a request for a Letter of Compliance by a property owner.

"Update Property" means an Assessor's Parcel of Final Mapped Property or Undeveloped Property for which a building permit has been issued after May 1 of the Fiscal Year preceding the current Fiscal Year. For purposes of all calculations in this Section D, Update Property shall be taxed as if it were already Developed Property during the current Fiscal Year.

1. Request for Letter of Compliance

A. Residential Development

After the issuance of the first series of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds, a property owner shall, as a precondition to the issuance of a building permit for construction of any residential development for a specific Assessor's Parcel or lot, submit a Letter of Compliance for the construction of the development on such Assessor's Parcel or lot. If a Letter of Compliance has not yet been issued, the property owner must first request a Letter of Compliance from the CFD Administrator. The request from the property owner shall contain a list of all building permits for which the property owner is requesting a Letter of Compliance. The property owner shall also submit the Assessor's Parcels or tract and lot numbers on which the construction is to take place, and the Residential Floor Area for each residential dwelling unit associated with each prospective building permit.

B. Non-Residential Development

After the issuance of the first series of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds, a property owner shall, as a precondition to the approval of a Final Subdivision which includes development of any non-residential property, submit a Letter of Compliance for the development of the non-residential property on such Final Subdivision. If a Letter of Compliance has not yet been issued, the property owner must first request a Letter of Compliance from the CFD Administrator. The request from the property owner shall contain the final map, parcel map, or lot line adjustment for which the property owner is requesting a Letter of Compliance. The property owner shall also submit the Assessor's Parcels or tract and lot numbers on which non-residential development is to take place.

2. Issuance of Letter of Compliance

A. Residential Development

Upon the receipt of a request for a Letter of Compliance, the CFD Administrator shall assign each building permit identified in such request to Land Use Classes 1 through 31 as listed in Table 2 below based on the type of use and, if applicable, the Residential Floor Area identified for each such building permit. When using Table 2, if Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds are secured solely by Assessor's Parcels in the portion of CFD No. 2009-3 (IA No. 1) that does not include the Future Annexation Area, the column entitled "Expected Units/Acreage Without Future Annexation Area" shall be utilized for purposes of this analysis. If Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds are secured by all of CFD No. 2009-3 (IA No. 1), including the Future Annexation Area, the column entitled "Expected Units/Acreage Including Future Annexation Area" shall be utilized for this analysis. If the CFD Administrator determines (i) that the number of building permits requested for each Land Use Class, plus those building permits previously issued for each Land Use Class, will not cause the total number of residential dwelling units within any such Land Use Class to exceed the number of residential dwelling units for such Land Use Class identified in Table 2 below, and (ii) that the total number of residential dwelling units anticipated to be constructed pursuant to the current development plan for CFD No. 2009-3 (IA No. 1) shall not be less than 638, then a Letter of Compliance shall be submitted to the City and/or property owner by the CFD Administrator authorizing the issuance of the requested building permits for the subject property. This Letter of Compliance shall be submitted to the City and/or property owner by the CFD Administrator within ten days of the submittal of the request for a Letter of Compliance by the property owner. However, should (i) the building permits requested, plus those previously issued, cause the total number of

residential dwelling units within any such Land Use Class to exceed the number of residential dwelling units for such Land Use Class identified in Table 2 below, or (ii) the CFD Administrator determines that changes in the development plan may cause a decrease in the number of residential dwelling units within CFD No. 2009-3 (IA No. 1) to below 638 residential dwelling units, then a Letter of Compliance will not be issued and the CFD Administrator will be directed to determine if a Buydown shall be required. The number of residential dwelling units by Land Use Class, as listed in Table 2 below, shall be updated by the CFD Administrator prior to the issuance of the first series of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds to reflect the current development plan for CFD No. 2009-3 (IA No. 1).

B. Non-Residential Development

Upon the receipt of a request for a Letter of Compliance, the CFD Administrator shall identify the Acreage of the proposed Non-Residential Property within the Final Subdivision on which such Non-Residential Property is to be located. When using Table 2, if Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds are secured solely by Assessor's Parcels in the portion of CFD No. 2009-3 (IA No. 1) that does not include the Future Annexation Area, the column entitled "Expected Units/Acreage Without Future Annexation Area" shall be utilized for purposes of this analysis. If Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds are secured by all of CFD No. 2009-3 (IA No. 1), including the Future Annexation Area, the column entitled "Expected Units/Acreage Including Future Annexation Area" shall be utilized for this analysis. If the CFD Administrator determines that the Acreage anticipated for the development of Non-Residential Property will not cause the total number of Acres identified in Table 2 for Land Use Classes 32 through 37 to exceed the number of Acres identified in Table 2 for such Land Use Classes, then a Letter of Compliance shall be submitted to the City and/or property owner by the CFD Administrator authorizing the approval of the Final Subdivision. This Letter of Compliance shall be submitted to the City and/or property owner by the CFD Administrator within ten days of the submittal of the request for a Letter of Compliance by the property owner. However, should the CFD Administrator determine that the changes in the development plan may cause a change to the Acreage anticipated for the development of Non-Residential Property within CFD No. 2009-3 (IA No. 1) to anything other than the Acreage identified for Land Use Classes 32 through 37, then a Letter of Compliance will not be issued and the CFD Administrator will determine if a Buydown shall be required. The Acreage anticipated for the development of Non-Residential Property, as listed in Table 2 below, shall be updated by the CFD Administrator prior to the issuance of the first series of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds to reflect the current development plan for CFD No. 2009-3 (IA No. 1).

TABLE 2

Expected Residential Dwelling Units per Land Use Class and Non-Residential Acreage Improvement Area No. 1 of CFD No. 2009-3

| Land Use Class | Description | Expected Units/ Acreage without Future Annexation | Expected Units/ Acreage with Future Annexation |
|----------------|---|---|--|
| 1 | DETACHED RESIDENTIAL PROPERTY (=> 5,700 SF) | [X] | [X] |
| 2 | DETACHED RESIDENTIAL PROPERTY (5,450 SF - 5,699 SF) | [X] | [X] |
| 3 | DETACHED RESIDENTIAL PROPERTY (5,200 SF - 5,449 SF) | [X] | [X] |
| 4 | DETACHED RESIDENTIAL PROPERTY (4,950 SF - 5,199 SF) | [X] | [X] |
| 5 | DETACHED RESIDENTIAL PROPERTY (4,700 SF - 4,949 SF) | [X] | [X] |
| 6 | DETACHED RESIDENTIAL PROPERTY (4,450 SF - 4,699 SF) | [X] | [X] |
| 7 | DETACHED RESIDENTIAL PROPERTY (4,200 SF - 4,449 SF) | [X] | [X] |
| 8 | DETACHED RESIDENTIAL PROPERTY (3,950 SF - 4,199 SF) | [X] | [X] |
| 9 | DETACHED RESIDENTIAL PROPERTY (3,700 SF - 3,949 SF) | [X] | [X] |
| 10 | DETACHED RESIDENTIAL PROPERTY (3,450 SF - 3,699 SF) | [X] | [X] |
| 11 | DETACHED RESIDENTIAL PROPERTY (3,200 SF - 3,449 SF) | [X] | [X] |
| 12 | DETACHED RESIDENTIAL PROPERTY (2,950 SF - 3,199 SF) | [X] | [X] |
| 13 | DETACHED RESIDENTIAL PROPERTY (2,700 SF - 2,949 SF) | [X] | [X] |
| 14 | DETACHED RESIDENTIAL PROPERTY (2,450 SF - 2,699 SF) | [X] | [X] |
| 15 | DETACHED RESIDENTIAL PROPERTY (2,200 SF - 2,449 SF) | [X] | [X] |
| 16 | DETACHED RESIDENTIAL PROPERTY (1,950 SF - 2,199 SF) | [X] | [X] |
| 17 | DETACHED RESIDENTIAL PROPERTY (1,700 SF - 1,949 SF) | [X] | [X] |
| 18 | DETACHED RESIDENTIAL PROPERTY (< 1,700 SF) | [X] | [X] |
| 19 | ATTACHED RESIDENTIAL PROPERTY (=> 2,600 SF) | [X] | [X] |
| 20 | ATTACHED RESIDENTIAL PROPERTY (2,400 SF - 2,599 SF) | [X] | [X] |
| 21 | ATTACHED RESIDENTIAL PROPERTY (2,200 SF - 2,399 SF) | [X] | [X] |
| 22 | ATTACHED RESIDENTIAL PROPERTY (2,000 SF - 2,199 SF) | [X] | [X] |
| 23 | ATTACHED RESIDENTIAL PROPERTY (1,800 SF - 1,999 SF) | [X] | [X] |
| 24 | ATTACHED RESIDENTIAL PROPERTY (1,600 SF - 1,799 SF) | [X] | [X] |
| 25 | ATTACHED RESIDENTIAL PROPERTY (1,400 SF - 1,599 SF) | [X] | [X] |
| 26 | ATTACHED RESIDENTIAL PROPERTY (1,200 SF - 1,399 SF) | [X] | [X] |
| 27 | ATTACHED RESIDENTIAL PROPERTY (< 1,200 SF) | [X] | [X] |
| 28 | SENIOR HOUSING | [X] | [X] |
| 29 | MODERATE AFFORDABLE | [X] | [X] |
| 30 | MODERATE AFFORDABLE SENIOR UNITS | [X] | [X] |
| 31 | AFFORDABLE UNITS | [X] | [X] |

| Land Use Class | Description | Expected Units/Acreage without Future Annexation | Expected Units/Acreage with Future Annexation |
|----------------|--|--|---|
| 32 | NON-RESIDENTIAL - COMMERCIAL PROPERTY | [X] Acres | [X] Acres |
| 33 | NON-RESIDENTIAL - INDUSTRIAL PROPERTY | [X] Acres | [X] Acres |
| 34 | NON-RESIDENTIAL - INSTITUTIONAL PROPERTY | [X] Acres | [X] Acres |
| 35 | NON-RESIDENTIAL - OFFICE PROPERTY | [X] Acres | [X] Acres |
| 36 | NON-RESIDENTIAL - AUTO CENTER | [X] Acres | [X] Acres |
| 37 | OTHER NON-RESIDENTIAL PROPERTY | [X] Acre | [X] Acres |

3. Calculation of Buydown

If a Buydown calculation is required as determined by the CFD Administrator pursuant to paragraph 2 above, the CFD Administrator shall review the current development plan for CFD No. 2009-3 (IA No. 1) in consultation with the current property owners for all remaining Final Mapped Property and Undeveloped Property in CFD No. 2009-3 (IA No. 1), and shall prepare an updated version of Table 2 identifying the revised number of residential dwelling units anticipated within each Land Use Class and the revised Acreage anticipated for the development of Non-Residential Property, as applicable. The CFD Administrator shall not be responsible for any delays in preparing the updated Table 2 that result from a refusal on the part of one or more current property owners of Final Mapped Property or Undeveloped Property to provide information on their future development.

The CFD Administrator shall then review the updated Table 2 and determine the Buydown Requirement, if any, to be applied to the property identified in the request for Letter of Compliance to assure CFD No. 2009-3 (IA No. 1)'s ability to levy Special Taxes equal to at least the Debt Service Coverage times the debt service necessary to support the Outstanding Bonds. The calculations shall be undertaken by the CFD Administrator, based on the data in the updated Table 2, as follows:

- Step 1. Compute the sum of the Special Taxes authorized to be levied on all Developed Property and Update Property within CFD No. 2009-3 (IA No. 1), plus the sum of the Special Taxes authorized to be levied on all future development as identified in the current development plan assuming buildout, as determined by the CFD Administrator in consultation with the property owner(s).

- Step 2. Determine the amount of Special Taxes equal to the Debt Service Coverage times the debt service necessary to support the Outstanding Bonds.
- Step 3. If the total sum computed pursuant to Step 1 is greater than or equal to the amount computed pursuant to Step 2, then no Buydown will be required and a Letter of Compliance shall be issued by the CFD Administrator for all of the building permits and/or Final Subdivisions currently being requested. If the total sum computed pursuant to Step 1 is less than the amount computed pursuant to Step 2, then continue to step 4.
- Step 4. Determine the Special Tax shortfall by subtracting the total sum computed pursuant to Step 1 from the amount computed pursuant to Step 2. Divide this difference by the amount computed pursuant to Step 2.
- Step 5. Multiply the quotient computed pursuant to Step 4 by the Outstanding Bonds and round up to the nearest increment of \$5,000 to compute the amount of Outstanding Bonds to be retired and prepaid (the "Bond Redemption Amount").
- Step 6. Multiply the Bond Redemption Amount computed pursuant to Step 5 by the applicable redemption premium, if any, on the Outstanding Bonds to be redeemed (the "Redemption Premium").
- Step 7. Compute the amount needed to pay interest on the Bond Redemption Amount from the first bond interest and/or principal payment date following the current Fiscal Year until the redemption date for the Outstanding Bonds ("Defeasance Amount").
- Step 8. The administrative fees and expenses of CFD No. 2009-3 (IA No. 1) are as calculated by the CFD Administrator and include the costs of computation of the Buydown Requirement, the costs to invest the Buydown Requirement proceeds and the costs of redeeming Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds (the "Administrative Fees and Expenses").
- Step 9. The Buydown Requirement is equal to the sum of the amounts computed pursuant to Steps 5, 6, 7 and 8 (the "Buydown Requirement").
- Step 10. The reserve fund credit (the "Reserve Fund Credit") shall equal the lesser of: (a) the expected reduction in the reserve requirement (as specified in the Indenture), if any, associated with the redemption of Outstanding Bonds as a result of the Buydown, or (b) the amount derived by subtracting the new reserve requirement (as defined in the Indenture) in effect after the redemption of Outstanding Bonds as a result of the Buydown from the balance in the reserve fund on the Buydown date, but in no event shall such amount be less than zero. No Reserve Fund Credit shall be granted if the amount then on deposit in the reserve fund for the Outstanding Bonds is below 100% of the reserve requirement (as defined in the Indenture).

The Buydown Requirement computed under Step 9 shall be billed directly to the property owner of each Assessor's Parcel identified in the request for Letter of Compliance and shall be due

within 30 days of the billing date. If the Buydown Requirement is not paid within 45 days of the billing date, a Letter of Compliance will not be issued to the City and/or property owner by the CFD Administrator and the authorization of the requested building permits (for residential development) or Final Subdivision (for non-residential development) for the subject property will not be approved until such Buydown Requirement is paid. Upon receipt of the Buydown Requirement, the CFD Administrator shall issue a Letter of Compliance and a Certificate of Satisfaction of Buydown for the subject property. The Reserve Fund Credit calculated pursuant to Step 10 above shall be credited to the property owner of each Assessor's Parcel identified in the request for Letter of Compliance once the CFD Administrator has confirmed receipt of all Special Taxes due for such property owner(s) in the Fiscal Year the Buydown Requirement was made.

4. Costs and Expenses Related to Implementation of Buydown

The costs of the CFD Administrator or other consultants required to review the application for building permits (for residential development) or a Final Subdivision (for non-residential development) and issue Letters of Compliance, as identified in Sections D1 and D2, above, shall be paid out of the administrative expenses account as established in the Indenture. The property owner of each Assessor's Parcel identified in the request for Letter of Compliance shall pay all costs of the CFD Administrator or other consultants required to calculate the Buydown Requirement, issue Letters of Compliance and any other actions required under Section D3. Such payments shall be due 30 days after receipt of invoice by such property owner. A deposit may be required by the CFD Administrator prior to undertaking work related to the Buydown pursuant to Section D3.

E. METHOD OF APPORTIONMENT OF THE SPECIAL TAX

I. Annual Levy

Commencing with Fiscal Year 20XX-20XX and for each following Fiscal Year, the Council or its designee shall levy the Special Tax as follows:

First: The Special Tax shall be levied on each Assessor's Parcel of Developed Property in an amount equal to 100% of the applicable Maximum Special Tax for Developed Property.

Second: Determine the Final Mapped Property/Undeveloped Property Special Tax Requirement and Proportionately levy the Special Tax on each Assessor's Parcel of Final Mapped Property until the amount levied on Final Mapped Property is equal to the lesser of (i) the Final Mapped Property/Undeveloped Property Special Tax Requirement, or (ii) 100% of the Intermediate Maximum Special Tax for Final Mapped Property.

Third: If additional monies are needed to satisfy the Final Mapped Property/Undeveloped Property Special Tax Requirement after the first two steps have been completed, the Special Tax shall be levied Proportionately on each Assessor's Parcel of Undeveloped Property until the amount levied on Undeveloped Property is equal to the lesser of (i) the Final Mapped Property/Undeveloped Property Special Tax Requirement less the amount levied pursuant to the second step above, or (ii) 100% of the Intermediate Maximum Special Tax for Undeveloped Property.

Fourth: If additional monies are needed to satisfy the Final Mapped Property/Undeveloped Property Special Tax Requirement after the first three steps have been completed, then the Special Tax levy on each Assessor's Parcel of Final Mapped Property and Undeveloped Property shall be increased in equal percentages from the Intermediate Special Tax up to 100% of the Maximum Special Tax for Final Mapped Property and Undeveloped Property.

Fifth: If additional monies are needed to satisfy the Final Mapped Property/Undeveloped Property Special Tax Requirement after the first four steps have been completed, then if required to satisfy the Indenture, a special tax shall be levied on each Assessor's Parcel of taxable property located within the Supplemental Improvement Areas pledged to CFD No. 2009-3 (IA No. 1) Bonds, based on the rate and method of apportionment of special taxes for these Supplemental Improvement Areas.

Sixth: Determine the Taxable Property Owner Association Property/Taxable Public Property Special Tax Requirement and Proportionately levy the Special Tax on each Assessor's Parcel of Taxable Property Owner Association Property until the amount levied on Taxable Property Owner Association Property is equal to the lesser of (i) the Taxable Property Owner Association Property/ Taxable Public Property Special Tax Requirement or (ii) 100% of the Maximum Special Tax for Taxable Property Owner Association Property.

Seventh: If additional monies are needed to satisfy the Taxable Property Owner Association Property/Taxable Public Property Special Tax Requirement after the sixth step has been completed, then the Special Tax shall be levied Proportionately on each Assessor's Parcel of Taxable Public Property until the amount levied on Taxable Public Property is equal to the lesser of (i) the Taxable Property Owner Association Property/ Taxable Public Property Special Tax Requirement less the amount levied pursuant to the sixth step above, or (ii) 100% of the Maximum Special Tax for Taxable Public Property.

2. Supplemental Levy

On or around January 1 and June 1 of each Fiscal Year, if the CFD Administrator determines that there is a shortfall in revenues available to finance the annual amounts necessary to pay the Guaranteed Amount (the "Shortfall"), the CFD Administrator may levy additional Special Taxes Proportionately upon each Assessor's Parcel of Final Mapped Property and Undeveloped Property that are not then delinquent, or reasonably foreseen to be delinquent in the judgment of the CFD Administrator, until the amount levied is equal to the Shortfall. The supplemental levy may occur only twice each Fiscal Year, and the combined amount of the annual levy pursuant to Section E.1 and the supplemental levy pursuant to this Section E.2 on each Assessor's Parcel in any Fiscal Year shall not exceed the Maximum Special Taxes identified in Section C for such Assessor's Parcel. The Shortfall shall be collected by direct billing to owners of such Assessor's Parcels, and the levy shall be due within thirty (30) days of such supplemental levy, and shall be subject to all penalties and interest in the event of delinquency.

F. EXEMPTIONS

1. Prior to Annexation of Future Annexation Area

No Special Tax shall be levied on up to [] acres of Property Owner Association Property and up to [] acres of Public Property in CFD No. 2009-3 (IA No. 1). Tax-exempt status will be assigned by the CFD Administrator in the chronological order in which property in CFD No. 2009-3 (IA No. 1) becomes Public Property or Property Owner Association Property. However, should an Assessor's Parcel no longer be classified as Public Property or Property Owner Association Property, it will, from that point forward, be subject to the Special Tax.

Property Owner Association Property or Public Property that is not exempt from the Special Tax under this section shall be subject to the levy of the Special Tax and shall be taxed Proportionately as part of the sixth step and seventh step in Section E above, respectively, at up to 100% of the applicable Maximum Special Tax for Taxable Property Owner Association Property or Taxable Public Property.

2. After Annexation of Future Annexation Area

No Special Tax shall be levied on up to [] acres of Property Owner Association Property and up to [] acres of Public Property in CFD No. 2009-3 (IA No. 1). Tax-exempt status will be assigned by the CFD Administrator in the chronological order in which property in CFD No. 2009-3 (IA No. 1) becomes Public Property or Property Owner Association Property. However, should an Assessor's Parcel no longer be classified as Public Property or Property Owner Association Property, it will, from that point forward, be subject to the Special Tax.

Property Owner Association Property or Public Property that is not exempt from the Special Tax under this section shall be subject to the levy of the Special Tax and shall be taxed Proportionately as part of the sixth step and seventh step in Section E above, respectively, at up to 100% of the applicable Maximum Special Tax for Taxable Property Owner Association Property or Taxable Public Property.

G. MANNER OF COLLECTION

The Special Tax shall be collected in the same manner and at the same time as ordinary ad valorem property taxes; provided, however, that the City, through the CFD Administrator may (i) directly bill the Special Tax, and/or may collect Special Taxes at a different time or in a different manner if necessary to meet financial obligations, (ii) may directly bill as a result of any Shortfall as set forth in Section E.2 above, and (iii) may covenant to foreclose and may actually foreclose on delinquent Assessor's Parcels. All direct billings shall be due within 30 days of the billing date.

H. APPEALS AND INTERPRETATIONS

Any landowner who feels that the amount of the Special Tax levied on their Assessor's Parcel is in error may submit a written appeal to the CFD Administrator. The CFD Administrator shall review the appeal and if the City concurs, no refund shall be given at that time. However, the amount of the Special Tax levied shall be appropriately modified through an adjustment to the Special Tax levy in the following Fiscal Year. The CFD Administrator may interpret this Rate and Method of Apportionment for purposes of clarifying any ambiguity and make determinations relative to the annual administration of the Special Tax and any landowner appeals.

I. PREPAYMENT OF SPECIAL TAX

Under this Rate and Method of Apportionment, an Assessor's Parcel within CFD No. 2009-3 (IA No. 1) is permitted to prepay a portion of the Maximum Special Tax (the "Prepayable Portion of the Special Tax"). The obligation of the Assessor's Parcel to pay the Prepayable Portion of the Special Tax may be fully or partially prepaid and permanently satisfied as described herein, provided that a prepayment may be made only for Assessor's Parcels of Developed Property, or an Assessor's Parcel of Final Mapped Property or Undeveloped Property for which a building permit for construction has been issued after January 1, 2009, and only if there are no delinquent Special Taxes with respect to such Assessor's Parcel at the time of prepayment. An owner of an Assessor's Parcel intending to fully or partially prepay the Prepayable Portion of the Special Tax shall provide the CFD Administrator with written notice of intent to prepay. Within 30 days of receipt of such written notice, the CFD Administrator shall notify such owner of the prepayment amount for such Assessor's Parcel. The CFD Administrator may charge such owner a reasonable fee for providing this service. If there are Outstanding Bonds, prepayment must be made not less than 30 days prior to a date that notice of redemption of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds from the proceeds of such prepayment may be given by the Trustee pursuant to the Indenture. No portion of the Maximum Special Tax other than the Prepayable Portion of the Special Tax may be prepaid. Only Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds may be redeemed as the result of any prepayment in this Section I. Prior to the issuance of the first series of CFD No. 2009-3 (IA No. 1) Bonds, the percentages identified in Section I and Section J may be changed to reflect changes in development, without the need for any proceedings to make changes permitted under the Act.

1. Full Prepayment of the Prepayable Portion of the Special Tax

The full Prepayment Amount of the Prepayable Portion of the Special Tax shall be the Prepayment Amount identified in Section A below for Residential Property, and the Prepayment Amount identified in Section B below for Non-Residential Property.

A. Residential Property

As of the proposed date of prepayment, the full Prepayment Amount for Residential Property Special Taxes shall be determined by application of the following steps:

- Step 1. Determine the number of future years remaining until the Fiscal Year in which the fortieth anniversary of the date on which the first issue of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds was sold occurs, not including the current Fiscal Year. If Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds have not yet been issued, the number shall be 40.
- Step 2. Determine the Maximum Special Tax being levied in the current Fiscal Year on the Assessor's Parcel prepaying the Special Tax.
- Step 3. Multiply the Maximum Special Tax calculated pursuant to Step 2 by XX.XX% (the "Prepayable Portion of the Residential Property Special Tax").
- Step 4. Determine the amount of Special Tax levied in the current Fiscal Year on such Assessor's Parcel which has not yet been paid and multiply this amount by XX.XX%.
- Step 5. The Prepayment Amount determined under this Section A shall be computed by calculating the sum of the following: (i) the net present value of the flow of annual

revenues from the Prepayable Portion of the Residential Property Special Tax as determined under step 3, for the number of years identified in Step 1, escalated annually by 2.0%, using a discount rate equal to the Discount Rate; and (ii) the unpaid current Fiscal Year's Prepayable Portion of the Residential Property Special Tax as determined under step 4 (collectively, the "Prepayment Amount").

B. Non-Residential Property

As of the proposed date of prepayment, the full Prepayment Amount for Non-Residential Property Special Taxes shall be determined by application of the following steps:

- Step 1. Determine the number of future years remaining until the Fiscal Year in which the fortieth anniversary of the date on which the first issue of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds was sold occurs, not including the current Fiscal Year. If Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds have not yet been issued, the number shall be 40.
- Step 2. Determine the Maximum Special Tax being levied in the current Fiscal Year on the Assessor's Parcel prepaying the Special Tax.
- Step 3. Multiply the Maximum Special Tax calculated pursuant to Step 2 by XX.XX% (the "Prepayable Portion of the Non-Residential Special Tax").
- Step 4. Determine the amount of Special Tax levied in the current Fiscal Year on such Assessor's Parcel which has not yet been paid and multiply this amount by XX.XX%.
- Step 5. The Prepayment Amount determined under this Section B shall be computed by calculating the sum of the following: (i) the net present value of the flow of annual revenues from the Prepayable Portion of the Non-Residential Special Tax as determined under step 3, for the number of year identified in Step 1, escalated annually by 2.0%, using a discount rate equal to the Discount Rate; and (ii) the unpaid current Fiscal Year's Prepayable Portion of the Non-Residential Special Tax as determined under step 4, (collectively, the "Prepayment Amount").

2. Partial Prepayment of the Prepayable Portion of the Special Tax

The amount of the partial prepayment shall be calculated as in Section I.1; except that a partial prepayment shall be calculated according to the following formula:

$$PP = PE \times F$$

These terms have the following meaning:

- PP = the Partial Prepayment Amount of the Prepayable Portion of the Special Tax
PE = the Prepayment Amount of the Prepayable Portion of the Special Tax calculated according to Section I.1.A (for Residential Property) or Section I.1.B (for Non-Residential Property).
F = the percentage, expressed as a decimal, by which the owner of the Assessor's Parcel is partially prepaying the Prepayable Portion of the Special Tax.

3. General Provisions Applicable to Prepayment

a. Use of Prepayments

Subsequent to the issuance of the first series of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds, the Prepayment Amount of the Prepayable Portion of the Special Tax shall be applied in the following order of priority: (i) to be deposited into specific funds established under the Indenture, to fully or partially retire as many Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds as possible (or as many Other Improvement Area Bonds as possible, if the Special Taxes secure Other Improvement Area Bonds), and, if amounts are less than \$5,000, to make debt service payments on the Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds (or Other Improvement Area Bonds if the Special Taxes secure Other Improvement Area Bonds), (ii) to finance Group A Facilities and/or Group B Facilities, as identified in the Amended and Restated Development Agreement, and (iii) to be remitted to the City and used for any Authorized Facilities or Authorized Services in accordance with the Amended and Restated Development Agreement. Prior to the issuance of the first series of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds, the Prepayment Amount of the Prepayable Portion of the Special Tax shall be applied in the following order of priority: (i) to finance Group A and/or Group B Facilities, as identified in the Amended and Restated Development Agreement, and (ii) to be remitted to the City and used for any Authorized Facilities or Authorized Services in accordance with the Amended and Restated Development Agreement.

b. Full Prepayment of the Prepayable Portion of the Special Tax

Upon confirmation of the payment of the current Fiscal Year's entire Prepayable Portion of the Special Tax, the CFD Administrator shall remove the current Fiscal Year's Prepayable Portion of the Special Tax levy for such Assessor's Parcel from the County tax rolls. With respect to any Assessor's Parcel that is prepaid in accordance with Section I.1, the CFD Administrator shall indicate in the records of CFD No. 2009-3 (IA No. 1) that there has been a prepayment of the Prepayable Portion of the Special Tax and that a portion of the Maximum Special Tax with respect to such Assessor's Parcel, equal to XX.XX% of the Maximum Special Tax for Residential Property and XX.XX% of the Maximum Special Tax for Non-Residential Property, shall continue to be levied on such Assessor's Parcel pursuant to Section E.

c. Partial Prepayment of the Prepayable Portion of the Special Tax

Upon confirmation of the payment of a portion of the current Fiscal Year's Prepayable Portion of the Special Tax, the CFD Administrator shall remove a portion of the current Fiscal Year's Prepayable Portion of the Special Tax levy for such Assessor's Parcel from the County tax rolls equal to that amount included in the partial prepayment for such Assessor's Parcel determined in Section I.2. With respect to any Assessor's Parcel that is partially prepaid in accordance with Section I.2, the CFD Administrator shall indicate in the records of CFD No. 2009-3 (IA No. 1) that there has been a partial prepayment of the Prepayable Portion of the Special Tax and that a portion of the Maximum Special Tax with respect to such Assessor's Parcel, equal to the outstanding percentage $[1.00 - (.XXXX \times F)]$ multiplied by the Maximum Special Tax for Residential Property and $[1.00 - (.XXXX \times F)]$ multiplied by the Maximum Special Tax for Non-Residential Property shall continue to be levied on such Assessor's Parcel pursuant to Section E.

d. Debt Service Coverage

Notwithstanding the foregoing, no prepayment of the Prepayable Portion of the Special Tax shall be allowed unless, at the time of such proposed prepayment, the Special Tax that may be levied on Taxable Property within CFD No. 2009-3 (IA No. 1) in all Fiscal Years (after excluding [] acres of Property Owner Association Property and [] acres of Public Property as set forth in Section F), both prior to and after the proposed prepayment, is at least equal to the Debt Service Coverage times the debt service necessary to support the remaining Outstanding Bonds.

J. TERM OF SPECIAL TAX

XX.XX% of the Maximum Special Tax on Residential Property and XX.XX% of the Maximum Special Tax on Non-Residential Property shall terminate and no longer be levied or collected pursuant to this Rate and Method of Apportionment in the Fiscal Year immediately following the fortieth anniversary of the date on which the first series of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds were sold. The remaining portion of the Special Tax for both Residential Property and Non-Residential Property shall be levied into perpetuity.

K. NO EXTENSION OR MODIFICATION OF AMENDED AND RESTATED DEVELOPMENT AGREEMENT

Notwithstanding any reference to the Amended and Restated Development Agreement, nothing herein shall incorporate the Amended and Restated Development Agreement in to the Rate and Method of Apportionment, extend the term of the Amended and Restated Development Agreement, as defined therein, and/or amend or modify the provisions thereof.

*K:\CLIENTS2\Irvine\Great Park\2009\RMMA\CFD No. 2009-3 (Great Park) RMA for DA FINAL - CLEAN.doc
Revised: 8/5/09*

EXHIBIT A

CERTIFICATE TO AMEND SPECIAL TAX

CITY OF IRVINE AND CFD No. 2009-3 (IA No. 1) CERTIFICATE

1. Pursuant to Section C of the Rate and Method of Apportionment, as attached to the Notice of Special Tax Lien, recorded in the Official Records of the County of Orange as Instrument No. XXXXXX on MM/DD/YYYY, the City of Irvine ("City") and City of Irvine Community Facilities District No. 2009-3 ("CFD No. 2009-3 (IA No. 1)") hereby agree to a reduction in the Maximum Special Tax for Residential Property or the special taxes for Non-Residential Property set forth in Table 1 of the Rate and Method of Apportionment for CFD No. 2009-3 (IA No. 1).

The information in Table 1 relating to the Fiscal Year 20XX-20XX Maximum Special Tax for Developed Property within CFD No. 2009-3 (IA No. 1) shall be amended and restated in full as follows:

| Land Use Class | Description | Maximum Special Tax |
|-----------------------|---|----------------------------|
| 1 | DETACHED RESIDENTIAL PROPERTY (=> 5,700 SF) | \$[] per unit |
| 2 | DETACHED RESIDENTIAL PROPERTY (5,450 SF - 5,699 SF) | \$[] per unit |
| 3 | DETACHED RESIDENTIAL PROPERTY (5,200 SF - 5,449 SF) | \$[] per unit |
| 4 | DETACHED RESIDENTIAL PROPERTY (4,950 SF - 5,199 SF) | \$[] per unit |
| 5 | DETACHED RESIDENTIAL PROPERTY (4,700 SF - 4,949 SF) | \$[] per unit |
| 6 | DETACHED RESIDENTIAL PROPERTY (4,450 SF - 4,699 SF) | \$[] per unit |
| 7 | DETACHED RESIDENTIAL PROPERTY (4,200 SF - 4,449 SF) | \$[] per unit |
| 8 | DETACHED RESIDENTIAL PROPERTY (3,950 SF - 4,199 SF) | \$[] per unit |
| 9 | DETACHED RESIDENTIAL PROPERTY (3,700 SF - 3,949 SF) | \$[] per unit |
| 10 | DETACHED RESIDENTIAL PROPERTY (3,450 SF - 3,699 SF) | \$[] per unit |
| 11 | DETACHED RESIDENTIAL PROPERTY (3,200 SF - 3,449 SF) | \$[] per unit |
| 12 | DETACHED RESIDENTIAL PROPERTY (2,950 SF - 3,199 SF) | \$[] per unit |
| 13 | DETACHED RESIDENTIAL PROPERTY (2,700 SF - 2,949 SF) | \$[] per unit |
| 14 | DETACHED RESIDENTIAL PROPERTY (2,450 SF - 2,699 SF) | \$[] per unit |
| 15 | DETACHED RESIDENTIAL PROPERTY (2,200 SF - 2,449 SF) | \$[] per unit |
| 16 | DETACHED RESIDENTIAL PROPERTY (1,950 SF - 2,199 SF) | \$[] per unit |
| 17 | DETACHED RESIDENTIAL PROPERTY (1,700 SF - 1,949 SF) | \$[] per unit |
| 18 | DETACHED RESIDENTIAL PROPERTY (< 1,700 SF) | \$[] per unit |
| 19 | ATTACHED RESIDENTIAL PROPERTY (=> 2,600 SF) | \$[] per unit |
| 20 | ATTACHED RESIDENTIAL PROPERTY (2,400 SF - 2,599 SF) | \$[] per unit |
| 21 | ATTACHED RESIDENTIAL PROPERTY (2,200 SF - 2,399 SF) | \$[] per unit |
| 22 | ATTACHED RESIDENTIAL PROPERTY (2,000 SF - 2,199 SF) | \$[] per unit |
| 23 | ATTACHED RESIDENTIAL PROPERTY (1,800 SF - 1,999 SF) | \$[] per unit |
| 24 | ATTACHED RESIDENTIAL PROPERTY (1,600 SF - 1,799 SF) | \$[] per unit |

| Land Use Class | Description | Maximum Special Tax |
|----------------|---|--|
| 25 | ATTACHED RESIDENTIAL PROPERTY (1,400 SF - 1,599 SF) | \$[] per unit |
| 26 | ATTACHED RESIDENTIAL PROPERTY (1,200 SF - 1,399 SF) | \$[] per unit |
| 27 | ATTACHED RESIDENTIAL PROPERTY (< 1,200 SF) | \$[] per unit |
| 28 | SENIOR HOUSING | \$[] per unit |
| 29 | MODERATE AFFORDABLE UNITS | \$[] per unit |
| 30 | MODERATE AFFORDABLE SENIOR UNITS | \$[] per unit |
| 31 | AFFORDABLE UNITS | \$[] per unit |
| 32 | NON-RESIDENTIAL - COMMERCIAL PROPERTY | \$[] per SF of Non-Residential Floor Area \$[] per Acre |
| 33 | NON-RESIDENTIAL - INDUSTRIAL PROPERTY | \$[] per SF of Non-Residential Floor Area \$[] per Acre |
| 34 | NON-RESIDENTIAL - INSTITUTIONAL PROPERTY | \$[] per SF of Non-Residential Floor Area \$[] per Acre |
| 35 | NON-RESIDENTIAL - OFFICE PROPERTY | \$[] per SF of Non-Residential Floor Area \$[] per Acre |
| 36 | NON-RESIDENTIAL - AUTO CENTER | \$[] per SF of Non-Residential Floor Area \$[] per Acre |
| 37 | OTHER NON-RESIDENTIAL PROPERTY | \$[] per SF of Non-Residential Floor Area \$[] per Acre |

2. Upon execution of the certificate by the City and CFD No. 2009-3 (IA No. 1), the City shall cause an amended notice of Special Tax lien for CFD No. 2009-3 (IA No. 1) to be recorded reflecting the modifications set forth herein.

By execution hereof, the undersigned acknowledges, on behalf of the County and CFD No. 2009-3 (IA No. 1), receipt of this certificate and modification of the Rate and Method of Apportionment as set forth in this certificate.

CITY OF IRVINE

By: _____
CFD Administrator

Date: _____

CITY OF IRVINE COMMUNITY FACILITIES DISTRICT NO. 2009-3

By: _____

Date: _____

EXHIBIT B

ANNUAL AMOUNTS FOR CFD No. 2009-3

| Fiscal Year | Amount |
|--|--|
| 2009-2010 | \$2,000,000 |
| 2010-2011 | \$3,000,000 |
| 2011-2012 | \$4,000,000 |
| 2012-2013 | \$4,000,000 |
| 2013-2014 | \$5,000,000 |
| 2014-2015 | \$9,500,000 |
| Each Fiscal Year Thereafter, Commencing in Fiscal Year 2015-2016 | Increase Amount in Prior Fiscal Year by 3%. |

EXHIBIT C

IDENTIFICATION OF FUTURE ANNEXATION AREA



Public Finance and Urban Economics

5000 Birch Street, Ste. 6000, Newport Beach, CA 92660

IMPLEMENTATION MEMORANDUM August 5, 2009

To: City of Irvine CFD No. 2009-3 Administrator
From: David Taussig and Associates, Inc.
Subject: Pro Rata Share of Guaranteed Amount and Prepayment Percentages

This Implementation Memo has been prepared to explain the methodology that will be used to recalculate the Pro Rata Share¹ and to set the prepayment percentages for any improvement areas ("IA" or "IAs") within CFD No. 2009-3.

I. Pro Rata Share of Guaranteed Amount

Pursuant to the Rate and Method of Apportionment ("RMA") for each of the 11 IAs within City of Irvine CFD No. 2009-3 (Great Park), the amount of Special Taxes levied to satisfy the Guaranteed Amount ("GA") for each IA cannot exceed that IA's Pro Rata Share of the amounts set forth in Exhibit B to the RMA (the "Indexed GA"), except for cases in which tax delinquencies have occurred. This serves as a mechanism to limit the amount of Special Taxes that can be levied on Final Mapped and Undeveloped Property. Once all of the Assessor's Parcels of Taxable Property within an IA have been classified as Developed Property, the actual amount of Special Taxes levied each year will be equal to the Maximum Special Taxes listed in Table 1 of the RMA, and the Pro Rata Share shall not impact the amount of Special Taxes levied (although it does impact the application of the Special Taxes).

In the RMA for each of the 11 IAs, the term GA will be defined as:

"Guaranteed Amount" means for any Fiscal Year, the lesser of (i) the Pro Rata Share for CFD No. 2009-3 (IA No. 1) of the annual amounts set forth in Exhibit B [of the RMA], or (ii) the sum of (a) the Pro Rata Share for CFD No. 2009-3 (IA No. 1) of the amount needed to finance Authorized Services in such Fiscal Year as determined by the City and (b) the Bond Costs associated with any Subordinate Bonds issued on behalf of CFD No. 2009-3 (IA No. 1). Notwithstanding the above, the Guaranteed Amount may exceed the Pro Rata Share for CFD No. 2009-3 (IA No. 1) as discussed in Section E.2 [of the RMA]. The Guaranteed Amount collected in CFD No. 2009-3 (IA No. 1) may be used to finance Authorized Services and to pay Bond Costs associated with Subordinate Bonds issued on behalf of CFD No. 2009-3 (IA No. 1).

¹ Please note that all capitalized terms used herein, unless otherwise indicated, shall have the meanings defined in the Rate and Method of Apportionment for all IAs.

Below is a copy of the Indexed GA, which is referred to in the GA definition above as Exhibit B of each RMA.

Table A: Copy of Exhibit B of each Rate and Method of Apportionment

| Fiscal Year | Annual Amount |
|--|---|
| 2009-10 | \$2,000,000 |
| 2010-11 | \$3,000,000 |
| 2011-12 | \$4,000,000 |
| 2012-13 | \$4,000,000 |
| 2013-14 | \$5,000,000 |
| 2014-15 | \$9,500,000 |
| Each Fiscal Year Thereafter, Commencing in Fiscal Year 2015-2016 | Increase Amount in Prior Fiscal Year by 3% |

On each July 1, commencing July 1, 2015, one year after the Indexed GA will have been increased to \$9,500,000, the Indexed GA shall be increased by an amount equal to three percent (3%) of the amount in effect for the previous Fiscal Year.

In the RMA for each of the 11 IAs, the term Pro Rata Share is defined as:

"Pro Rata Share" means the ratio calculated by dividing the anticipated Maximum Special Tax to be levied at build out in CFD No. 2009-3 (IA No. 1) by the anticipated Maximum Special Tax to be levied at build out for all improvement areas within CFD No. 2009-3. So long as there are no CFD No. 2009-3 (IA No. 1) Bonds outstanding, or Special Taxes being pledged to the payment of Bond Costs for Other Improvement Area Bonds, the City may recalculate the Pro Rata Share to reflect development assumptions which differ from those identified in Table 2 of the rate and method of apportionment for any improvement area of CFD No. 2009-3. Notwithstanding the foregoing, the City shall not recalculate the Pro Rata Share to incorporate any prepayments of the Prepayable Portion of the Special Tax.

It is currently anticipated that at the time of formation of CFD No. 2009-3, the Pro Rata Share for each IA will equal the following percentages:

Table B: Pro Rata Share

| Improvement Area | FY 2014-2015 Total Estimated Maximum Special Tax | Pro Rata Share | FY 2014-2015 Maximum GA* |
|-------------------------|---|-----------------------|---------------------------------|
| No. 1 | \$4,246,398 | 13.49% | \$1,281,133 |
| No. 2 | \$4,060,422 | 12.89% | \$1,225,025 |
| No. 3 | \$3,322,390 | 10.55% | \$1,002,361 |
| No. 4 | \$1,033,560 | 3.28% | \$311,824 |
| No. 5 | \$5,339,732 | 16.96% | \$1,610,991 |
| No. 6 | \$5,343,952 | 16.97% | \$1,612,264 |
| No. 7 | \$0 | 0.00% | \$0 |
| No. 8 | \$134,640 | 0.43% | \$40,621 |
| No. 9 | \$4,973,739 | 15.80% | \$1,500,571 |
| No. 10 | \$3,033,519 | 9.63% | \$915,209 |
| No. 11 | \$0 | 0.00% | \$0 |
| Total | \$31,488,352 | 100.00% | \$9,500,000 |

*Note. The Maximum GA identified assumes the Total Maximum Special Taxes identified are for FY 2014-2015.

Prior to bond issuance, the amounts listed in Table B above for all Non-Fixed IAs (as defined herein) shall be revised by the City whenever Table 1 in the RMA for any IA is amended and restated. All future changes to the Maximum Special Tax and Pro Rata Share (percentages and dollar amounts) reflected in Table B above will be based on the same methodology used at the time of IA formation. The calculations will be based on the formulas listed below, where Maximum Special Tax (“MST”) for each IA will be equal to the Maximum Special Tax anticipated at buildout of that IA based on the approved changes in development assumptions:

$$\begin{aligned} \text{Pro Rata Share for IA No. 1} &= \text{MST}_{\text{IA No. 1}} / \text{MST}_{\sum \text{IA No. 1...11}} \\ \text{Pro Rata Share for IA No. 2} &= \text{MST}_{\text{IA No. 2}} / \text{MST}_{\sum \text{IA No. 1...11}} \\ \text{Pro Rata Share for IA No. 3} &= \text{MST}_{\text{IA No. 3}} / \text{MST}_{\sum \text{IA No. 1...11}} \\ \text{Pro Rata Share for IA No. 4} &= \text{MST}_{\text{IA No. 4}} / \text{MST}_{\sum \text{IA No. 1...11}} \\ \text{Pro Rata Share for IA No. 5} &= \text{MST}_{\text{IA No. 5}} / \text{MST}_{\sum \text{IA No. 1...11}} \\ \text{Pro Rata Share for IA No. 6} &= \text{MST}_{\text{IA No. 6}} / \text{MST}_{\sum \text{IA No. 1...11}} \\ \text{Pro Rata Share for IA No. 7} &= \text{MST}_{\text{IA No. 7}} / \text{MST}_{\sum \text{IA No. 1...11}} \\ \text{Pro Rata Share for IA No. 8} &= \text{MST}_{\text{IA No. 8}} / \text{MST}_{\sum \text{IA No. 1...11}} \\ \text{Pro Rata Share for IA No. 9} &= \text{MST}_{\text{IA No. 9}} / \text{MST}_{\sum \text{IA No. 1...11}} \\ \text{Pro Rata Share for IA No. 10} &= \text{MST}_{\text{IA No. 10}} / \text{MST}_{\sum \text{IA No. 1...11}} \\ \text{Pro Rata Share for IA No. 11} &= \text{MST}_{\text{IA No. 11}} / \text{MST}_{\sum \text{IA No. 1...11}} \end{aligned}$$

To determine the maximum GA for each IA, the CFD administrator will multiply the Pro Rata Share percentages in Table B above, by the Indexed GA for such Fiscal Year, identified in Table A, herein.

However, notwithstanding the above, the Pro Rata Share for a specific IA shall be considered final upon the issuance of bonds for such IA (herein, a "Fixed IA"). All IAs other than the Fixed IAs shall be referred to herein as "Non-Fixed IAs"). For example, if bonds have been issued on behalf of IA No. 1, the Pro Rata Share for IA No. 1 would be finalized (according to the current Table B at 13.49%). Any revisions to the Pro Rata Share amounts for all remaining Improvement Areas would be based on the formula listed below and reflected in an updated Table B:

$$\text{Pro Rata Share for a Non-Fixed IA} = \text{MST for a Non-Fixed IA} / \text{MST} \sum \text{All Non-Fixed IAs}$$

To determine the maximum GA for each Non-Fixed IA in any Fiscal Year, the CFD administrator will multiply (i) the Pro Rata Share percentages calculated pursuant to the formula above, by (ii) the difference between the Indexed GA for such Fiscal Year identified in Table A and the GA for all Fixed IAs for such Fiscal Year (calculated by multiplying the fixed Pro Rata Share of the Fixed IAs by the Indexed GA).

The new Pro Rata Share percentages for each Non-Fixed IA, as calculated by the CFD Administrator using the formula above, shall replace the amounts identified in Table B and shall be used in each Fiscal Year to determine the maximum GA for such Non-Fixed IAs. In addition, Table B shall identify the maximum Pro Rata Share of the GA for FY 2014-2015 to reflect the remaining IAs Pro Rata Share of \$9,500,000.

II. Prepayment Percentages

Two percentage amounts are required to determine the prepayment amounts for Residential Property and Non-Residential Property under Section I of the RMA. These percentage amounts are called Property Prepayment Percentages, and they shall be calculated separately for Residential Property and Non-Residential Property as follows:

Non-Residential Property

- Step 1. For such IA, determine the amount of the Maximum Special Tax identified in Table B above generated by Non-Residential Property or parcels anticipated to become Non-Residential Property ("Total Non-Residential Property MST")
- Step 2. Multiply the total Non-Residential Floor Area expected at buildout for such IA by \$0.25.
- Step 3. Subtract the amount calculated in Step 2 above from the Total Non-Residential Property MST for such IA as determined under Step 1 above and divide by 1.1 ("Prepayable Portion of the Total Non-Residential Property MST").
- Step 4. Divide the amount calculated in Step 3 by the Total Non-Residential Property MST as determined under Step 1 ("Non-Residential Property Prepayment Percentage").

Residential Property

- Step 5. For such IA, determine the Maximum Special Tax expected to be levied on Residential Property (“Total Residential Property MST”).
- Step 6. Determine the GA to be paid by Residential Property or parcels anticipated to become Residential Property for such IA by subtracting the amount calculated in Step 2 above from an amount equal to the Pro Rata Share for such IA multiplied by \$9,500,000 (if this calculation is being done in Fiscal Year 2014-2015), or for each Fiscal Year beyond Fiscal Year 2014-2015 in which this calculation is being made, \$9,500,000 escalated by 2% each Fiscal Year thereafter. . If this calculation is made prior to Fiscal Year 2014-2015, the amount calculated in Step 2 shall be subtracted from an amount equal to the Pro Rata Share for such IA multiplied by \$9,500,000 discounted 2% annually for the number of years remaining until Fiscal Year 2014-2015.
- Step 7. Subtract the amount calculated in Step 6 above from the Total Residential Property MST as determined under Step 5 and divide by 1.1 (“Prepayable Portion of the Total Residential Property MST”).
- Step 8. Divide the amount calculated in Step 7 by the Total Residential Property MST as determined under Step 5 (“Residential Property Prepayment Percentage”).

The Non-Residential Property Prepayment Percentage calculated pursuant to Step 4 above shall be utilized within the RMA as the percentage amounts required in the following places:

- Step 3 and Step 4 in Section I.1.B
- Section I.3.c

In addition, in Section I.3.b of the RMA, the percentage amount that will continue to be levied on Non-Residential Property shall equal (1.0 - Non-Residential Property Prepayment Percentage calculated in Step 4).

The Residential Property Prepayment Percentage calculated pursuant to Step 8 above shall be utilized within the RMA as the percentage amounts required in the following places:

- Step 3 and Step 4 in Section I.1.A
- Section I.3.c

In addition, in Section I.3.b of the RMA, the percentage amount that will continue to be levied on Residential Property shall equal (1.0 - Residential Property Prepayment Percentage calculated in Step 8).

Lastly, in Section J of the RMA, the percentage amount that shall terminate shall equal 1.1 x Non-Residential Property Prepayment Percentage, calculated pursuant to Step 4 above, for Non-residential Property, and for Residential Property, the percentage amount that shall terminate

City of Irvine – (Great Park Implementation Memo)

Page 6

August 5, 2009

shall equal 1.1 x Residential Property Prepayment Percentage, calculated pursuant to Step 8 above.

Example:

Step 1: Non-Res SF = 1,423,417 x 1.32 = 1,878,910.44

Step 2: 1,423,417 x 0.25 = 355,854.25

Step 3: 1,878,910.44-355,854.25=1,523,056.19/1.1=1,384,596.54

Step 4: 1,384,596.54/1,878,910.44=73.69%

Step 5: 638 units x average tax of 3,710.8 =2,367,487.56

Step 6: (Pro Rata Share: 13.49% x 9,500,000) - 355,854.25 = 925,279.20

Step 7: 2,367,487.56-925,279.20=1,442,208.36/1.1=1,311,098.51

Step 8: 1,311,098.51/2,367,487.56=55.38%

K:\CLIENTS2\Irvine\Great Park\2008\Misc\Implementation Memo FINAL.doc

Exhibit T

POLICE SITE TITLE EXCEPTIONS

1. General and special taxes and assessments for the fiscal year in which the conveyance of the Police Site occurs and all subsequent fiscal years.
2. Taxes, bonds and assessments not examined.
3. The lien of supplemental taxes, if any, assessed pursuant to Chapter 3.5 commencing with Section 75 of the California Revenue and Taxation Code.
4. Water rights, claims or title to water, whether or not shown by the public records.
5. An easement for right of way for road and incidental purposes, recorded March 24, 1902 as Book 123 Page 316 of Official Records in favor of The County of Orange.

As modified by that certain easement for right of way for road and incidental purposes, recorded July 1, 1944 as Book 1263 Page 136 of Official Records, that certain Resolution of Board of Supervisors, Orange County California, recorded January 6, 1960 in Book 5050 Page 577 of Official Records, and that certain Certificate of Completion recorded January 14, 2004 as Instrument No. 2004000030076 of Official Records.

6. An easement for Electrical distribution systems and incidental purposes, recorded March 4, 1918 as Book 318 Page 240 and as amended and changed by agreement recorded July 31, 1943 in Book 1204 Page 171 both of Official Records.

In Favor of: Southern California Edison Company
Affects: A portion of the land

As modified by Final Judgment and Decree of Condemnation rendered in the District Court of the United States in and for the Southern District of California, Central District in an action entitled United States of America, Plaintiff VS. 2318.833 acres of land, and others, defendants Case No. 2504-Y Civil, a certified copy of which decree was recorded July 12, 1944 in Book 1264 Page 154 and recorded November 3, 1949 in Book 1923 Page 151, both of Official Records

7. The Terms, Provisions and Easement(s) contained in the document entitled "Quitclaim Deed" recorded July 12, 2005 as Instrument No. 2005-0536288 of Official Records.

Document(s) declaring modifications thereof recorded December 22, 2005 as Instrument No. 2005001023680 of Official Records.

8. The Terms, Provisions, Restrictions (including those set forth in Section 3.9 and 9.1) and any Easement(s) (if any) contained in that certain document entitled "Amended and Restated Development Agreement" to which this Exhibit is attached;

Which amends and restates that certain "Development Agreement" recorded July 12, 2005 as Instrument No. 2005-0538136 of Official Records.

Exhibit T

The interest of Heritage Fields, LLC, a Delaware Limited Liability Company, under the Development Agreement recorded July 12, 2005 as Instrument No. 2005-0538136 of Official Records was assigned to Heritage Fields El Toro, LLC, a Delaware Limited Liability Company, by an instrument recorded December 22, 2005 as Instrument No. 05-1023682 of Official Records.

9. Covenants, conditions, restrictions and easements in the document recorded July 12, 2005 as Instrument No. 2005-0538145 of Official Records (the "Original CC&Rs"), which provide that a violation thereof shall not defeat or render invalid the lien of any first mortgage or deed of trust made in good faith and for value, but deleting any covenant, condition or restriction indicating a preference, limitation or discrimination based on race, color, religion, sex, handicap, familial status, national origin, sexual orientation, marital status, ancestry, source of income or disability, to the extent such covenants, conditions or restrictions violate Title 42, Section 3604(c), of the United States Codes or applicable state law. Lawful restrictions under state and federal law on the age of occupants in senior housing or housing for older persons shall not be construed as restrictions based on familial status.[Note: This exception will be removed upon the termination of the Original CC&Rs pursuant to the provisions of Section 12 of that certain "Amended and Restated Development Agreement" to which this Exhibit is attached.]
10. The fact that the land lies within the boundaries of the Great Park Redevelopment Project Area, as disclosed by the document recorded March 31, 2005 as Instrument No. 2005000242692 and as revised by a document recorded June 19, 2007 as Instrument No. 2007000407641 of Official Records.
11. Easements for water lines and incidental purposes, as set out in decree entered August 27, 1953 and supplemental judgment entered July 7, 1960 and upon the terms and conditions contained therein, in the matter of the United States of America vs. The Irvine Company and others in the United States District Court Southern District of California, Central Division Case No. 15821-WB civil certified copies of which decrees were respectively recorded September 1, 1953 in Book 2567 Page 100; July 13, 1960 in Book 5327 Page 139 and October 31, 1978 in Book 12904 Page 1756, all of Official Records.
12. Any and all offers of dedication, conditions, restrictions, easements, fence line/boundary discrepancies, notes and/or provisions shown or disclosed on Parcel Map 2006-271, upon the recordation of any final map.
13. Any and all offers of dedication, conditions, restrictions, easements, fence line/boundary discrepancies, notes and/or provisions shown or disclosed on Approved Tentative Tract Map 17008 (as amended), upon the recordation of any final map.
14. Any and all offers of dedication, conditions, restrictions, easements, fence line/boundary discrepancies, notes and/or provisions shown or disclosed on Approved Tentative Map 17283, upon the recordation of any final map.
15. An easement for underground power transmission facilities reserved for the benefit of Heritage Fields El Toro, LLC (which is assignable to SCE or any other applicable utility company) in the approximate location shown on Exhibit F to that certain document entitled "Amended and Restated Development Agreement" to which this Exhibit is attached.
16. A license to carry out the obligations of Heritage Fields under the Amended and Restated Master Implementation Agreement by and between the City of Irvine and Heritage Fields El Toro, LLC (the "Amended MIA"), as set forth in the Amended MIA.

Exhibit T

17. With respect to those portions of the Police Site on which The United States of America retained one or more Leases in Furtherance of Conveyance, the Terms, Provisions, Restrictions and Easement(s) contained and/or reserved in one or more Quitclaim Deed(s) to be granted by The United States of America in connection with the conveyance of the Police Site (or portions thereof) to Heritage Fields El Toro, LLC following the issuance of a Finding of Suitability to Transfer, including easements and other rights for the maintenance and exclusive use of and provision and maintenance for support of structures owned by the United States of America and incidental purposes.
18. Easement rights held (or to be contained and/or reserved in one or more Quitclaim Deed(s) to be granted by The United States of America) by the United States of America relating to access/egress, installation, maintenance and removal of monitoring wells located on the property.

Exhibit U

ARDA TRANSFER SITE TITLE EXCEPTIONS

1. General and special taxes and assessments for the fiscal year in which the conveyance of the ARDA Transfer Site occurs and all subsequent fiscal years.
2. Taxes, bonds and assessments not examined.
3. The lien of supplemental taxes, if any, assessed pursuant to Chapter 3.5 commencing with Section 75 of the California Revenue and Taxation Code.
4. Water rights, claims or title to water, whether or not shown by the public records.
5. An easement for Sanitary sewer, storm drains, pipelines, public utilities and incidental purposes, recorded March 26, 1996 as Instrument No. 199960144770 of Official Records.

In Favor of: The County of Orange
Affects: A portion of vacated Trabuco Road

6. The Terms, Provisions and Easement(s) contained in the document entitled "Quitclaim Deeds" recorded July 12, 2005 as Instrument No. 2005-0536290 of Official Records.

Said instrument was modified by deed recorded December 22, 2005 as Instrument No. 2005001023680 of Official Records.

7. An easement for Ingress, egress and the installation, operation, maintenance and repair of utilities and maintenance and exclusive use of and provision and maintenance for support of structures owned by the United States of America and incidental purposes, recorded July 12, 2005 as Instrument No. 2005-0536290 all of Official Records.

In Favor of: United States of America, acting by and through the
Department of the Navy
Affects: As provided in said instruments

8. A leasehold estate as created by that certain for the term, and upon the terms, covenants and conditions therein provided; Lessor: United States of America, acting by and through the Department of the Navy; Lessee: Heritage Fields, LLC, a Delaware Limited Liability Company; Dated: July 12, 2005; Recorded: July 12, 2005 as Instrument No. 2005-053291 of Official Records

Terms, provisions and conditions contained in an instrument entitled "Assignment and Assumption of Leases", executed by and between Heritage Fields LLC, a Delaware Limited Liability Company and Heritage Fields El Toro, LLC, a Delaware Limited Liability Company and recorded December 22, 2005 as Instrument No. 2005001023681 of Official Records.

9. The Terms, Provisions, Restrictions (including those set forth in Section 3.9) and any Easement(s) (if any) contained in that certain document entitled "Amended and Restated Development Agreement" to which this Exhibit is attached;

Exhibit U

Which amends and restates that certain "Development Agreement" recorded July 12, 2005 as Instrument No. 2005-0538136 of Official Records.

The interest of Heritage Fields LLC, a Delaware Limited Liability Company, under the Development Agreement recorded July 12, 2005 as Instrument No. 2005-0538136 of Official Records was assigned to Heritage Fields El Toro, LLC, a Delaware Limited Liability Company, by an instrument recorded December 22, 2005 as Instrument No. 05-1023682 of Official Records.

10. Covenants, conditions, restrictions and easements in the document recorded July 12, 2005 as Instrument No. 2005-0538145 of Official Records (the "Original CC&Rs"), which provide that a violation thereof shall not defeat or render invalid the lien of any first mortgage or deed of trust made in good faith and for value, but deleting any covenant, condition or restriction indicating a preference, limitation or discrimination based on race, color, religion, sex, handicap, familial status, national origin, sexual orientation, marital status, ancestry, source of income or disability, to the extent such covenants, conditions or restrictions violate Title 42, Section 3604(c), of the United States Codes or applicable state law. Lawful restrictions under state and federal law on the age of occupants in senior housing or housing for older persons shall not be construed as restrictions based on familial status. [Note: This exception will be removed upon the termination of the Original CC&Rs pursuant to the provisions of Section 12 of that certain "Amended and Restated Development Agreement" to which this Exhibit is attached.]
11. The fact that the land lies within the boundaries of the Great Park Redevelopment Project Area, as disclosed by the document recorded March 31, 2005 as Instrument No. 200500242692 and as revised by a document recorded June 19, 2007 as Instrument No. 2007000407641 of Official Records both of Official Records.
12. Any and all offers of dedication, conditions, restrictions, easements, fence line/boundary discrepancies, notes and/or provisions shown or disclosed by Tentative Tract Map. No. 17008 (as amended), upon the recordation of such final map.
13. Any and all offers of dedication, conditions, restrictions, easements, fence line/boundary discrepancies, notes and/or provisions shown or disclosed by Parcel Map No. 2006-271, upon the recordation of such final map.
14. A license to carry out the obligations of Heritage Fields under the Amended and Restated Master Implementation Agreement by and between the City of Irvine and Heritage Fields El Toro, LLC (the "Amended MIA"), as set forth in the Amended MIA.
14. With respect to those portions of the ARDA Transfer Site on which The United States of America retained one or more Leases in Furtherance of Conveyance, the Terms, Provisions, Restrictions and Easement(s) contained and/or reserved in one or more Quitclaim Deed(s) to be granted by The United States of America in connection with the conveyance of the ARDA Transfer Site (or portions thereof) to Heritage Fields El Toro, LLC following the issuance of a Finding of Suitability to Transfer, including easements and other rights for the maintenance and exclusive use of and provision and maintenance for support of structures owned by the United States of America and incidental purposes.

BINGHAM

1/12 RETURNED CC. CLARK
FILE

Edward S. Merrill
Direct Phone: 415.393.2335
Direct Fax: 415.262.9228
doc.merrill@bingham.com
Our File No.: 0000335426

January 5, 2011

Via FedEx

City of Irvine
City Hall
One Civic Center Plaza
Irvine, CA 92623-9675
Attn: Sean Joyce, City Manager

Re: Mortgagee Notice

Dear Mr. Joyce:

We represent State Street Bank & Trust Co. As you may know, State Street recently closed an acquisition and restructuring of the mortgage loan encumbering the Heritage Fields Property. Enclosed is State Street's letter notifying the City of State Street's status as Mortgagee with respect to the Amended and Restated Development Agreement concerning the Heritage Fields Property.

Please have the City of Irvine acknowledge receipt of the letter by signing and dating where indicated and returning to me at the address shown on our letterhead.

Thank you for your cooperation.

Very truly yours,


Edward S. Merrill

Enclosure

cc: Rutan & Tucker, Attn: Phil Kohn, Irvine City Atty (w/encl.) (via Fed. Exp.)
Michael Alvarado (w/encl.) (via Email)
Michael Damast (w/encl.) (via Email)

Boston
Hartford
Hong Kong
London
Los Angeles
New York
Orange County
San Francisco
Santa Monica
Silicon Valley
Tokyo
Washington

Bingham McCutchen LLP
Three Embarcadero Center
San Francisco, CA
94111-4067

T +1.415.393.2000
F +1.415.393.2286
bingham.com



STATE STREET.

Global Treasury Division
State Street
Financial Center
One Lincoln Street
Boston, MA 02111-2900

January 5, 2011

City of Irvine (the "City")
City Hall
One Civic Center Plaza
Irvine, California 92623-9575
Attention: Director of Community Development

Rutan & Tucker, LLP
611 Anton Blvd., Suite 1400
Costa Mesa, California 92626
Attention: Irvine City Attorney

Re: Mortgagee Notice

Ladies and Gentlemen:

Reference is made to that certain Amended and Restated Development Agreement (the "Agreement"), dated as of December 29, 2010, by and among the City, the Irvine Redevelopment Agency and Heritage Fields El Toro, LLC, a Delaware limited liability company ("Heritage Fields"). Except as otherwise defined in this letter, defined terms herein shall have the meaning given to such terms in the Agreement.

State Street Bank and Trust Company, a Massachusetts trust company ("State Street") is now a Mortgagee with respect to the Heritage Fields Property. Pursuant to the terms of Section 16.4 of the Agreement, upon written request to the City, a Mortgagee is entitled to receive written notice from the City of the results of the Annual Review and of any default by Heritage Fields under the Agreement.

In accordance with Section 16.4 of the Agreement, State Street hereby requests to receive the notices described in Section 16.4. All such notices or communications shall be given to State Street at addresses set forth below:

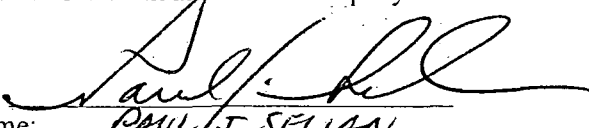
State Street Bank and Trust Company
One Lincoln Street
Boston, MA 02111
Attention: Paul J. Selian, Q. Sophie Yang, and Robert S. Emslie
Telephone: (617) 664-0374
Facsimile: (617) 664-2637

and
State Street Bank and Trust Company
Copley Place, Tower 1, Floor 2
Boston, MA 02116
Attention: Bruce M. Denneen
Telephone: (617) 662-7280
Facsimile: (617) 664-5650

Please acknowledge your receipt of this notice with your countersignature below and returning an original to Mortgagee at the address set forth above.

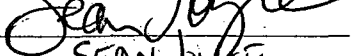
Sincerely,

State Street Bank and Trust Company

By: 
Name: PAUL J. SULLIVAN
Title: E. V. PRESIDENT

Acknowledged and agreed to
this ___ day of January, 2011:

CITY OF IRVINE,
a municipal corporation

By: 
Name: SEAN JOYCE
Title: CITY MANAGER

THIS DOCUMENT WAS PREPARED BY,
AND AFTER RECORDING RETURN TO:

O.C. Property Company, LLC
c/o Broadcom Corporation
1110 American Parkway NE
Allentown, PA 18109
Attn: Paul Bento, Esq.

(Space Above for Recorder's Use)

**PARTIAL ASSIGNMENT AND ASSUMPTION OF DEVELOPMENT AGREEMENT AND
SITE SPECIFIC APPROVALS**

THIS PARTIAL ASSIGNMENT AND ASSUMPTION OF DEVELOPMENT AGREEMENT AND SITE SPECIFIC APPROVALS ("**Assignment Agreement**") is made as of the ___ day of _____, 2017, by and between O.C. PROPERTY COMPANY, LLC, a Delaware limited liability company, doing business in California under the name Red Pipe Property Company, LLC ("**Assignor**"), and FIVE POINT OFFICE VENTURE I, LLC, a Delaware limited liability company ("**Assignee**"), with reference to the following facts:

A. HERITAGE FIELDS EL TORO, LLC, a Delaware limited liability company ("**HFET**"), as assignor, and Assignor, as assignee, entered into that certain Partial Assignment and Assumption of Development Agreement and Site Specific Approvals dated as of March 10, 2015, and recorded in the Official Records of Orange County, California, on March 10, 2015 as Instrument Number 2015000123655 (the "**DA Assignment**"), which is hereby incorporated herein by this reference. Capitalized terms used and not otherwise defined herein shall have the meaning ascribed to such terms in the DA Assignment.

B. Pursuant to the DA Assignment, HFET assigned to Assignor, and Assignor assumed from HFET, subject to the terms, conditions and restrictions set forth in the DA Assignment, the Assigned Interests and the Site Specific Approvals with respect to the Assigned Parcels, which are also described on **Exhibit A** attached hereto and incorporated herein by this reference.

C. Based on Assignee's exercise of certain repurchase option rights, Assignee has agreed to purchase, and Assignor has agreed to sell, the Assigned Parcels, in each case, upon terms and conditions ("**Purchase Agreement Terms**") more particularly set forth in that certain Agreement of Purchase and Sale and Joint Escrow Instructions dated March 10, 2017 previously executed by Assignor, as seller, and Bravo Strategies III, a Delaware limited liability company, as buyer.

D. In conjunction with the conveyance of the Assigned Parcels to Assignee, Assignor desires to assign to Assignee, and Assignee desires to assume, all of Assignor's rights, duties and obligations with respect to the Assigned Interests and the Site Specific Approvals subject to the terms, conditions and restrictions set forth in this Assignment Agreement.

NOW THEREFORE, in consideration of the foregoing facts and the mutual covenants and conditions herein below set forth, it is agreed:

1. Effective Date. This Assignment Agreement shall become effective upon the recordation in the Official Records of Orange County, California, of a grant deed conveying the Assigned Parcels from Assignor to Assignee (the "**Effective Date**").

2. Assignment of Interests. From and after the Effective Date, Assignor hereby assigns and transfers to Assignee the Assigned Interests, subject to the terms, conditions and restrictions set forth in this Assignment Agreement.

3. Assumption of Assigned Interests; Assignee to become Party. From and after the Effective Date, Assignee hereby assumes all of the Assigned Interests with respect to the Assigned Parcels, subject to the terms, conditions and restrictions set forth in this Assignment Agreement. From and after the Effective Date, and in accordance with Section 17.2 of the Development Agreement, Assignee shall become substituted for Assignor as "Heritage Fields," "Owner" and "Party" under the Development Agreement solely with respect to the Assigned Parcels and the Assigned Interests, and, subject to the City's consent to this Assignment Agreement as evidenced by the City's execution of the attached Consent, Assignor shall be unconditionally and irrevocably released, from and after the Effective Date, from the Assigned Interests.

4. Site Specific Approvals. From and after the Effective Date, Assignor hereby assigns and transfers to Assignee and Assignee hereby assumes all of the Site Specific Approvals with respect to the Assigned Parcels, subject to the terms, conditions and restrictions set forth in this Assignment Agreement.

5. NITM Fee. Consistent with Section 3 above, Assignee shall have the right to receive a Certificate of NITM Compliance with respect to the Assigned Parcels in accordance with Section 6.13 of the Development Agreement.

6. Annual Review of Development Agreement Compliance; Assignee Responsibilities. Assignee shall participate in the annual review of the Development Agreement conducted pursuant to California Government Code Section 65865.1 with respect to the Assigned Parcels and the Assigned Interests arising under or relating to the Development Agreement, and Assignor shall have no responsibility therefor.

7. Miscellaneous.

(a) Counterparts. This Assignment Agreement may be executed in counterparts which taken together shall constitute one and the same instrument.

(b) Successors and Assigns. The provisions of this instrument shall be binding upon and inure to the benefit of Assignor and Assignee and their respective successors and assigns.

(c) Further Assurances. Assignor and Assignee each hereby covenants that it will, at any time and from time to time, execute any documents and take such additional actions as the other, or its respective successors or assigns, shall reasonably require in order to more completely or perfectly carry out the transfers intended to be accomplished by this Assignment Agreement.

(d) Governing Law. This Assignment Agreement shall be construed and interpreted in accordance with the laws of the State of California.

(e) Severability. Consistent with Section 20.7 of the Development Agreement, if any term or provision of this Assignment Agreement or the application thereof to any person or circumstance is found by a court of competent jurisdiction to be invalid or unenforceable, the remainder of this Assignment Agreement, or the application of such term or provision to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected thereby, and each remaining term and provision of this Assignment Agreement shall be valid and enforceable to the full extent permitted by law; unless and to the extent the rights and obligations or the benefits of the bargain for either Assignor or Assignee as derived from this Assignment Agreement have been materially altered or abridged by such holding or action, as determined by the party who would have benefited.

(f) Notices. In accordance with Section 20.12 of the Development Agreement, from and after the Effective Date of this Assignment Agreement, the Assignee shall be considered a "Party" with respect to the Assigned Parcels and Assignee designates the following initial addresses for Notices in accordance with Section 20.12 of the Development Agreement:

If to Assignee:

Five Point Office Venture I, LLC
25 Enterprise, Suite 300
Aliso Viejo, California 92656
Attention: Legal Notices
Fax: (949) 349-1075

(g) Estoppel Certificates. From and after the Effective Date, Assignee may exercise the rights of a "Party" (as that term is defined in the Development Agreement) pursuant to Development Agreement section 20.9.

(h) No Waiver. Failure by a party to insist upon the strict performance of any of the provisions of this Assignment Agreement by any other party, or the failure by a party to exercise its rights upon the default of the other party, shall not constitute a waiver of such party's right to insist and demand strict compliance by the other parties with the terms of this Assignment Agreement thereafter.

(i) Amendments. Any amendments or modifications to this Assignment Agreement must be in writing, signed by duly authorized representatives of each of the parties hereto, and recorded in the Official Records of Orange County, California.

(e) Authority. Each party represents and warrants that the person executing this Assignment Agreement on behalf of such party has the authority to bind such party to the performance of its obligations hereunder and that all necessary board of directors', shareholders', partners', members', managers', and other approvals have been obtained.

[SIGNATURE PAGES TO FOLLOW]

IN WITNESS WHEREOF, Assignor and Assignee have executed this Assignment Agreement as of the date first set forth above.

"ASSIGNOR"

O.C. PROPERTY COMPANY, LLC, a Delaware limited liability company, doing business in California under the name Red Pipe Property Company, LLC

By: _____
Name: Thomas H. Krause, Jr.
Title: Chief Financial Officer

ALL-PURPOSE ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF _____

COUNTY OF _____

On _____ before me, _____ (here insert name and title of the officer), personally appeared _____ who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

Assignor Signature Page
for Partial Assignment and
Assumption of
Development Agreement
and Site Specific Approvals

"ASSIGNEE"

FIVE POINT OFFICE VENTURE I, LLC,
a Delaware limited liability company

By: _____
Name: _____
Title: _____

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA

COUNTY OF _____

On _____ before me, _____ (here insert name and title of the officer), personally appeared _____ who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

Assignee Signature Page
for Partial Assignment and
Assumption of
Development Agreement
and Site Specific Approvals

CONSENT AND ESTOPPEL BY CITY

The foregoing Partial Assignment and Assumption of Development Agreement and Site Specific Approvals ("Assignment Agreement") to which this Consent and Estoppel by City ("Consent and Estoppel") is attached is hereby acknowledged and agreed to by THE CITY OF IRVINE, a California charter city ("City"). By its execution hereof, the City hereby: (i) consents to the partial assignment of the Development Agreement to Assignee pursuant to this Assignment Agreement, and, accordingly, pursuant to Section 17.3 of the Development Agreement, from and after the Effective Date, Assignor shall be relieved of its legal duty to perform the Assigned Interests (except to the extent of any default by Assignor in respect of the Assigned Interests which accrued prior to the Effective Date); (ii) pursuant to Section 20.9 of the Development Agreement, certifies that, to its best knowledge, the Development Agreement is in full force and effect and a binding obligation upon the City and Assignor, and has not been modified or amended and Assignor is not in default in the performance of any of the Assigned Interests under the Development Agreement; and (iii) acknowledges that the approvals and plans referred to in the ARDA Letter Agreements are considered the Existing Land Use Regulations and the applicable ARDA Overlay Plan and are accordingly afforded the vested rights protection of the Development Agreement.

"CITY"

CITY OF IRVINE,
a California charter city

By: _____

Name: _____

Title: _____

ATTEST:

Name: _____

City Clerk

APPROVED AS TO FORM FOR CITY:

 _____

Name: Jeffrey Melching

City Attorney

City Signature Page for
Partial Assignment and
Assumption of
Development Agreement
and Site Specific Approvals

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA

COUNTY OF _____

On _____ before me, _____ (here insert name and title of the officer), personally appeared _____ who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

JOINDER BY SUCCESSOR AGENCY

The foregoing Partial Assignment and Assumption of Development Agreement and Site Specific Approvals ("Assignment Agreement") to which a Consent and Estoppel by the City is attached, is hereby acknowledged by the SUCCESSOR AGENCY OF THE IRVINE REDEVELOPMENT AGENCY (the "Successor Agency"). By its execution hereof, the Successor Agency hereby further acknowledges that in accordance with Section 3.13 no consent or action by the Successor Agency is required for any of the transactions or activities contemplated by the Assignment Agreement.

"SUCCESSOR AGENCY"

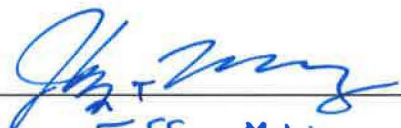
SUCCESSOR AGENCY OF THE IRVINE REDEVELOPMENT AGENCY

By: _____
Name: Sean Joyce
Title: Executive Director, Irvine Successor Agency

ATTEST:

Name: _____
[title]

APPROVED AS TO FORM FOR SUCCESSOR AGENCY:



Name: Jeffrey Meldoy
{TITLE} Agency Counsel

Successor Agency
Signature Page for Partial
Assignment and
Assumption of
Development Agreement
and Site Specific Approvals

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA

COUNTY OF _____

On _____ before me, _____ (here insert name and title of the officer), personally appeared _____ who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

EXHIBIT A

TO

PARTIAL ASSIGNMENT AND ASSUMPTION OF DEVELOPMENT AGREEMENT

LEGAL DESCRIPTION OF ASSIGNED PARCELS

Real property in the City of Irvine, County of Orange, State of California, described as follows:

LOTS 1 THROUGH 17, INCLUSIVE, AND LOTS A THROUGH E, INCLUSIVE OF PARCEL MAP 2014-122, IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA, AS PER MAP FILED IN BOOK 384, PAGES 1 THROUGH 10, INCLUSIVE, OF PARCEL MAPS IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

CITY COUNCIL RESOLUTION NO. 17-XX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, APPROVING THE ASSIGNMENT AND ASSUMPTION OF CERTAIN OBLIGATIONS UNDER THE APPROVED AMENDED AND RESTATED DEVELOPMENT AGREEMENT (00470035-PDA) BY AND BETWEEN THE CITY OF IRVINE, CITY OF IRVINE AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY AND O.C. PROPERTY COMPANY, LLC TO FIVE POINT OFFICE VENTURE I LLC FOR THE GREAT PARK NEIGHBORHOODS DEVELOPMENT DISTRICT 3 CORPORATE CAMPUS PROJECT LOCATED IN PLANNING AREA 51

WHEREAS, on September 8, 2009, the City Council of the City of Irvine adopted Ordinance No. 09-09 approving a the Amended and Restated Development Agreement (ARDA) between the City of Irvine, City of Irvine as Successor Agency to the Dissolved Irvine Redevelopment Agency and Heritage Fields El Toro LLC; and

WHEREAS, O.C. Property Company LLC is the current holder of certain rights and obligations under the ARDA that relate to the development of the Broadcom Campus on property bisected by Marine Way in Planning Area 51, near the entrance to the Orange County Great Park (Broadcom Campus); and

WHEREAS, O.C. Property Company LLC (“Developer”) has informed the City that it intends to sell the Broadcom Campus , and in connection with that sale, desires to assign certain of the rights and obligations under the ARDA to Five Point Office Venture I LLC; and

WHEREAS, Under Section 17 of the ARDA Developer (i) has the “right to assign” its rights and obligations under the ARDA in connection with a transfer of its interest in the property, subject to City’s consent pursuant to Section 17.3, (ii) following an assignment or transfer of any of the rights and interests of the Developer, the assignee’s exercise, use, and enjoyment of the Property shall be subject to the terms of this ARDA to the same extent (iii) upon written consent of City to the partial assignment and the express written assumption in a form approved by City of such assigned obligations of the Developer under this ARDA by the assignee, the Developer shall be relieved of its legal duty to perform the assigned obligations set forth in this agreement, except to the extent the Developer is in default hereunder prior to said transfer; and

WHEREAS, Five Point Office Venture I LLC, as the assignee, possesses reasonable ownership structure, sufficient management and extensive development

experience to complete the Broadcom Campus project as described in the ARDA and project site approvals; and

WHEREAS, the Developer, City, and the Successor Agency have jointly prepared forms of Partial Assignment and Assumption of Development Agreement for O.C. Property Company, LLC and Five Point Office Venture I LLC, copies of which are attached hereto and incorporated herein as Exhibit 1, that are to be executed within 30 days of City Council adoption of this resolution.

NOW THEREFORE BE IT RESOLVED that the City Council does hereby resolve as follows:

SECTION 1. The above recitals are true and correct and incorporated herein.

SECTION 2. City of Irvine staff concluded that Five Point Office Venture I LLC, possess reasonable ownership structure, sufficient management and extensive development experience to complete the Broadcom Campus project as described in the ARDA and project site approvals.

SECTION 3. Section 17.3 of the ARDA releases Developer from the assigned obligations of the ARDA upon complete assignment/transfer of the ARDA. As required by Section 17.3, Developer, has obtained the City's and Successor Agency's approval of the form of Partial Assignment and Assumption of Development Agreement for Five Point Office Venture I LLC.

Pursuant to the foregoing recitals, City finds and determines that Developer has provided (i) sufficient evidence and documentation demonstrating that Five Point Office Venture I LLC has the experience and management competence to carry out development of the project described in the ARDA in accordance with the terms of the ARDA, (ii) sufficient evidence that Developer is transferring all of its interest in the Property, and (iii) assignment and assumption agreements to be executed that specifies Five Point Office Venture I LLC, along with any lawful successors, will continue to assume all of the rights and obligations under the ARDA. Therefore, the proposed assignment of the ARDA to Five Point Office Venture I LLC is hereby approved.

PASSED AND ADOPTED by the City council of the City of Irvine at a regular meeting held on the 8th day of August 2017.

MAYOR OF THE CITY OF IRVINE

ATTEST:

CITY CLERK OF THE CITY OF IRVINE

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing Resolution was duly adopted at a regular meeting of the City Council of the City of Irvine on the 8th day of August 2017, by the following vote:

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

ABSTAIN: COUNCILMEMBERS:

CITY CLERK OF THE CITY OF IRVINE

PARTIAL ASSIGNMENT AND ASSUMPTION AGREEMENTS

FOR

O.C. PROPERTY COMPANY, LLC

AND

FIVE POINT OFFICE VENTURE I, LLC

[See following pages]

EXHIBIT 1

THIS DOCUMENT WAS PREPARED BY,
AND AFTER RECORDING RETURN TO:

O.C. Property Company, LLC
c/o Broadcom Corporation
1110 American Parkway NE
Allentown, PA 18109
Attn: Paul Bento, Esq.

(Space Above for Recorder's Use)

**PARTIAL ASSIGNMENT AND ASSUMPTION OF DEVELOPMENT AGREEMENT AND
SITE SPECIFIC APPROVALS**

THIS PARTIAL ASSIGNMENT AND ASSUMPTION OF DEVELOPMENT AGREEMENT AND SITE SPECIFIC APPROVALS ("**Assignment Agreement**") is made as of the ___ day of _____, 2017, by and between O.C. PROPERTY COMPANY, LLC, a Delaware limited liability company, doing business in California under the name Red Pipe Property Company, LLC ("**Assignor**"), and FIVE POINT OFFICE VENTURE I, LLC, a Delaware limited liability company ("**Assignee**"), with reference to the following facts:

A. HERITAGE FIELDS EL TORO, LLC, a Delaware limited liability company ("**HFET**"), as assignor, and Assignor, as assignee, entered into that certain Partial Assignment and Assumption of Development Agreement and Site Specific Approvals dated as of March 10, 2015, and recorded in the Official Records of Orange County, California, on March 10, 2015 as Instrument Number 2015000123655 (the "**DA Assignment**"), which is hereby incorporated herein by this reference. Capitalized terms used and not otherwise defined herein shall have the meaning ascribed to such terms in the DA Assignment.

B. Pursuant to the DA Assignment, HFET assigned to Assignor, and Assignor assumed from HFET, subject to the terms, conditions and restrictions set forth in the DA Assignment, the Assigned Interests and the Site Specific Approvals with respect to the Assigned Parcels, which are also described on **Exhibit A** attached hereto and incorporated herein by this reference.

C. Based on Assignee's exercise of certain repurchase option rights, Assignee has agreed to purchase, and Assignor has agreed to sell, the Assigned Parcels, in each case, upon terms and conditions ("**Purchase Agreement Terms**") more particularly set forth in that certain Agreement of Purchase and Sale and Joint Escrow Instructions dated March 10, 2017 previously executed by Assignor, as seller, and Bravo Strategies III, a Delaware limited liability company, as buyer.

D. In conjunction with the conveyance of the Assigned Parcels to Assignee, Assignor desires to assign to Assignee, and Assignee desires to assume, all of Assignor's rights, duties and obligations with respect to the Assigned Interests and the Site Specific Approvals subject to the terms, conditions and restrictions set forth in this Assignment Agreement.

NOW THEREFORE, in consideration of the foregoing facts and the mutual covenants and conditions herein below set forth, it is agreed:

1. Effective Date. This Assignment Agreement shall become effective upon the recordation in the Official Records of Orange County, California, of a grant deed conveying the Assigned Parcels from Assignor to Assignee (the "**Effective Date**").

2. Assignment of Interests. From and after the Effective Date, Assignor hereby assigns and transfers to Assignee the Assigned Interests, subject to the terms, conditions and restrictions set forth in this Assignment Agreement.

3. Assumption of Assigned Interests; Assignee to become Party. From and after the Effective Date, Assignee hereby assumes all of the Assigned Interests with respect to the Assigned Parcels, subject to the terms, conditions and restrictions set forth in this Assignment Agreement. From and after the Effective Date, and in accordance with Section 17.2 of the Development Agreement, Assignee shall become substituted for Assignor as "Heritage Fields," "Owner" and "Party" under the Development Agreement solely with respect to the Assigned Parcels and the Assigned Interests, and, subject to the City's consent to this Assignment Agreement as evidenced by the City's execution of the attached Consent, Assignor shall be unconditionally and irrevocably released, from and after the Effective Date, from the Assigned Interests.

4. Site Specific Approvals. From and after the Effective Date, Assignor hereby assigns and transfers to Assignee and Assignee hereby assumes all of the Site Specific Approvals with respect to the Assigned Parcels, subject to the terms, conditions and restrictions set forth in this Assignment Agreement.

5. NITM Fee. Consistent with Section 3 above, Assignee shall have the right to receive a Certificate of NITM Compliance with respect to the Assigned Parcels in accordance with Section 6.13 of the Development Agreement.

6. Annual Review of Development Agreement Compliance; Assignee Responsibilities. Assignee shall participate in the annual review of the Development Agreement conducted pursuant to California Government Code Section 65865.1 with respect to the Assigned Parcels and the Assigned Interests arising under or relating to the Development Agreement, and Assignor shall have no responsibility therefor.

7. Miscellaneous.

(a) Counterparts. This Assignment Agreement may be executed in counterparts which taken together shall constitute one and the same instrument.

(b) Successors and Assigns. The provisions of this instrument shall be binding upon and inure to the benefit of Assignor and Assignee and their respective successors and assigns.

(c) Further Assurances. Assignor and Assignee each hereby covenants that it will, at any time and from time to time, execute any documents and take such additional actions as the other, or its respective successors or assigns, shall reasonably require in order to more completely or perfectly carry out the transfers intended to be accomplished by this Assignment Agreement.

(d) Governing Law. This Assignment Agreement shall be construed and interpreted in accordance with the laws of the State of California.

(e) Severability. Consistent with Section 20.7 of the Development Agreement, if any term or provision of this Assignment Agreement or the application thereof to any person or circumstance is found by a court of competent jurisdiction to be invalid or unenforceable, the remainder of this Assignment Agreement, or the application of such term or provision to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected thereby, and each remaining term and provision of this Assignment Agreement shall be valid and enforceable to the full extent permitted by law; unless and to the extent the rights and obligations or the benefits of the bargain for either Assignor or Assignee as derived from this Assignment Agreement have been materially altered or abridged by such holding or action, as determined by the party who would have benefited.

(f) Notices. In accordance with Section 20.12 of the Development Agreement, from and after the Effective Date of this Assignment Agreement, the Assignee shall be considered a "Party" with respect to the Assigned Parcels and Assignee designates the following initial addresses for Notices in accordance with Section 20.12 of the Development Agreement:

If to Assignee:

Five Point Office Venture I, LLC
25 Enterprise, Suite 300
Aliso Viejo, California 92656
Attention: Legal Notices
Fax: (949) 349-1075

(g) Estoppel Certificates. From and after the Effective Date, Assignee may exercise the rights of a "Party" (as that term is defined in the Development Agreement) pursuant to Development Agreement section 20.9.

(h) No Waiver. Failure by a party to insist upon the strict performance of any of the provisions of this Assignment Agreement by any other party, or the failure by a party to exercise its rights upon the default of the other party, shall not constitute a waiver of such party's right to insist and demand strict compliance by the other parties with the terms of this Assignment Agreement thereafter.

(i) Amendments. Any amendments or modifications to this Assignment Agreement must be in writing, signed by duly authorized representatives of each of the parties hereto, and recorded in the Official Records of Orange County, California.

(e) Authority. Each party represents and warrants that the person executing this Assignment Agreement on behalf of such party has the authority to bind such party to the performance of its obligations hereunder and that all necessary board of directors', shareholders', partners', members', managers', and other approvals have been obtained.

[SIGNATURE PAGES TO FOLLOW]

IN WITNESS WHEREOF, Assignor and Assignee have executed this Assignment Agreement as of the date first set forth above.

"ASSIGNOR"

O.C. PROPERTY COMPANY, LLC, a Delaware limited liability company, doing business in California under the name Red Pipe Property Company, LLC

By: _____
Name: Thomas H. Krause, Jr.
Title: Chief Financial Officer

ALL-PURPOSE ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF _____

COUNTY OF _____

On _____ before me, _____ (here insert name and title of the officer), personally appeared _____ who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

"ASSIGNEE"

FIVE POINT OFFICE VENTURE I, LLC,
a Delaware limited liability company

By: _____
Name: _____
Title: _____

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA

COUNTY OF _____

On _____ before me, _____ (here insert name and title of the officer), personally appeared _____ who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

CONSENT AND ESTOPPEL BY CITY

The foregoing Partial Assignment and Assumption of Development Agreement and Site Specific Approvals ("Assignment Agreement") to which this Consent and Estoppel by City ("Consent and Estoppel") is attached is hereby acknowledged and agreed to by THE CITY OF IRVINE, a California charter city ("City"). By its execution hereof, the City hereby: (i) consents to the partial assignment of the Development Agreement to Assignee pursuant to this Assignment Agreement, and, accordingly, pursuant to Section 17.3 of the Development Agreement, from and after the Effective Date, Assignor shall be relieved of its legal duty to perform the Assigned Interests (except to the extent of any default by Assignor in respect of the Assigned Interests which accrued prior to the Effective Date); (ii) pursuant to Section 20.9 of the Development Agreement, certifies that, to its best knowledge, the Development Agreement is in full force and effect and a binding obligation upon the City and Assignor, and has not been modified or amended and Assignor is not in default in the performance of any of the Assigned Interests under the Development Agreement; and (iii) acknowledges that the approvals and plans referred to in the ARDA Letter Agreements are considered the Existing Land Use Regulations and the applicable ARDA Overlay Plan and are accordingly afforded the vested rights protection of the Development Agreement.

"CITY"

CITY OF IRVINE,
a California charter city

By: _____

Name: _____

Title: _____

ATTEST:

Name: _____
City Clerk

APPROVED AS TO FORM FOR CITY:

Name: _____
City Attorney

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

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STATE OF CALIFORNIA

COUNTY OF _____

On _____ before me, _____ (here insert name and title of the officer), personally appeared _____ who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

JOINDER BY SUCCESSOR AGENCY

The foregoing Partial Assignment and Assumption of Development Agreement and Site Specific Approvals ("Assignment Agreement") to which a Consent and Estoppel by the City is attached, is hereby acknowledged by the SUCCESSOR AGENCY OF THE IRVINE REDEVELOPMENT AGENCY (the "Successor Agency"). By its execution hereof, the Successor Agency hereby further acknowledges that in accordance with Section 3.13 no consent or action by the Successor Agency is required for any of the transactions or activities contemplated by the Assignment Agreement.

"SUCCESSOR AGENCY"

SUCCESSOR AGENCY OF THE IRVINE REDEVELOPMENT AGENCY

By: _____
Name: Sean Joyce
Title: Executive Director, Irvine Successor Agency

ATTEST:

Name: _____
[title]

APPROVED AS TO FORM FOR SUCCESSOR AGENCY:

Name: _____
[TITLE]

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA

COUNTY OF _____

On _____ before me, _____ (here insert name and title of the officer), personally appeared _____ who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

EXHIBIT A

TO

PARTIAL ASSIGNMENT AND ASSUMPTION OF DEVELOPMENT AGREEMENT

LEGAL DESCRIPTION OF ASSIGNED PARCELS

Real property in the City of Irvine, County of Orange, State of California, described as follows:

LOTS 1 THROUGH 17, INCLUSIVE, AND LOTS A THROUGH E, INCLUSIVE OF PARCEL MAP 2014-122, IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA, AS PER MAP FILED IN [BOOK 384, PAGES 1 THROUGH 10](#), INCLUSIVE, OF PARCEL MAPS IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

2.6



REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: AUGUST 8, 2017

TITLE: ACCEPTANCE OF AGREEMENT FOR TRANSFER OR PURCHASE OF EQUIPMENT/SERVICES OR FOR REIMBURSEMENT OF TRAINING COSTS FOR FISCAL YEAR 2016 URBAN AREAS SECURITY INITIATIVE GRANT

Director of Public Safety

City Manager

RECOMMENDED ACTION

1. Authorize the Director of Public Safety to accept the Agreement for Transfer or Purchase of Equipment/Supplies or for Reimbursement of Training Costs for Fiscal Year 2016 Urban Areas Security Initiative Grant.
2. Authorize the Director of Public Safety to accept equipment, technology, services or supplies purchased by the City of Anaheim and transferred to the City of Irvine to enhance countywide emergency preparedness.
3. Approve a budget adjustment request in the amount of \$50,000 in grant revenues and appropriations for training costs and necessary personnel; as well as equipment, supplies or services.
4. Authorize the Director of Public Safety to submit for reimbursement up to \$25,000 in training and personnel costs, and \$25,000 in approved equipment, supplies or services through the Fiscal Year 2016 Urban Areas Security Initiative Grant.

EXECUTIVE SUMMARY

The Department of Homeland Security Urban Areas Security Initiative program provides federal funding to address the unique planning, equipment and training needs of high threat, high-density urban areas. The grant also provides funding to prevent, respond and recover from acts of terrorism. A portion of the grant funding awarded to the Anaheim/Santa Ana Urban Area for Fiscal Year 2016 is earmarked for training first responders within Orange County to address issues of domestic preparedness. The Department of Public Safety and other City personnel will participate in the first responder training. Reimbursement for personnel who assist with the instruction of this training will be provided by the grant. In addition, the grant provides funding for the purchase of equipment consistent with the grant terms as authorized by the Department of Homeland Security.

COMMISSION/BOARD/COMMITTEE RECOMMENDATION

At its regular meeting on July 17, 2017, the Finance Commission approved the recommended action by a vote of 5-0.

ANALYSIS

The Department of Homeland Security is providing funding to the California Office of Homeland Security for Fiscal Year 2016. The Urban Areas Security Initiative Grant is designed to address acts of terrorism and natural disasters. The Urban Areas Security Initiative Grant Program complements the federal government's broader mission to coordinate and strengthen homeland security preparedness. These efforts implement strategic objectives and legislation adopted after September 11, 2001, as well as Presidential Directives to bolster Homeland Security.

The City of Irvine has participated in the Urban Areas Security Initiative Grant Program since 2004. The program has provided the City of Irvine with important training and equipment to respond to manmade and natural disasters. The funding has also been used to enhance our Community Emergency Response Team program. The City of Anaheim is the agency responsible for coordinating the Fiscal Year 2016 Urban Areas Security Initiative Grant. A portion of the subject grant will reimburse the City of Irvine's costs to train employees for prevention of and response to terrorist incidents. Training-related costs include personnel costs for staff that assist with the instruction and delivery of Department of Homeland Security approved courses.

The grant also permits the City of Irvine to purchase equipment, supplies, technology, or services as needed pursuant to the Department of Homeland Security guidelines. The City of Anaheim, as the grant coordinator, is also authorized to purchase equipment, technology, supplies or services on the City's behalf and transfer those assets directly to the City of Irvine to enhance countywide emergency preparedness.

ALTERNATIVES CONSIDERED

The City Council may choose to decline the Fiscal Year 2016 Urban Areas Security Initiative Grant. A different funding source would be required to maintain homeland security efforts underway.

FINANCIAL IMPACT

Accepting the Fiscal Year 2016 Urban Areas Security Initiative Grant will provide additional funding to reimburse the City of Irvine for training and equipment related to homeland security efforts. There is no required in-kind or matching contribution.

REPORT PREPARED BY Dave Klug, Lieutenant

ATTACHMENTS

1. Agreement for Transfer or Purchase of Equipment/Services or for Reimbursement of Training Costs for Fiscal Year 2016 Urban Areas Security Initiative Grant
2. Budget Adjustment Request

AGREEMENT

SUB-RECIPIENT: CITY OF IRVINE

City Contract Number _____

ATTACHMENT 1

TABLE OF CONTENTS

| <u>Section Description</u> | <u>Page</u> |
|----------------------------|-------------|
|----------------------------|-------------|

I INTRODUCTION

| | |
|---|---|
| §101. Parties to the Agreement | 3 |
| §102. Representatives of the Parties and Service of Notices | 3 |
| §103. Independent Party | 4 |
| §104. Conditions Precedent to Execution of this Agreement | 4 |

II TERM AND SERVICES TO BE PROVIDED

| | |
|---------------------------|---|
| §201. Time of Performance | 5 |
| §202. Use of Grant Funds | 5 |

III PAYMENT

| | |
|--|---|
| §301. Payment of Grant Funds and Method of Payment | 8 |
|--|---|

IV STANDARD PROVISIONS

| | |
|--|----|
| §401. Construction of Provisions and Titles Herein | 9 |
| §402. Applicable Law, Interpretation and Enforcement | 9 |
| §403. Integrated Agreement | 9 |
| §404. Excusable Delays | 9 |
| §405. Breach | 10 |
| §406. Prohibition Against Assignment or Delegation | 10 |
| §407. Permits | 10 |
| §408. Non Discrimination and Affirmative Action | 10 |
| §409. Bonds | 11 |

TABLE OF CONTENTS

| <u>Section Description</u> | <u>Page</u> |
|--|-------------|
| §410. Indemnification | 11 |
| §411. Conflict of Interest | 11 |
| §412. Restriction on Disclosures | 13 |
| §413. Statutes and Regulations Applicable to All Grant Contracts | 13 |
| §414. Federal, State, and Local Taxes | 22 |
| §415. Inventions, Patents and Copyrights | 22 |
| §416. MBE/WBE | 23 |

V
DEFAULTS, SUSPENSION, TERMINATION, AND AMENDMENTS

| | |
|------------------|----|
| §501. Defaults | 24 |
| §502. Amendments | 24 |

V
ENTIRE AGREEMENT

| | |
|---------------------------------------|----|
| §601. Complete Agreement | 25 |
| §602. Number of Pages and Attachments | 25 |
| Execution (Signature) Page | 26 |

EXHIBITS

| | |
|-----------|--|
| Exhibit A | Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion Lower Tier Covered Transactions |
| Exhibit B | Certification Regarding Lobbying |
| Exhibit C | Grant Assurances |

AGREEMENT FOR TRANSFER OR PURCHASE OF EQUIPMENT/SERVICES OR FOR
REIMBURSEMENT OF TRAINING COSTS
FOR FY2016 URBAN AREAS SECURITY INITIATIVE (UASI)

BETWEEN
THE CITY OF ANAHEIM
AND CITY OF IRVINE

THIS AGREEMENT is made and entered into this 1st day of March 2017, by and between the CITY OF ANAHEIM, a municipal corporation (the "CITY"), and CITY OF IRVINE (the "SUB-RECIPIENT" or "Contractor").

W I T N E S S E T H

WHEREAS, CITY, acting through the Anaheim Police Department in its capacity as a Core City for the Anaheim/Santa Ana Urban Area under the FY16 Urban Areas Security Initiative, has applied for, received and accepted a grant entitled "FY 2016 Urban Areas Security Initiative" from the federal Department Of Homeland Security(DHS), Federal Emergency Management Agency (FEMA), through the State of California Governor's Office of Emergency Services (CalOES), to enhance countywide emergency preparedness (the "grant"), as set forth in the grant guidelines and assurances that are incorporated to this Agreement by reference and located at:

"U.S. Department of Homeland Security "Fiscal Year 2016 Homeland Security Grant Program (HSGP) Notice of Funding Opportunity (NOFO)" https://www.fema.gov/media-library-data/1455569937218-3daa3552913b8affe0c6b5bc3b448635/FY_2016_HSGP_NOFO_FINAL.pdf

California Office of Emergency Services "FY2016 Homeland Security Grant Program: California Supplement to Federal Program Guidance and Application Kit"
<http://www.caloes.ca.gov/GrantsManagementSite/Documents/FY%202016%20HSGP%20State%20Guidance.pdf>

Copies of the grant guidelines shall be retained in the Anaheim/Santa Ana Grant Office.

WHEREAS, this financial assistance is administered by the CITY OF ANAHEIM ("CITY") and is overseen by the California Governor's Office of Emergency Services ("CalOES"); and

WHEREAS, this financial assistance is being provided to address the unique equipment, training, planning, and exercise needs of large urban areas, and to assist them in building an enhanced and sustainable capacity to prevent, respond to, and recover from threats or acts of terrorism; and

WHEREAS, the Anaheim/Santa Ana Urban Area (“ASAUA”) consists of 34 cities in Orange County, including the City of Anaheim and the City of Santa Ana, the County of Orange, Santa Ana Unified School District Police, California State University, Fullerton, University of California, Irvine, Municipal Water District of Orange County, and the Orange County Fire Authority; and

WHEREAS, the Office of Grants Management (“OGM”) awarded a FY16 UASI Grant of \$4,344,000 (“Grant Funds”) to the CITY OF ANAHEIM, as a Core City, for use in the ASAUA; and

WHEREAS, the CITY has designated the Chief of Police, or his designee and the Anaheim Police Department, Emergency Management Director (“UASI Grant Office”) to provide for terrorism prevention and emergency preparedness; and

WHEREAS, the UASI Grant Office now wishes to distribute FY16 UASI Grant Funds throughout the ASAUA, as further detailed in this Agreement (“Agreement”) to CITY OF IRVINE (“SUB-RECIPIENT”) and others;

WHEREAS, the CITY and SUB-RECIPIENT are desirous of executing this Agreement as authorized by the City Council and the Chief of Police which authorizes the CITY to prepare and execute the Agreement.

NOW, THEREFORE, IT IS MUTUALLY AGREED AS FOLLOWS:

I
INTRODUCTION

§101. Parties to the Agreement

The parties to this Agreement are:

- A. The CITY, a municipal corporation, having its principal office at 425 South Harbor Boulevard, Anaheim, CA 92805; and
- B. CITY OF IRVINE, a municipal corporation, P.O. Box 19575, Irvine, CA 92623

§102. Representatives of the Parties and Service of Notices

- A. The representatives of the respective parties who are authorized to administer this Agreement and to whom formal notices, demands and communications shall be given are as follows:

- 1. The representative of the City of Anaheim shall be, unless otherwise stated in the Agreement:

Chris Pena, Lieutenant
Anaheim Police Department
425 South Harbor Boulevard
Anaheim, CA. 92805
Phone: (714) 765-3833
Fax: (714) 765-1616
cpena@anaheim.net

- 2. The representative of CITY OF IRVINE shall be:

Dave Klug, Lieutenant
CITY OF IRVINE
P.O. Box 19575, Irvine, CA 92623
Phone: (949) 724-7362
E-mail: dklug@cityofirvine.org

- B. Formal notices, demands and communications to be given hereunder by either party shall be made in writing and may be effected by personal delivery or by registered or certified mail, postage prepaid, return receipt requested and shall be deemed communicated as of the date of mailing.
- C. If the name of the person designated to receive the notices, demands or communications or the address of such person is changed, written notice shall be given, in accord with this section, within five (5) business days of said change.

§103. Independent Party

SUB-RECIPIENT is acting hereunder as an independent party, and not as an agent or employee of the CITY OF ANAHEIM. No employee of SUB-RECIPIENT is, or shall be an employee of the CITY OF ANAHEIM by virtue of this Agreement, and SUB-RECIPIENT shall so inform each employee organization and each employee who is hired or retained under this Agreement. SUB-RECIPIENT shall not represent or otherwise hold out itself or any of its directors, officers, partners, employees, or agents to be an agent or employee of the CITY OF ANAHEIM.

§104. Conditions Precedent to Execution of This Agreement

SUB-RECIPIENT shall provide copies of the following documents to the CITY OF ANAHEIM, unless otherwise exempted.

- A. Grant Assurances in accordance with section 415C of this Agreement attached hereto as Exhibit C and made part hereof.
- B. Certifications Regarding Ineligibility, Suspension and Debarment as required by Executive Order 12549 in accordance with Section 415A12 of this Agreement and attached hereto as Exhibit A and made a part hereof.
- C. Certifications and Disclosures Regarding Lobbying in accordance with Section 415C of this Agreement and attached hereto as Exhibit B and made a part hereof. SUB-RECIPIENT shall also file a Disclosure Form at the end of each calendar quarter in which there occurs any event requiring disclosure or which materially affects the accuracy of the information contained in any Disclosure Form previously filed by SUB-RECIPIENT.

II
TERM AND SERVICES TO BE PROVIDED

§201. Time of Performance

The term of this Agreement shall commence on March 1, 2017 and end on March 31, 2019 or upon the final disbursement of all of the Grant Amount (as defined in Section 301) and any additional period of time as is required to complete any necessary close out activities. Said term is subject to the provisions herein.

§202. Use of Grant Funds

- A. CITY may, a) transfer to SUB-RECIPIENT, equipment or services purchased with grant funds and in accordance with grant guidelines set forth above; or, b) reimburse SUB-RECIPIENT for purchase of authorized equipment, exercises, services or training upon receiving prior written approval from CITY or its designee and in accordance with grant guidelines and in full compliance with all of the SUB-RECIPIENT'S purchasing and bidding procedures. SUB-RECIPIENT shall specify the equipment, services, exercises and training to be purchased using the Application for Project Funding. A paper copy of this document will be provided to SUB-RECIPIENT by CITY. In addition, a compact disc with a copy of the document will be provided to SUB-RECIPIENT by CITY. If additional copies of the document are needed, SUB-RECIPIENT may contact the Anaheim Grant Coordinator and it will be provided.
- B. SUB-RECIPIENT shall provide any reports requested by the CITY regarding the performance of the Agreement. Reports shall be in the form requested by the CITY, and shall be provided in a timely manner.
- C. The Authorized Equipment List (AEL) is a list of the allowable equipment which may be purchased pursuant to this Agreement and is located at <https://www.fema.gov/authorized-equipment-list>, and incorporated to this Agreement by reference. A copy of the AEL shall be retained in the Anaheim/Santa Ana Grant Office. Unless otherwise stated in program guidance any equipment acquired pursuant to this Agreement shall meet all mandatory regulations and/or DHS-adopted standards to be eligible for purchase using grant funds. SUB-RECIPIENT shall provide the CITY a copy of its most current procurement guidelines and follow its own procurement requirements as long as they meet the minimum federal requirements. Federal procurement requirements for the FY 16 UASI Grant can be found at 2 Code of Federal Regulations (CFR) Part 200 "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards."

Any equipment acquired or obtained with Grant Funds:

1. Shall be made available under the California Disaster and Civil Defense Master Mutual Aid Agreement in consultation with representatives of the various fire, emergency medical, hazardous materials response services, and law enforcement agencies within the jurisdiction of the applicant;
2. Shall be consistent with needs as identified in the National Priorities and Core Capabilities, the State Homeland Security Strategy and the Anaheim/Santa Ana Urban Area and Orange County Operational Area Homeland Security Grants Strategy, the Threat Hazard Identification and Risk Assessment (THIRA), the State Preparedness Report; and deployed in conformance with those plans;
3. Shall be made available pursuant to applicable terms of the California Disaster and Civil Defense Master Mutual Aid Agreement and deployed with personnel trained in the use of such equipment in a manner consistent with the California Law Enforcement Mutual Aid Plan or the California Fire Services and Rescue Mutual Aid Plan;
4. Shall be subject to the requirements of Title 2 CFR Part 200.313 and 200.314. For the purposes of this subsection, "Equipment" is defined as nonexpendable property that is not consumed or does not lose its identity by being incorporated into another item of equipment, which costs \$5,000 or more per unit, or is expected to have a useful life of one (1) year or more.
5. Shall be used by SUB-RECIPIENT in the program or project for which it was acquired as long as needed, whether or not the project or program continues to be supported by Federal funds. When no longer useful for the original program or project, the Equipment may be used in other activities currently or previously supported by a Federal agency.
6. Shall be made available for use on other projects or programs currently or previously supported by the Federal Government, providing such use will not interfere with the work on the projects or program for which it was originally acquired. First preference for other use shall be given to other programs or projects supported by the awarding agency.
7. Shall be recorded on a ledger. The record shall include: (a) description of the item of Equipment, (b) serial number or other identification number, (c) the source of funding for the property (including FAIN); (d) who holds the title, (e) date of acquisition; (f) the per unit acquisition cost of the Equipment, (g) percentage of federal participation in the project costs for the Federal award under which the property was acquired, (h) location, and (i) use and

condition of Equipment, and (j) ultimate disposition data including the date of disposal and sale price of the property. Records must be retained pursuant to 2 CFR Part 200.313.

8. All equipment obtained under this Agreement shall have an ASUA identification decal affixed to it, and, when practical, shall be affixed where it is readily visible.
 9. A physical inventory of the Equipment shall be taken and the results reconciled with the Equipment records at least once every two years. Inventory shall also be taken prior to any UASI, State or Federal monitor visits.
 10. SUB-RECIPIENT shall exercise due care to preserve and safeguard equipment acquired with grant funds from damage or destruction and shall provide regular maintenance and such repairs for said equipment as necessary, in order to keep said equipment continually in good working order. Such maintenance and servicing shall be the sole responsibility of SUB-RECIPIENT, who shall assume full responsibility for maintenance and repair of the equipment throughout the life of said equipment.
- D. Any training paid pursuant to this Agreement shall conform to the guidelines as listed in FY 2016 Homeland Security Grant Program, as set forth above. All training expenses must be pre-authorized by CalOES at <https://w3.calema.ca.gov/WebPage/trainreq.nsf/TrainRequest?OpenForm>. A catalogue of Grantor approved and sponsored training courses is available at <https://cdp.dhs.gov/>.
- E. Any exercise paid pursuant to this Agreement shall conform to the guidelines as listed in FY 2016 Homeland Security Grant Program, as set forth above. Detailed Homeland Security Exercise and Evaluation Program Guidance is available at <https://www.fema.gov/media-library/assets/documents/32326>.
- F. Any planning paid pursuant to this Agreement shall conform to the guidelines as listed in FY 2016 Homeland Security Grant Program, as set forth above.
- G. Any organizational activities paid pursuant to this Agreement shall conform to the guidelines as listed in FY 2016 Homeland Security Grant Program, as set forth above.

III PAYMENT

§301. Payment of Grant Funds and Method of Payment

- A. CITY may, a) transfer to SUB-RECIPIENT, equipment or services purchased with grant funds; or, b) reimburse SUB-RECIPIENT for the purchase of authorized equipment, exercises, services or training upon receiving prior written

approval from CITY or its designee and in accordance with grant guidelines and in full compliance with all of the SUB-RECIPIENT'S purchasing and bidding procedures. SUB-RECIPIENT shall specify the equipment, exercises, services or training to be purchased using the Application for Project Funding. A paper copy of this document will be provided to SUB-RECIPIENT by CITY. In addition, a compact disc with a copy of the document will be provided to SUB-RECIPIENT by CITY. If additional copies of the document are needed, SUB-RECIPIENT may contact the Anaheim Grant Coordinator and it will be provided. Funds may be used for planning, exercises, organizational and training activities, and the purchase of equipment as described in Section 202 above.

- B. SUB-RECIPIENT shall provide invoices to the CITY requesting payment and all supporting documentation. Each reimbursement request shall be accompanied by the Reimbursement Request for Grant Expenditures (provided to SUB-RECIPIENT by CITY on compact disc) detailing the expenditures made by SUB-RECIPIENT as authorized by Section 202 above. Each reimbursement request shall be submitted to the Anaheim UASI Grant Office. For equipment for which SUB-RECIPIENT is requesting reimbursement, all appropriate back-up documentation must be attached to the reimbursement form, including invoices, proof of payment, packing slips, and Equipment Reimbursement Worksheet. For training reimbursements, SUB-RECIPIENT must include a copy of any certificates issued or a copy of the class roster verifying training attendees, proof that a CalOES tracking number has been assigned to the course, timesheets and payroll registers for all training attendees, receipts for travel expenses related to the training, and Training Reimbursement Worksheet. For regional project reimbursements, SUB-RECIPIENT must include approval from the lead agency for all submitted invoices.
- C. Payment of final invoice shall be withheld by the CITY until the SUB-RECIPIENT has turned in all supporting documentation and completed the requirements of this Agreement.
- D. It is understood that the CITY makes no commitment to fund this Agreement beyond the terms set forth herein.
- E. Funding for all periods of this Agreement is subject to the continuing availability to the CITY of federal funds for this program. The Agreement may be terminated immediately upon written notice to SUB-RECIPIENT of a loss or reduction of federal grant funds.

IV
STANDARD PROVISIONS

§401. Construction of Provisions and Titles Herein

All titles or subtitles appearing herein have been inserted for convenience and shall not be deemed to affect the meaning or construction of any of the terms or provisions hereof. The language of this Agreement shall be construed according to its fair meaning and not strictly for or against either party. The word "Sub-recipient" herein and in any amendments hereto includes the party or parties identified in this Agreement. The singular shall include the plural. If there is more than one Sub-recipient as identified herein, unless expressly stated otherwise, their obligations and liabilities hereunder shall be joint and several. Use of the feminine, masculine, or neuter genders shall be deemed to include the genders not used.

§402. Applicable Law, Interpretation and Enforcement

Each party's performance hereunder shall comply with all applicable laws of the United States of America, the State of California, and the CITY. This Agreement shall be enforced and interpreted under the laws of the State of California and the CITY.

If any part, term or provision of this Agreement shall be held void, illegal, unenforceable, or in conflict with any law of a federal, state or local government having jurisdiction over this Agreement, the validity of the remaining portions of provisions shall not be affected thereby.

§403. Integrated Agreement

This Agreement sets forth all of the rights and duties of the parties with respect to the subject matter hereof, and replaces any and all previous agreements or understandings, whether written or oral, relating thereto. This Agreement may be amended only by a written instrument executed by both parties hereto.

§404. Excusable Delays

In the event that performance on the part of any party hereto shall be delayed or suspended as a result of circumstances beyond the reasonable control and without the fault and negligence of said party, none of the parties shall incur any liability to the other parties as a result of such delay or suspension.

Circumstances deemed to be beyond the control of the parties hereunder shall include, but not be limited to, acts of God or of the public enemy; insurrection; acts of the Federal Government or any unit of State or Local Government in either sovereign or contractual capacity; fires; floods; epidemics; quarantine

restrictions; strikes, freight embargoes or delays in transportation; to the extent that they are not caused by the party's willful or negligent acts or omissions and to the extent that they are beyond the party's reasonable control.

§405. Breach

Except for excusable delays, if any party fails to perform, in whole or in part, any promise, covenant, or agreement set forth herein, or should any representation made by it be untrue, any aggrieved party may avail itself of all rights and remedies, at law or equity, in the courts of law. Said rights and remedies are cumulative of those provided for herein except that in no event shall any party recover more than once, suffer a penalty or forfeiture, or be unjustly compensated.

§406. Prohibition Against Assignment or Delegation

SUB-RECIPIENT may not, unless it has first obtained the written permission of the CITY:

- A. Assign or otherwise alienate any of its rights hereunder, including the right to payment; or
- B. Delegate, subcontract, or otherwise transfer any of its duties hereunder.

§407. Permits

SUB-RECIPIENT and its officers, agents and employees shall obtain and maintain all permits and licenses necessary for SUB-RECIPIENT performance hereunder and shall pay any fees required therefore. SUB-RECIPIENT further certifies to immediately notify the CITY of any suspension, termination, lapses, non renewals or restrictions of licenses, certificates, or other documents.

§408. Nondiscrimination and Affirmative Action

SUB-RECIPIENT shall comply with the applicable nondiscrimination and affirmative action provisions of the laws of the United States of America, the State of California, and the CITY. In performing this Agreement, SUB-RECIPIENT shall not discriminate in its employment practices against any employee or applicant for employment because of such person's race, color, religion, national origin, ancestry, sex, gender, gender identity, gender expression, sexual orientation, age, physical handicap, mental disability, marital status, domestic partner status, pregnancy, denial of medical and family care leave, pregnancy disability leave, or medical condition. SUB-RECIPIENT shall comply with Executive Order 11246, entitled "Equal Employment Opportunity," as amended by Executive Order 11375, and as supplemented in Department of Labor regulations (41 CFR Part 60).

SUB-RECIPIENT shall comply with California Public Contract Code §10295.3, which addresses discrimination based on domestic partnerships. If required, SUB-RECIPIENT shall submit an Equal Employment Opportunity Plan (“EEOP”) to the DOJ Office of Civil Rights (“OCR”) in accordance with guidelines listed at <http://www.ojp.usdoj.gov/ocr/eeop.htm>,

Any subcontract entered into by the SUB-RECIPIENT relating to this Agreement, to the extent allowed hereunder, shall be subject to the provisions of this § 408.

§409. Bonds

SUB-RECIPIENT must purchase a performance bond for any equipment item over \$250,000 or any vehicle (including aircraft or watercraft) financed with homeland security funds. SUB-RECIPIENT must provide a copy of performance bond to CITY no later than the time of reimbursement.

§410. Indemnification

To the fullest extent of the law, SUB-RECIPIENT agrees to indemnify, defend, and hold harmless the City of Anaheim, its officers, agents, employees, representatives and designated volunteers from and against any and all claims, demands, defense costs, or liability of any kind or nature arising out of or resulting from, or any way connected with SUB-RECIPIENT’S acts, errors or omissions in the performance of SUB-RECIPIENT’S services or use of grant funds under the terms of this Agreement.

§411. Conflict of Interest

A. SUB-RECIPIENT covenants that none of its directors, officers, employees, or agents shall participate in selecting, or administering any subcontract supported (in whole or in part) by Federal funds where such person is a director, officer, employee or agent of the subcontractor; or where the selection of subcontractors is or has the appearance of being motivated by a desire for personal gain for themselves or others such as family business, etc.; or where such person knows or should have known that:

1. A member of such person's immediate family, or domestic partner or organization has a financial interest in the subcontract;
2. The subcontractor is someone with whom such person has or is negotiating any prospective employment; or
3. The participation of such person would be prohibited by the California Political Reform Act, California Government Code §87100 et seq. if such person were a public officer, because such person would have a "financial or other interest" in the subcontract.

B. Definitions:

1. The term "immediate family" includes but is not limited to domestic partner and/or those persons related by blood or marriage, such as husband, wife, father, mother, brother, sister, son, daughter, father in law, mother in law, brother in law, sister in law, son in law, daughter in law.
2. The term "financial or other interest" includes but is not limited to:
 - a. Any direct or indirect financial interest in the specific contract, including a commission or fee, a share of the proceeds, prospect of a promotion or of future employment, a profit, or any other form of financial reward.
 - b. Any of the following interests in the subcontractor ownership: partnership interest or other beneficial interest of five percent or more; ownership of five percent or more of the stock; employment in a managerial capacity; or membership on the board of directors or governing body.
- C. The SUB-RECIPIENT further covenants that no officer, director, employee, or agent shall solicit or accept gratuities, favors, anything of monetary value from any actual or potential subcontractor, supplier, a party to a sub agreement, (or persons who are otherwise in a position to benefit from the actions of any officer, employee, or agent).
- D. The SUB-RECIPIENT shall not subcontract with a former director, officer, or employee within a one year period following the termination of the relationship between said person and the Contractor.
- E. Prior to obtaining the CITY'S approval of any subcontract, the SUB-RECIPIENT shall disclose to the CITY any relationship, financial or otherwise, direct or indirect, of the SUB-RECIPIENT or any of its officers, directors or employees or their immediate family with the proposed subcontractor and its officers, directors or employees.
- F. For further clarification of the meaning of any of the terms used herein, the parties agree that references shall be made to the guidelines, rules, and laws of the SUB-RECIPIENT, State of California, and Federal regulations regarding conflict of interest.
- G. The SUB-RECIPIENT warrants that it has not paid or given and will not pay or give to any third person any money or other consideration for obtaining this Agreement.
- H. The SUB-RECIPIENT covenants that no member, officer or employee of SUB-RECIPIENT shall have interest, direct or indirect, in any contract or subcontract or the proceeds thereof for work to be performed in connection with this project during his/her tenure as such employee, member or officer or for one year thereafter.

- I. The SUB-RECIPIENT shall incorporate the foregoing subsections of this Section into every agreement that it enters into in connection with this project and shall substitute the term "subcontractor" for the term "SUB-RECIPIENT" and "sub subcontractor" for "Subcontractor".

§412. Restriction on Disclosures

Any reports, analysis, studies, drawings, information, or data generated as a result of this Agreement are to be governed by the California Public Records Act (California Government Code Sec. 6250, et seq.).

§413. Statutes and Regulations Applicable To All Grant Contracts

- A. SUB-RECIPIENT shall comply with all applicable requirements of state, federal, county and SUB-RECIPIENT laws, executive orders, regulations, program and administrative requirements, policies and any other requirements governing this Agreement. SUB-RECIPIENT shall comply with state and federal laws and regulations pertaining to labor, wages, hours, and other conditions of employment. SUB-RECIPIENT shall comply with new, amended, or revised laws, regulations, and/or procedures that apply to the performance of this Agreement. These requirements include, but are not limited to:

1. Office of Management and Budget (OMB) Circulars

SUB-RECIPIENT shall comply with 2 Code of Federal Regulations (CFR) Part 200 (Uniform Administrative, Cost Principles, and Audit Requirements for Federal Awards).

2. Single Audit Act

If Federal funds are used in the performance of this Agreement, SUB-RECIPIENT shall adhere to the rules and regulations of the Single Audit Act, 31 USC Sec. 7501 et seq.; Title 2 Code of Federal Regulations, Part 200, Subpart F Audit Requirements; and any administrative regulation or field memos implementing the Act. When reporting under on the FY16 UASI Grant Program under the Single Audit Act, SUB-RECIPIENT shall use Catalog of Federal Domestic Assistance (CFDA) Program Number 97.067 "Homeland Security Grant Program"; Grant Identification Number 2016-0102; and Identify the City of Anaheim as the Pass-Through.

3. Americans with Disabilities Act

SUB-RECIPIENT hereby certifies that it will comply with the Americans with Disabilities Act, 42 USC §§ 12101, et seq., and its implementing regulations. SUB-RECIPIENT will provide reasonable accommodations to allow qualified individuals with disabilities to

have access to and to participate in its programs, services and activities in accordance with the provisions of the Americans with Disabilities Act. SUB-RECIPIENT will not discriminate against persons with disabilities or against persons due to their relationship to or association with a person with a disability. Any subcontract entered into by the SUB-RECIPIENT, relating to this Agreement, to the extent allowed hereunder, shall be subject to the provisions of this paragraph.

4. Political and Sectarian Activity Prohibited

None of the funds, materials, property or services provided directly or indirectly under this Agreement shall be used for any partisan political activity, or to further the election or defeat of any candidate for public office. Neither shall any funds provided under this Agreement be used for any purpose designed to support or defeat any pending legislation or administrative regulation. None of the funds provided pursuant to this Agreement shall be used for any sectarian purpose or to support or benefit any sectarian activity.

If this Agreement provides for more than \$100,000 in grant funds or more than \$150,000 in loan funds, SUB-RECIPIENT shall submit to the CITY a Certification Regarding Lobbying and a Disclosure Form, if required, in accordance with 31 USC §1352. A copy of the Certificate is attached hereto as Exhibit B. No funds will be released to SUB-RECIPIENT until the Certification is filed.

SUB-RECIPIENT shall file a Disclosure Form at the end of each calendar quarter in which there occurs any event requiring disclosure or which materially affects the accuracy of any of the information contained in any Disclosure Form previously filed by SUB-RECIPIENT. SUB-RECIPIENT shall require that the language of this Certification be included in the award documents for all sub-awards at all tiers and that all subcontractors shall certify and disclose accordingly.

5. Records Inspection

In accordance with 2 CFR§200.336, at any time during normal business hours and as often as the CITY, the U.S. Comptroller General, and/or the Auditor General of the State of California may deem necessary, SUB-RECIPIENT shall make available for examination all of its records with respect to all matters covered by this Agreement. The CITY, the U.S. Comptroller General and/or the Auditor General of the State of California shall have the authority to audit, examine and make excerpts or transcripts from records, including SUB-RECIPIENT'S invoices, materials, payrolls, records of personnel, conditions of employment and other data relating to all matters covered by this Agreement.

SUB-RECIPIENT agrees to provide any reports requested by the CITY regarding performance of the Agreement.

6. Records Maintenance

Records, in their original form, shall be maintained in accordance with requirements prescribed by the CITY with respect to all matters covered on file for all documents specified in this Agreement. Original forms are to be maintained on file for all documents specified in this Agreement. Such records shall be retained for a period of three (3) years after the CITY receives notification of grant closeout from CalOES, and after final disposition of all pending matters. "Pending matters" include, but are not limited to, an audit, litigation or other actions involving records. The CITY may, at its discretion, take possession of, retain and audit said records. Records, in their original form pertaining to matters covered by this Agreement, shall at all times be retained within the County of Orange unless authorization to remove them is granted in writing by the CITY.

7. Subcontracts and Procurement

SUB-RECIPIENT shall comply with the federal and SUB-RECIPIENT standards in the award of any subcontracts. For purposes of this Agreement, subcontracts shall include but not be limited to purchase agreements, rental or lease agreements, third party agreements, consultant service contracts and construction subcontracts.

SUB-RECIPIENT shall ensure that the terms of this Agreement with the CITY are incorporated into all Subcontractor Agreements. The SUB-RECIPIENT shall submit all Subcontractor Agreements to the CITY for review prior to the release of any funds to the subcontractor. The SUB-RECIPIENT shall withhold funds to any subcontractor agency that fails to comply with the terms and conditions of this Agreement and their respective Subcontractor Agreement.

8. Labor

SUB-RECIPIENT shall comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333), regarding labor standards for federally-assisted construction subagreements, and the Hatch Act (5 USC §§1501-1508 and 7324-7328).

SUB-RECIPIENT shall comply with the Federal Fair Labor Standards Act (29 USC §201) regarding wages and hours of employment. None of the funds shall be used to promote or deter Union/labor organizing

activities. CA Gov't Code Sec. 16645, et seq.

9. Civil Rights

SUB-RECIPIENT shall comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§1681- 1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) The Age Discrimination act of 1975, as amended (42 U.S.C. §§6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation act of 1970 (P.L. 91-616) as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee 3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601, et seq.), as amended, relating to non-discrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; (j) the requirements of any other nondiscrimination statute(s) which may apply to the application; and (k) P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.

10. Environmental

SUB-RECIPIENT shall comply, or has already complied, with the requirements of Titles II and III of the Uniform relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.

SUB-RECIPIENT shall comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d)

evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451, et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401, et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93205); and (i) Flood Disaster Protection Act of 1973 §102(a) (P.L. 93-234).

SUB-RECIPIENT shall comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271, et seq.) related to protecting components or potential components of the national wild and scenic rivers system.

SUB-RECIPIENT shall comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801, et seq.) which prohibits the use of lead- based paint in construction or rehabilitation of residence structures.

SUB-RECIPIENT shall comply with the Federal Water Pollution Control Act (33 U.S.C. § 1251-1387) which restores and maintains the chemical, physical and biological integrity of the Nation's waters.

SUB-RECIPIENT shall comply with the Federal Clean Water Act (CWA) (33 U.S.C §1251 et seq.), which establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters.

SUB-RECIPIENT shall ensure that the facilities under its ownership, lease or supervision which shall be utilized in the accomplishment of this project are not listed in the Environmental Protection Agency's (EPA) list of Violating Facilities and that it will notify the Federal Grantor agency of the receipt of any communication from the Director of the EPA Office of Federal Activities indicating that a facility to be used in the project is under consideration for listing by the EPA.

By signing this Agreement, SUB-RECIPIENT ensures that it is in compliance with the California Environmental Quality Act (CEQA), Public Resources Code §21000, et seq. and is not impacting the environment negatively.

SUB-RECIPIENT shall comply with the Energy Policy and Conservation Act (P.L. 94-163, 89 Stat. 871).

11. Preservation

SUB-RECIPIENT shall comply with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1, et seq.).

12. Debarment and Suspension

SUB-RECIPIENT shall comply with Federal Register, Volume 68, Number 228, regarding Suspension and Debarment, and SUB-RECIPIENT shall submit a Certification Regarding Debarment required by Executive Order 12549 and any amendment thereto. Said Certification shall be submitted to the CITY concurrent with the execution of this Agreement and shall certify that neither SUB-RECIPIENT nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this transaction by any federal department head or agency. SUB-RECIPIENT shall require that the language of this Certification be included in the award documents for all sub-award at all tiers and that all subcontractors shall certify accordingly.

As required by Executive Orders (EO) 12549 and 12689, and 2 CFR §200.212 and codified in 2 CFR Part 180, Debarment and Suspension, SUB-RECIPIENT will provide protection against waste, fraud and abuse by debarring or suspending those persons deemed irresponsible in their dealings with the Federal government.

13. Drug-Free Workplace

SUB-RECIPIENT shall comply with the federal Drug-Free Workplace Act of 1988, 41 USC §701, 44 CFR Part 67; the California Drug-Free Workplace Act of 1990, CA Gov't Code §§ 8350-8357.

14. Financial Management

SUB-RECIPIENT will comply with 31 U.S.C §3729 which sets forth that no subgrantee, recipient or subrecipient shall submit a false claim for payment, reimbursement or advance.

15. Reporting – Accountability

SUB-RECIPIENT agrees to comply with applicable provisions of the Federal Funding Accountability and Transparency Act (FFATA) (2 CFR Chapter 1, Part 170), specifically (a) the reporting of subawards obligating \$25,000 or more in federal funds and (b) executive compensation data for first-tier subawards. This includes the provisions of FFATA, which includes requirements on executive compensation, and also requirements implementing the Act for the non-Federal entity at 2 CFR part 25 Financial Assistance Use of

Universal Identifier and Central Contractor Registration and 2 CFR part 170 Reporting Subaward and Executive Compensation Information.

SUB-RECIPIENT must also comply with statutory requirements for whistleblower protections at 10 U.S.C. §2409, 41 U.S.C. §4712, and 10 U.S.C. §2324, 41 U.S.C. §4304 and §4310 and 31 U.S.C. §6101 et seq.

16. Human Trafficking

SUB-RECIPIENT will comply with the requirements of Section 106(g) of the Trafficking Victims Protection Act (TVPA) of 2000, as amended (22 U.S.C. §7104) which prohibits grant award recipients or a subrecipient from (1) Engaging in severe forms of trafficking in persons during the period of time that the award is in effect (2) Procuring a commercial sex act during the period of time that the award is in effect or (3) Using forced labor in the performance of the award or subawards under the award.

17. Freedom of Information Act

SUB-RECIPIENT acknowledges that all information submitted in the course of applying for funding under this program or provided in the course of an entity's grant management activities which is under Federal control is subject to the Freedom of Information Act (FOIA), 5 U.S.C. §552. SUB-RECIPIENT should also consult State and local laws and regulations regarding the release of information, which should be considered when reporting sensitive matters in the grant application, needs assessment and strategic planning process.

18. California Public Records Act

SUB-RECIPIENT acknowledges that all information submitted in the course of applying for funding under this program or provided in the course fo an entity's grant management activities may be subject to the California Public Records Act (California Government Code §§6250-6276.48), which requires inspection and/or disclosure of governmental records to the public upon request, unless exempted by law.

B. Statutes and Regulations Applicable To This Particular Grant

SUB-RECIPIENT shall comply with all applicable requirements of state and federal laws, executive orders, regulations, program and administrative requirements, policies and any other requirements governing this particular grant program. SUB-RECIPIENT shall comply with new, amended, or revised

laws, regulations, and/or procedures that apply to the performance of this Agreement. These requirements include, but are not limited to:

1. Title 44 Code of Federal Regulations (CFR) Part 13; EO 12372; Department of Justice (DOJ) Office of Judicial Programs (OJP) Office of the Comptroller, U.S. Department of Homeland Security, Preparedness Directorate Financial Management Guide; U.S. Department of Homeland Security, Office of Grants and Training, FY 2009 Homeland Security Grant Program – Program Guidance and Application Kit; ODP WMD Training Course Catalogue; and DOJ Office for Civil Rights.

Standardized Emergency Management System (SEMS) requirements as stated in the California Emergency Services Act, Government Code Chapter 7 of Division 1 of Title 2, § 8607.1(e) and CCR Title 19, §§ 2445-2448.

Provisions of 44 CFR applicable to grants and cooperative agreements, including Part 18, Administrative Review Procedures; Part 20, Criminal Justice Information Systems; Part 22, Confidentiality of Identifiable Research and Statistical Information; Part 23, Criminal Intelligence Systems Operating Policies; Part 30, Intergovernmental Review of Department of Justice Programs and Activities; Part 35, Nondiscrimination on the Basis of Disability in State and Local Government Services; Part 38, Equal Treatment of Faith-based Organizations; Part 42, Nondiscrimination/Equal employment Opportunities Policies and Procedures; Part 61, Procedures for Implementing the National Environmental Policy Act; Part 63, Floodplain Management and Wetland Protection Procedures; Part 64, Floodplain Management and Wetland Protection Procedures; Federal laws or regulations applicable to federal Assistance Programs; Part 69, New Restrictions on Lobbying; Part 70, Uniform Administrative Requirements for Grants and Cooperative Agreements (including sub-awards) with Institutions of Higher Learning, Hospitals and other Non-Profit Organizations; and Part 83, Government- Wide Requirements for a Drug Free Workplace (grants).

2. Travel Expenses

SUB-RECIPIENT as provided herein may be compensated for SUB-RECIPIENT'S reasonable travel expenses incurred in the performance of this Agreement, to include travel and per diem, unless otherwise expressed. Travel including in-State and out-of-State travel shall not be reimbursed without prior written authorization from the UASI Grant Office.

SUB-RECIPIENT'S travel and per diem reimbursement costs shall be reimbursed based on the SUB-RECIPIENT'S travel policies and procedures. If SUB-RECIPIENT does not have established

travel policies and procedures, SUB-RECIPIENT'S reimbursement rates shall not exceed the amounts established under 5 U.S.C 5701-11, ("Travel and Subsistence Expenses; Mileage Allowances"), or by the Administrator of General Services, or by the President (or his or her designee) pursuant to any provisions of such subchapter must apply to travel under federal awards (48 CFR 31.205-46(a)).

3. Personally Identifiable Information

SUB-RECIPIENT collecting Personally Identifiable Information (PII) must have a publically-available policy that describes what PII they collect, how they plan to use the PII, whether they share PII with third parties, and how individuals may have their PII corrected where appropriate

4. Hotel and Motel Fire Safety Act of 1990

SUB-RECIPIENT must ensure that all conference, meeting, convention, or training space funded in whole or in part with Federal funds complies with Section 6 of the fire prevention and control guidelines of the Federal Fire Prevention and Control Act of 1974, 15 U.S.C. §2225a.

5. Terrorist Financing E.O. 13224

SUB-RECIPIENT must comply with U.S. Executive Order 13224 and U.S. law that prohibit transactions with, and the provisions of resources and support to, individuals and organizations associated with terrorism.

6. USA Patriot Act of 2001

SUB-RECIPIENT must comply with the requirements of the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act (USA Patriot Act), which amends 18 U.S.C. §§175-175c.

7. Noncompliance

SUB-RECIPIENT understands that failure to comply with any of the above assurances may result in suspension, termination or reduction of grant funds, and repayment by SUB-RECIPIENT to CITY of any unlawful expenditures.

C. Compliance With Grant Assurances

To obtain the Grant Funds, the Grantor required an authorized representative of the CITY to sign certain promises regarding the way the Grant Funds would

be spent ("Grant Assurances"), attached hereto as Exhibit C. By signing these Grant Assurances, the CITY became liable to the Grantor for any funds that are used in violation of the grant requirements. SUB-RECIPIENT shall be liable to the Grantor for any funds the Grantor determines SUB-RECIPIENT used in violation of these Grant Assurances. SUB-RECIPIENT shall indemnify and hold harmless the CITY for any sums the Grantor determines SUB-RECIPIENT used in violation of the Grant Assurances.

§414. Federal, State and Local Taxes

Federal, State and local taxes shall be the responsibility of SUB-RECIPIENT as an independent party and not as a CITY employee.

§415. Inventions, Patents and Copyrights

A. Reporting Procedure for Inventions

If any project produces any invention or discovery (Invention) patentable or otherwise under title 35 of the U.S. Code, including, without limitation, processes and business methods made in the course of work under this Agreement, the SUB-RECIPIENT shall report the fact and disclose the Invention promptly and fully to the CITY. The CITY shall report the fact and disclose the Invention to the Grantor. Unless there is a prior agreement between the CITY and the Grantor, the Grantor shall determine whether to seek protection on the Invention. The Grantor shall determine how the rights in the Invention, including rights under any patent issued thereon, will be allocated and administered in order to protect the public interest consistent with the policy ("Policy") embodied in the Federal Acquisition Regulations System, which is based on Ch. 18 of title 35 U.S.C. Sections 200, et seq. (Pub. L. 95-517, Pub. L. 98-620, 37 CFR part 401); Presidential Memorandum on Government Patent Policy to the Heads of the Executive Departments and Agencies, dated 2/18/1983; and Executive Order 12591, 4/10/87, 52 FR 13414, 3 CFR, 1987 Comp., p. 220 (as amended by Executive Order 12618, 12/22/87, 52 FR 48661, 3 CFR, 1987 Comp., p. 262). SUB-RECIPIENT hereby agrees to be bound by the Policy, and will contractually require its personnel to be bound by the Policy.

B. Rights to Use Inventions

CITY shall have an unencumbered right, and a non-exclusive, irrevocable, royalty-free license, to use, manufacture, improve upon, and allow others to do so for all government purposes, any Invention developed under this Agreement.

C. Copyright Policy

1. Unless otherwise provided by the terms of the Grantor or of this Agreement, when copyrightable material ("Material") is developed under this Agreement, the author or the CITY, at the CITY'S

discretion, may copyright the Material. If the CITY declines to copyright the Material, the CITY shall have an unencumbered right, and a non-exclusive, irrevocable, royalty-free license, to use, manufacture, improve upon, and allow others to do so for all government purposes, any Material developed under this Agreement.

2. The Grantor shall have an unencumbered right, and a non-exclusive, irrevocable, royalty-free license, to use, manufacture, improve upon, and allow others to do so for all government purposes, any Material developed under this Agreement or any Copyright purchased under this Agreement.
3. SUB-RECIPIENT shall comply with all applicable requirements in the Code of Federal Regulations related to copyrights and copyright policy.

D. Rights to Data

The Grantor and the CITY shall have unlimited rights or copyright license to any data first produced or delivered under this Agreement. "Unlimited rights" means the right to use, disclose, reproduce, prepare derivative works, distribute copies to the public, and perform and display publicly, or permit others to do so; as required by 48 CFR 27.401. Where the data are not first produced under this Agreement or are published copyrighted data with the notice of 17 U.S.C. Section 401 or 402, the Grantor acquires the data under a copyright license as set forth in 48 CFR 27.404(f)(2) instead of unlimited rights. (48 CFR 27.404(a)).

E. Obligations Binding on Subcontractors

SUB-RECIPIENT shall require all subcontractors to comply with the obligations of this section by incorporating the terms of this section into all subcontracts.

§416. Minority, Women, And Other Business Enterprise Outreach Program

It is the policy of the CITY to provide minority business enterprises (MBEs), women business enterprises (WBEs) and all other business enterprises an equal opportunity to participate in the performance of all SUB-RECIPIENT contracts, including procurement, construction and personal services. This policy applies to all Contractors and Sub-Contractors.

V
DEFAULTS, SUSPENSION, TERMINATION, AND AMENDMENTS

§501. Defaults

Should SUB-RECIPIENT fail for any reason to comply with the contractual obligations of this Agreement within the time specified by this Agreement, the CITY reserves the right to terminate the Agreement, reserving all rights under state and federal law.

§502. Amendments

Any change in the terms of this Agreement, including changes in the services to be performed by SUB-RECIPIENT and any increase or decrease in the amount of compensation which are agreed to by the CITY and SUB-RECIPIENT shall be incorporated into this Agreement by a written amendment properly executed and signed by the person authorized to bind the parties thereto.

SUB-RECIPIENT agrees to comply with all future CITY Directives, or any rules, amendments or requirements promulgated by the CITY affecting this Agreement.

VI
ENTIRE AGREEMENT

§601. Complete Agreement

This Agreement contains the full and complete Agreement between the two parties. Neither verbal agreement nor conversation with any officer or employee of either party shall affect or modify any of the terms and conditions of this Agreement.

§602. Number of Pages and Attachments

This Agreement is executed in three (3) duplicate originals, each of which is deemed to be an original. This Agreement includes twenty-six (26) pages and three (3) Exhibits which constitute the entire understanding and agreement of the parties.

IN WITNESS WHEREOF, the City and CITY OF IRVINE have caused this Agreement to be executed by their duly authorized representatives on the date first set forth above.

ATTEST:

CITY OF ANAHEIM, a municipal Corporation of the State of California

By: _____
Linda N. Andal
Clerk of the Council

By: _____
Raul Quezada
Chief of Police

SUB-RECIPIENT
CITY OF IRVINE
07-2511363

APPROVED AS TO FORM:

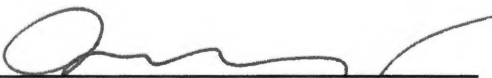
By: _____

Printed Name _____

By: _____
Kristin Pelletier
Interim City Attorney

Title _____

APPROVED AS TO FORM

By: 

Printed Name Jeff Melchior

Title City Attorney

EXHIBIT A

**CERTIFICATION REGARDING DEBARMENT, SUSPENSION AND OTHER
RESPONSIBILITY MATTERS**

Applicants should refer to the regulations cited below to determine the certification to which they are required to attest. Applicants should also review the instructions for certification included in the regulations before completing this form. Signature of this form provides for compliance with certification requirements under the applicable CFR covering New Restrictions on Government-wide Debarment and Suspension (Nonprocurement). The certification shall be treated as a material representation of fact upon which reliance will be placed when the Agency determines to award the covered transaction or cooperative agreement.

As required by Executive Order 12549, Debarment and Suspension, and implemented under the applicable CFR, for prospective participants in covered transactions, as defined in the applicable CFR

A. The applicant certifies that it and its principals:

- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, sentenced to a denial of Federal benefits by a State or Federal court, or voluntarily excluded from covered transactions by any Federal department or agency;
- (b) Have not within a three-year period preceding this application been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (c) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal State or local) with commission of any of these offenses enumerated in paragraph (1) (b) of this certification; and
- (d) Have not within a three-year period preceding this application had one or more public transactions (Federal, State or local) terminated for cause or default; and

B. Where the applicant is unable to certify to any of the statements in this certification, he or she shall attach an explanation to this application.

Authorized Agent Signature

Address: _____

Printed or Typed Name

Title

INSTRUCTIONS FOR CERTIFICATION

1. By signing and submitting this document, the prospective recipient of Federal assistance funds is providing the certification as set out below.
2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective recipient of Federal assistance funds knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
3. The prospective recipient of Federal assistance funds shall provide immediate written notice to the person to whom this agreement is entered, if at any time the prospective recipient of Federal assistance funds learns that its certification was erroneous, when submitted or has become erroneous by reason of changed circumstances.
4. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549.
5. The prospective recipient of Federal assistance funds agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
6. The prospective recipient of Federal assistance funds further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion Lower Tier Covered Transactions," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the List of Parties Excluded from Procurement or Non Procurement Programs.
8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
9. Except for transactions authorized under Paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

EXHIBIT B

CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form LLL "Disclosure Form to Report Lobbying" in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.
4. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352 Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

AGREEMENT NUMBER

CONTRACTOR/BORROWER/AGENCY

NAME AND TITLE OF AUTHORIZED REPRESENTATIVE

SIGNATURE

DATE

Initials_____

EXHIBIT C

California Governor's Office of Emergency Services
FY2016 Grant Assurances
(All HSGP Applicants)

Name of Applicant: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Telephone Number: _____ Fax Number: _____

E-Mail Address: _____

As the duly authorized representative of the Applicant, I hereby certify that the Applicant has the legal authority to apply for federal assistance and the institutional, managerial and financial capability (including funds sufficient to pay any non-federal share of project cost) to ensure proper planning, management and completion of the project described in this application, within prescribed timelines.

I further acknowledge that the Applicant is responsible for reviewing and adhering to all requirements within the:

- (a) Applicable Federal Regulations (see below);
- (b) Federal Program Notice of Funding Opportunity (NOFO);
- (c) California Supplement to the NOFO; and
- (d) Federal and State Grant Program Guidelines.

Federal Regulations

Government cost principles, uniform administrative requirements and audit requirements for federal grant programs are set forth in Title 2, Part 200 of the Code of Federal Regulations (CFR) and updates are issued by the Office of Management and Budget (OMB) and can be found at <http://www.whitehouse.gov/omb/>.

Significant state and federal grant award requirements (some of which appear in the documents listed above) are set forth below. The Applicant hereby agrees to comply with the following:

1. Proof of Authority

The Applicant will obtain written authorization from the city council, governing board or authorized body in support of this project. This written authorization must specify that the Applicant and the city council, governing board, or authorized body agree:

- (a) To provide all matching funds required for the grant project and that any cash match will be appropriated as required.
- (b) Any liability arising out of the performance of this agreement shall be the responsibility of the Applicant and the city council, governing board or authorized body.
- (c) Grant funds shall not be used to supplant expenditures controlled by the city council, governing board or authorized body.

Initials _____

(d) The official executing this agreement is, in fact, authorized to do so.

This Proof of Authority must be maintained on file and readily available upon request.

2. Period of Performance

The Applicant will initiate work after approval of the award and complete all work within the period of performance specified in the grant.

3. Lobbying and Political Activities

As required by Section 1352, Title 31 of the U.S. Code (U.S.C.), for persons entering into a contract, grant, loan or cooperative agreement from an agency or requests or receives from an agency a commitment providing for the United States to insure or guarantee a loan, the Applicant certifies that:

- (a) No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
- (b) If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions.
- (c) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

The Applicant will also comply with provisions of the Hatch Act (5 U.S.C. §§1501-1508 and §§7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with federal funds.

Finally, the Applicant agrees that federal funds will not be used, directly or indirectly, to support the enactment, repeal, modification or adoption of any law, regulation or policy without the express written approval from the California Governor's Office of Emergency Services (Cal OES) or the federal awarding agency.

4. Debarment and Suspension

As required by Executive Orders 12549 and 12689, and 2 CFR §200.212 and codified in 2 CFR Part 180, Debarment and Suspension, the Applicant will provide protection against waste, fraud, and abuse by debarment or suspending those persons deemed irresponsible in their dealings with the federal government. The Applicant certifies that it and its principals:

- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal department or agency;
- (b) Have not within a three-year period preceding this application been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local)

Initials_____

transaction or contract under a public transaction; violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

- (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (federal, state, or local) with commission of any of the offenses enumerated in paragraph (2)(b) of this certification; and
- (d) Have not within a three-year period preceding this application had one or more public transaction (federal, state, or local) terminated for cause or default.

Where the Applicant is unable to certify to any of the statements in this certification, he or she shall attach an explanation to this application.

5. Non-Discrimination and Equal Employment Opportunity

The Applicant will comply with all federal statutes relating to non-discrimination. These include, but are not limited to, the following:

- (a) Title VI of the Civil Rights Act of 1964 (Public Law (P.L.) 88-352 and 42 U.S.C. §2000d et. seq.) which prohibits discrimination on the basis of race, color, or national origin and requires that recipients of federal financial assistance take reasonable steps to provide meaningful access to persons with limited English proficiency (LEP) to their programs and services;
- (b) Title IX of the Education Amendments of 1972, (20 U.S.C. §§1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex in any federally funded educational program or activity;
- (c) Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. §794), which prohibits discrimination against those with disabilities or access and functional needs;
- (d) Americans with Disabilities Act (ADA) of 1990, which prohibits discrimination on the basis of disability and requires buildings and structures be accessible to those with disabilities and access and functional needs;(42 U.S.C. §§ 12101-12213.);
- (e) Age Discrimination Act of 1975, (42 U.S.C. §§ 6101-6107), which prohibits discrimination on the basis of age;
- (f) Public Health Service Act of 1912 (42 U.S.C. §§ 290), relating to confidentiality of patient records regarding substance abuse treatment;
- (g) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §3601 et seq.), relating to nondiscrimination in the sale, rental or financing of housing;
- (h) Executive Order 11246, which prohibits federal contractors and federally assisted construction contractors and subcontractors, who do over \$10,000 in Government business in one year from discriminating in employment decisions on the basis of race, color, religion, sex, sexual orientation, gender identification, or national origin;
- (i) Executive Order 11375, which bans discrimination on the basis of race, color, religion, sex, sexual orientation, gender identification, or national origin in hiring and employment in both the United States federal workforce and on the part of government contractors;
- U) California Public Contract Code §10295.3, which prohibits discrimination based on domestic partnerships and those in same sex marriages;
- (k) Any other nondiscrimination provisions in the specific statute(s) under which application for federal assistance is being made; and
- (l) The requirements of any other nondiscrimination statute(s) which may apply to the application.

In addition to the items listed in (a) through (n), the Applicant will comply with California's Fair Employment and Housing Act (FEHA). FEHA prohibits harassment and discrimination in

Initials_____

employment because of ancestry, race, color, religious creed (including religious dress and grooming practices), sex (which includes pregnancy, childbirth, breastfeeding and medical conditions related to pregnancy, childbirth, or breastfeeding), gender, gender identity, gender expression, sexual orientation, marital status, national origin, ancestry, mental and physical disability, genetic information, medical condition, age, pregnancy, denial of medical and family care leave, or pregnancy disability leave (California Government Code §§ 12940, 12945, 12945.2), military and veteran status, and/or retaliation for protesting illegal discrimination related to one of these categories, or for reporting patient abuse in tax supported institutions.

6. Drug-Free Workplace

As required by the Drug-Free Workplace Act of 1988 (41 U.S.C. §701 et seq.), the Applicant certifies that it will maintain a drug-free workplace and a drug-free awareness program as outlined in the Act.

7. Environmental Standards

The Applicant will comply with state and federal environmental standards, which may be prescribed pursuant to the following, as applicable:

- (a) California Environmental Quality Act (CEQA) (California Public Resources Code §§ 21000-21177), to include coordination with the city or county planning agency;
- (b) CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, §§ 15000-15387);
- (c) Federal Clean Water Act (CWA) (33 U.S.C. § 1251 et seq.), which establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters;
- (d) Federal Clean Air Act of 1955 (42 U.S.C. § 7401) which regulates air emissions from stationary and mobile sources;
- (e) Institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order 12898 on the Environmental Justice Act, and Executive Order 11514 on Environmental Quality;
- (f) Notification of Environmental Protection Agency (EPA) violating facilities pursuant to Executive Order 11738;
- (g) Protection of wetlands pursuant to Executive Order 11990;
- (h) Evaluation of flood hazards in floodplains in accordance with Executive Order 11988;
- (i) Assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §1451 et seq.);
- U) Conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §7401 et seq.);
- (k) Executive Order 11738 instituted to assure that each federal agency empowered to enter into contracts for the procurement of goods, materials, or services and each federal agency empowered to extend federal assistance by way of grant, loan, or contract shall undertake such procurement and assistance activities in a manner that will result in effective enforcement of the Clean Air Act and the Federal Water Pollution Control Act Executive Order Executive Order 11990 which requires preservation of wetlands;
- (l) The Safe Drinking Water Act of 1974, (P.L. 93-523);
- (m) The Endangered Species Act of 1973, (P.L. 93-205);
- (n) Wild and Scenic Rivers Act of 1968 (16 U.S.C. §1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.

The Applicant shall not be: 1) in violation of any order or resolution promulgated by the State Air

Initials _____

Resources Board or an air pollution district; 2) subject to a cease and desist order pursuant to § 13301 of the California Water Code for violation of waste discharge requirements or discharge prohibitions; or 3) determined to be in violation of federal law relating to air or water pollution.

8. Audits

For subrecipients expending \$750,000 or more in federal grant funds annually, the Applicant will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and Title 2 of the Code of Federal Regulations, Part 200, Subpart F Audit Requirements.

9. Access to Records

In accordance with 2 CFR §200.336, the Applicant will give the awarding agency, the Comptroller General of the United States and, if appropriate, the state, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award. The Applicant will require any subrecipients, contractors, successors, transferees and assignees to acknowledge and agree to comply with this provision.

10. Conflict of Interest

The Applicant will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.

11. Financial Management

False Claims for Payment The Applicant will comply with 31 U.S.C §3729 which sets forth that no subgrantee, recipient or subrecipient shall submit a false claim for payment, reimbursement or advance.

12. Reporting - Accountability

The Applicant agrees to comply with applicable provisions of the Federal Funding Accountability and Transparency Act (FFATA) (P.L. 109-282), specifically (a) the reporting of subawards obligating \$25,000 or more in federal funds and (b) executive compensation data for first-tier subawards. This includes the provisions of FFATA, which includes requirements for executive compensation, and also requirements implementing the Act for the non-federal entity at 2 CFR part 25 Financial Assistance Use of Universal Identifier and Central Contractor Registration and 2 CFR part 170 Reporting Subaward and Executive Compensation Information.

13. Whistleblower Protections

The Applicant also must comply with statutory requirements for whistleblower protections at 10 U.S.C. § 2409, 41 U.S.C. § 4712, and 10 U.S.C. § 2324, 41 U.S.C. § 4304 and § 4310.

14. Human Trafficking

The Applicant will comply with the requirements of Section 106(g) of the Trafficking Victims Protection Act of 2000, as amended (22 U.S.C. § 7104) which prohibits grant award recipients or a subrecipient from: (1) engaging in trafficking in persons during the period of time that the award is in effect: (2) procuring a commercial sex act during the period of time that the award is in effect: or (3) using forced labor in the performance of the award or subawards under the award.

15. Labor Standards

The Applicant will comply with the following federal labor standards:

Initials_____

- (a) Comply with the provisions of the Davis-Bacon Act (40 U.S.C. §§ 276a to 276a-7), as applicable, and the Copeland Act (40 U.S.C. § 3145 and 18 U.S.C. § 874) and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§ 327-333), regarding labor standards for federally-assisted construction contracts or subcontracts.
- (b) Comply with the Federal Fair Labor Standards Act (29 U.S.C. § 201 et al.) as they apply to employees of institutes of higher learning (IHE), hospitals and other non-profit organizations.

16. Worker's Compensation

The Applicant must comply with provisions which require every employer to be insured to protect workers who may be injured on the job before commencing performance of the work of this Agreement, as per the workers compensation laws set forth in California Labor Code §§ 3700 et seq.

17. Property-Related

If applicable to the type of project funded by this federal award, the Applicant will:

- (a) Comply with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchase.
- (b) Comply with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires subrecipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
- (c) Assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. § 470), Executive Order 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. § 469a-1 et seq.).
- (d) Comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. § 4831 and 24 CFR Part 35) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.

18. Certifications Applicable Only to Federally-Funded Construction Projects

For all construction projects, the Applicant will:

- (a) Not dispose of, modify the use of, or change the terms of the real property title or other interest in the site and facilities without permission and instructions from the awarding agency. Will record the federal awarding agency directives and will include a covenant in the title of real property acquired in whole or in part with federal assistance funds to assure nondiscrimination during the useful life of the project.
- (b) Comply with the requirements of the awarding agency with regard to the drafting, review and approval of construction plans and specifications.
- (c) Provide and maintain competent and adequate engineering supervision at the construction site to ensure that the complete work conforms with the approved plans and specifications and will furnish progressive reports and such other information as may be required by the assistance awarding agency or State.

Initials_____

19. Use of Cellular Device While Driving is Prohibited

Applicants are required to comply with California Vehicle Code sections 23123 and 23123.5. These laws prohibit driving a motor vehicle while using an electronic wireless communications device to write, send, or read a text-based communication. Drivers are also prohibited from the use of a wireless telephone without hands-free listening and talking, unless to make an emergency call to 911, law enforcement, or similar services.

20. Freedom of Information Act

The Applicant acknowledges that all information submitted in the course of applying for funding under this program, or provided in the course of an entity's grant management activities that are under Federal control, is subject to the Freedom of Information Act (FOIA), 5 U.S.C. § 552, and the California Public Records Rights Act, California Government Code section 6250 et seq. The Applicant should consider these laws and consult its own State and local laws and regulations regarding the release of information when reporting sensitive matters in the grant application, needs assessment, and strategic planning process.

HOMELAND SECURITY GRANT PROGRAM - PROGRAM SPECIFIC ASSURANCES / CERTIFICATIONS

21. Reporting Accusations and Findings of Discrimination

If during the past three years the recipient has been accused of discrimination on any basis the recipient must provide a list of all such proceedings, pending or completed, including outcome and copies of settlement agreements to the OHS financial assistance office and the OHS Office of Civil Rights and Civil Liberties (CRCL) by e-mail at crcl@hq.dhs.gov or by mail at U.S. Department of Homeland Security Office for Civil Rights and Civil Liberties Building 410, Mail Stop #0190 Washington, D.C. 20528.

In the event any court or administrative agency makes a finding of discrimination against the recipient, or the recipient settles a case or matter alleging such discrimination, recipients must forward a copy of the complaint and findings to the OHS Component financial assistance office and the CRCL office by e-mail or mail at the addresses listed above.

The United States has the right to seek judicial enforcement of these obligations.

22. Acknowledgment of Federal Funding from DHS

All recipients must acknowledge their use of federal funding when issuing statements, press releases, requests for proposals, bid invitations, and other documents describing projects or programs funded in whole or in part with federal funds.

23. Activities Conducted Abroad

All recipients must ensure that project activities carried on outside the United States are coordinated as necessary with appropriate government authorities and that appropriate licenses, permits, or approvals are obtained.

24. Best Practices for Collection and Use of Personally Identifiable Information (PII)

OHS defines personally identifiable information (PII) as any information that permits the identity of an individual to be directly or indirectly inferred, including any information that is linked or linkable to that individual. All recipients who collect PII are required to have a publically-available privacy policy that describes standards on the usage and maintenance of PII they collect. Award recipients may also find as a useful resource the OHS Privacy Impact Assessments: Privacy Guidance and Privacy

Initials_____

template respectively.

25. Copyright

All recipients must affix the applicable copyright notices of 17 U.S.C. §§ 401 or 402 and an acknowledgement of Government sponsorship (including award number) to any work first produced under federal financial assistance awards.

26. Energy Policy and Conservation Act

All recipients must comply with the requirements of 42 U.S.C. § 6201 which contain policies relating to energy efficiency that are defined in the state energy conservation plan issued in compliance with this Act.

27. Federal Debt Status

All recipients are required to be non-delinquent in their repayment of any federal debt. Examples of relevant debt include delinquent payroll and other taxes, audit disallowances, and benefit overpayments. See OMB Circular A-129.

28. Fly America Act of 1974

All recipients must comply with Preference for U.S. Flag Air Carriers: (air carriers holding certificates under 49 U.S.C. § 41102) for international air transportation of people and property to the extent that such service is available, in accordance with the International Air Transportation Fair Competitive Practices Act of 1974 (49 U.S.C. § 40118) and the interpretative guidelines issued by the Comptroller General of the United States in the March 31, 1981, amendment to Comptroller General Decision B-138942

29. Hotel and Motel Fire Safety Act of 1990

In accordance with Section 6 of the Hotel and Motel Fire Safety Act of 1990, all recipients must ensure that all conference, meeting, convention, or training space funded in whole or in part with federal funds complies with the fire prevention and control guidelines of the Federal Fire Prevention and Control Act of 1974, as amended, 15 U.S.C. § 2225a.

30. Non-supplanting Requirements

All Applicants who receive awards made under programs that prohibit supplanting by law must ensure that federal funds do not replace (supplant) funds that have been budgeted for the same purpose through non-federal sources.

32. Patents and Intellectual Property Rights

Unless otherwise provided by law, recipients are subject to the Bayh-Dole Act, Pub. L. No. 96-517, as amended, and codified in 35 U.S.C. § 200 et seq. All recipients are subject to the specific requirements governing the development, reporting, and disposition of rights to inventions and patents resulting from financial assistance awards located at 37 C.F.R. Part 401 and the standard patent rights clause located at 37 C.F.R. § 401.14.

33. SAFECOM

All Applicants who receive awards made under programs that provide emergency communication equipment and its related activities must comply with the SAFECOM Guidance for Emergency Communication Grants, including provisions on technical standards that ensure and enhance interoperable communications.

Initials_____

34. Terrorist Financing

All Applicants must comply with Executive Order 13224 and U.S. law that prohibit transactions with, and the provisions of resources and support to, individuals and organizations associated with terrorism. It is the legal responsibility of recipients to ensure compliance with the Order and laws.

35. Reporting of Matters Related to Recipient Integrity and Performance

If the total value of the Applicant's currently active grants, cooperative agreements, and procurement contracts from all federal assistance office exceeds \$10,000,000 for any period of time during the period of performance of this federal award, the Applicant must comply with the requirements set forth in the government-wide Award Term and Condition for Recipient Integrity and Performance Matters located at 2 C.F.R. Part 200, Appendix XII, the full text of which is incorporated here by reference in the terms and conditions of your award.

36. USA Patriot Act of 2001

All recipients must comply with requirements of the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act (USA PATRIOT Act), which amends 18 U.S.C. §§ 175-175c.

IMPORTANT

The purpose of the assurance is to obtain federal and state financial assistance, including any and all federal and state grants, loans, reimbursement, contracts, etc. The Applicant recognizes and agrees that state financial assistance will be extended based on the representations made in this assurance. This assurance is binding on the Applicant, its successors, transferees, assignees, etc. Failure to comply with any of the above assurances may result in suspension, termination, or reduction of grant funds.

All appropriate documentation, as outlined above, must be maintained on file by the Applicant and available for Cal OES or public scrutiny upon request. Failure to comply with these requirements may result in suspension of payments under the grant or termination of the grant or both and the subrecipient may be ineligible for award of any future grants if the Cal OES determines that any of the following has occurred: (1) the recipient has made false certification, or (2) violates the certification by failing to carry out the requirements as noted above.

All of the language contained within this document must be included in the award documents for all subawards at all tiers, including contracts under grants and cooperative agreements and subcontracts. All recipients are bound by the Department of Homeland Security Standard Terms and Conditions 2016, Version 6.0, hereby incorporated by reference, which can be found at: <https://www.dhs.gov/sites/default/files/publications/Fiscal%20Year%202016%20DHS%20General%20Terms%20and%20Conditions.pdf>

The undersigned represents that he/she is authorized to enter into this agreement for and on behalf of the said Applicant.

Signature of Authorized Agent: _____

Printed Name of Authorized Agent: _____

Title: _____ Date: _____

Initials _____



CITY OF IRVINE BUDGET ADJUSTMENT REQUEST FORM

Department: Public Safety
 Requestor: Peter Hong

Finance Comm. Date: July 17, 2017
 City Council Date: August 8, 2017

Approval Exception (A - O): _____
 (see Financial Policies - Budget Adjustment)

| | |
|---|-------------|
| <i>Finance Use Only - Batch Record Number</i> | |
| GL | _____ |
| JL | _____ |
| Posting Date | _____ |
| Posted by | _____ /date |

Reason Code: 0003 New Program or Project

Explanation for Request:
 Appropriate \$50,000 in revenue and expenditures for the 2016 Urban Areas Security Initiative Grant.

Approvals: *[Signature]* 06/30/2017

| | | | |
|--------------------------|------|------------------------|------|
| Department Approval | Date | Budget Office Approval | Date |
| Fiscal Services Approval | Date | City Manager Approval | Date |

REVENUES AND TRANSFERS-IN

| Fund # | Account Number | | | | Amount |
|--------|----------------|-------------|---------|-------------|------------------------|
| | GL | | JL | | Increase or (Decrease) |
| | Org Key | Object Code | Job Key | Object Code | |
| 143 | 3840146675 | 3210 | | | 50,000 |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | Subtotal | 50,000 |

EXPENDITURES AND TRANSFERS-OUT

| Fund # | Account Number | | | | Amount |
|--------|----------------|-------------|---------|-------------|------------------------|
| | GL | | JL | | Increase or (Decrease) |
| | Org Key | Object Code | Job Key | Object Code | |
| 143 | 3840146675 | 4030 | | | 5,000 |
| 143 | 3840146675 | 4110 | | | 25,000 |
| 143 | 3840146675 | 4445 | | | 20,000 |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | Subtotal | 50,000 |

CHANGE TO FUND BALANCE

| Fund # | Account Number | | | | Amount |
|--------|----------------|-------------|---------|-------------|------------------------|
| | GL | | JL | | Increase or (Decrease) |
| | Org Key | Object Code | Job Key | Object Code | |
| | | | | | |
| | | | | | |
| | | | | Subtotal | 0 |

2.7



REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: AUGUST 8, 2017

TITLE: ACCEPTANCE OF MARUCHAN, INCORPORATED DONATION

Director of Public Safety

City Manager

RECOMMENDED ACTION

Accept a \$100,000 donation from Maruchan, Incorporated.

EXECUTIVE SUMMARY

An Irvine-based company, Maruchan, Incorporated (Maruchan), has offered a donation of \$100,000 to the Department of Public Safety. The Department of Public Safety proposes that the donated funds be accepted by the City of Irvine to advance department technology, equipment and training.

COMMISSION/BOARD/COMMITTEE RECOMMENDATION

At its regular meeting on July 17, 2017, the Finance Commission approved the recommended action by a vote of 5-0.

ANALYSIS

Founded in 1972, Maruchan is an Irvine-based firm that produces noodle soups and related products. Maruchan has a history of donating funds to the Department of Public Safety. In the past, these funds have been used for several worthwhile projects including the purchase of electric, clean energy stand-up patrol vehicles, audio visual systems, technology systems and most recently, the Department's Naloxone (Narcan) program, used by first responders.

In April 2017, Maruchan sent a \$100,000 donation to the Department of Public Safety. Staff recommends the donation be accepted and used for advancing Department technology, equipment and training.

ALTERNATIVES CONSIDERED

The City Council may choose to return the donation to Maruchan. Returning the donation would preclude the City from utilizing the valued funds for advancing Public Safety technology, equipment and training.

FINANCIAL IMPACT

The funds have been deposited into Special Fund 143. The planned expenditures will be fully paid for with the donated funds, with no impact to the General Fund.

REPORT PREPARED BY Peter Hong, Senior Management Analyst

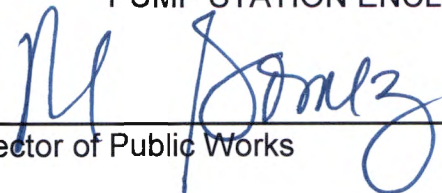
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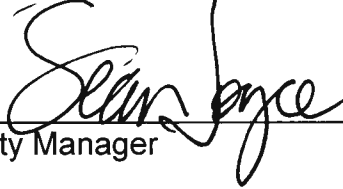
REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: AUGUST 8, 2017

TITLE: APPROVAL OF PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS FOR ORANGE COUNTY GREAT PARK SOUTH LAWN PUMP STATION ENCLOSURE



Director of Public Works



City Manager

RECOMMENDED ACTION

1. Approve the construction plans, specifications and contract documents for the Orange County Great Park South Lawn Pump Station Enclosure, Capital Improvement Project 381703.
2. Approve the Engineer's Estimate, Construction Contingency and Project Funding Summary.
3. Authorize staff to solicit competitive bids and award the construction contract to the lowest responsive and responsible bidder, in accordance with the City's purchasing policies and procedures, within the approved budget.

EXECUTIVE SUMMARY

Plans, specifications and contract documents for the Orange County Great Park South Lawn Pump Station Enclosure are complete and ready for City Council approval. These documents are available for public review in the Public Works department. The proposed work includes constructing a new metal roof steel structure enclosure for the existing irrigation pump station with a roof hatch for equipment access and installation of motion sensor energy efficient Light Emitting Diode (LED) lighting fixtures to facilitate night time routine maintenance activities. Approval of the recommended actions will allow staff to proceed with solicitation of competitive bids for construction and award of a contract to the lowest responsive and responsible bidder in accordance with the City's purchasing policies and procedures within the approved project budget.

COMMISSION/BOARD/COMMITTEE RECOMMENDATION

Not applicable.

ANALYSIS

The existing pump station serves as the primary irrigation support for the storm water runoff capture and reuse system at the Orange County Great Park South Lawn and associated portions of the Western Sector. The existing pump station and its electrical

components are enclosed by metal grate fencing with no weather protection from the sun or rain. The proposed enclosure will enhance the useful life of the equipment and assist in minimizing maintenance shut downs and repairs of the pump station equipment. A rendering of the proposed structure is included as Attachment 3.

The construction contract estimate prepared by the consultant design engineer for the project is \$262,515. A budget allowance of \$40,000 for construction engineering (material and equipment testing and inspection services) and \$52,500 for construction contingency is recommended as shown in the Project Funding Summary (Attachment 4). The City's construction contracting policies and procedures limit the award of the construction contract by staff to a maximum of 10 percent over the engineer's estimate. These policies also restrict the use of the construction contingency only for unforeseen circumstances that may arise necessary to complete the work within the approved project scope and budget.

Staff is seeking City Council approval to proceed with soliciting competitive bids for construction. A copy of the Notice Inviting Bids, Construction Contract, Plans, Specifications, and the proposed Schedule of Work listing the individual bid items for this project is included as Attachment 5. If approved by the City Council, construction is anticipated to begin in October 2017 with completion in February 2018. Work activity will take place primarily Monday through Friday between the hours of 7 a.m. and 3:30 p.m. and no lane closures are anticipated.

ENVIRONMENTAL REVIEW

Pursuant to Section 4 of the City of Irvine California Environmental Quality Act (CEQA) Procedures and Article 19 of the State of California CEQA Guidelines, the proposed project is categorically exempt from the requirements of CEQA, under State Guideline Section 15301, Class 1(d), Existing Facilities.

ALTERNATIVES CONSIDERED

The City Council could direct staff to defer the proposed project to a future date, or may direct staff to modify any elements of the project scope. The City Council may also approve the construction plans and related documents, authorize staff to solicit competitive bids and direct staff to bring back the results of the competitive bid process to the City Council for its review and consideration prior to award of the contract.

FINANCIAL IMPACT

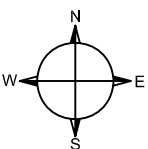
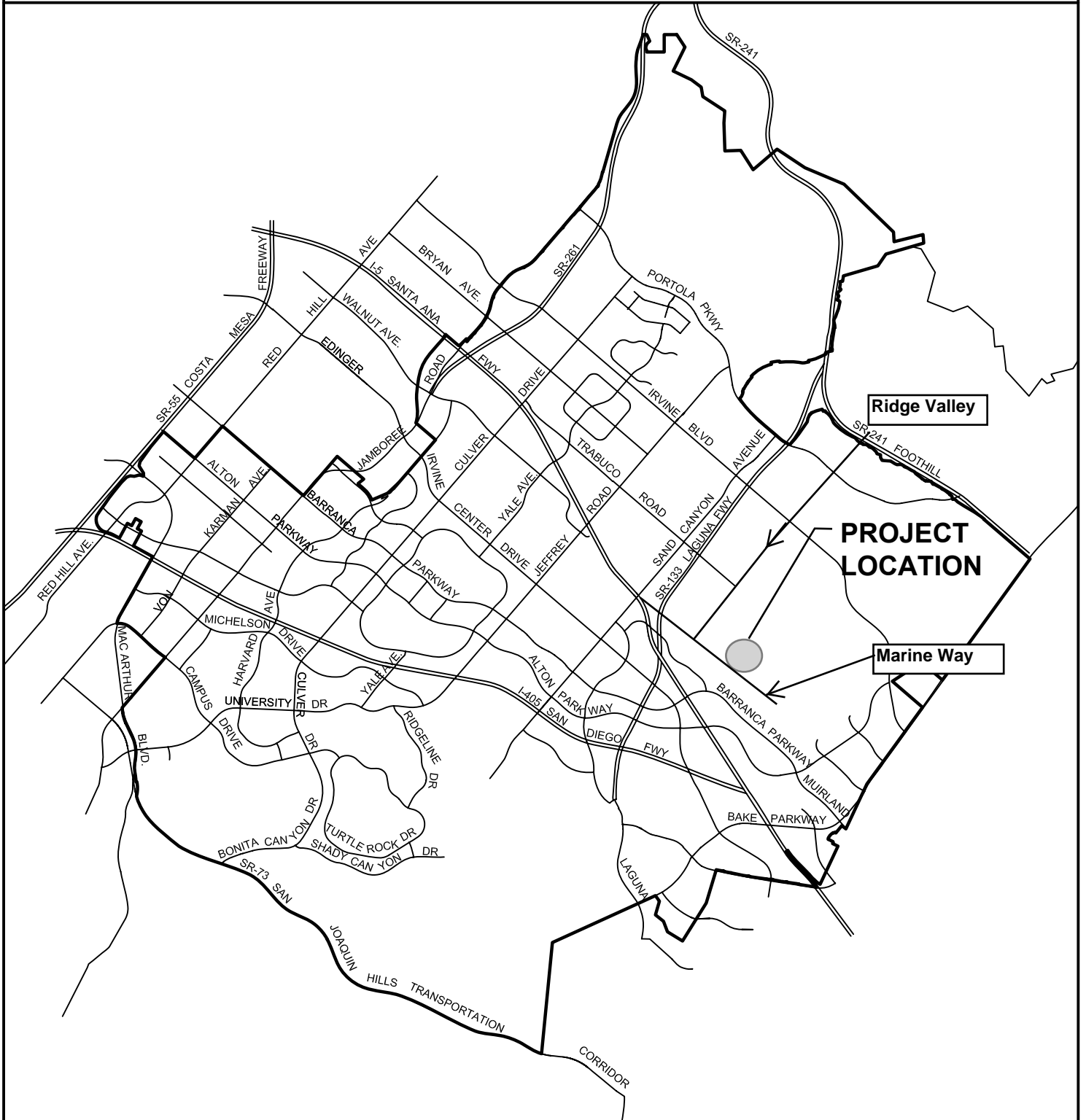
Project expenditures to date for preparation of the construction plans and contract documents total \$32,900. The construction contract estimate prepared by the design engineer is \$262,515. The recommended budget allowance of \$40,000 for construction engineering and \$52,500 for construction contingency brings the total estimated project cost for the construction phase to \$355,015. Funding for the construction phase is available in the City Council approved CIP 381703 from Park In Lieu Fees. A complete Project Funding Summary is provided in Attachment 4.

REPORT PREPARED BY Thomas Perez, P.E., CIP Administrator

ATTACHMENTS

1. Vicinity Map
2. Site Map
3. Project Rendering
4. Project Funding Summary
5. Notice Inviting Bids, Construction Contract, Plans, Specifications and Proposed Schedule of Work.

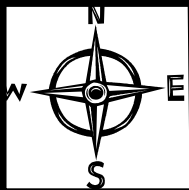
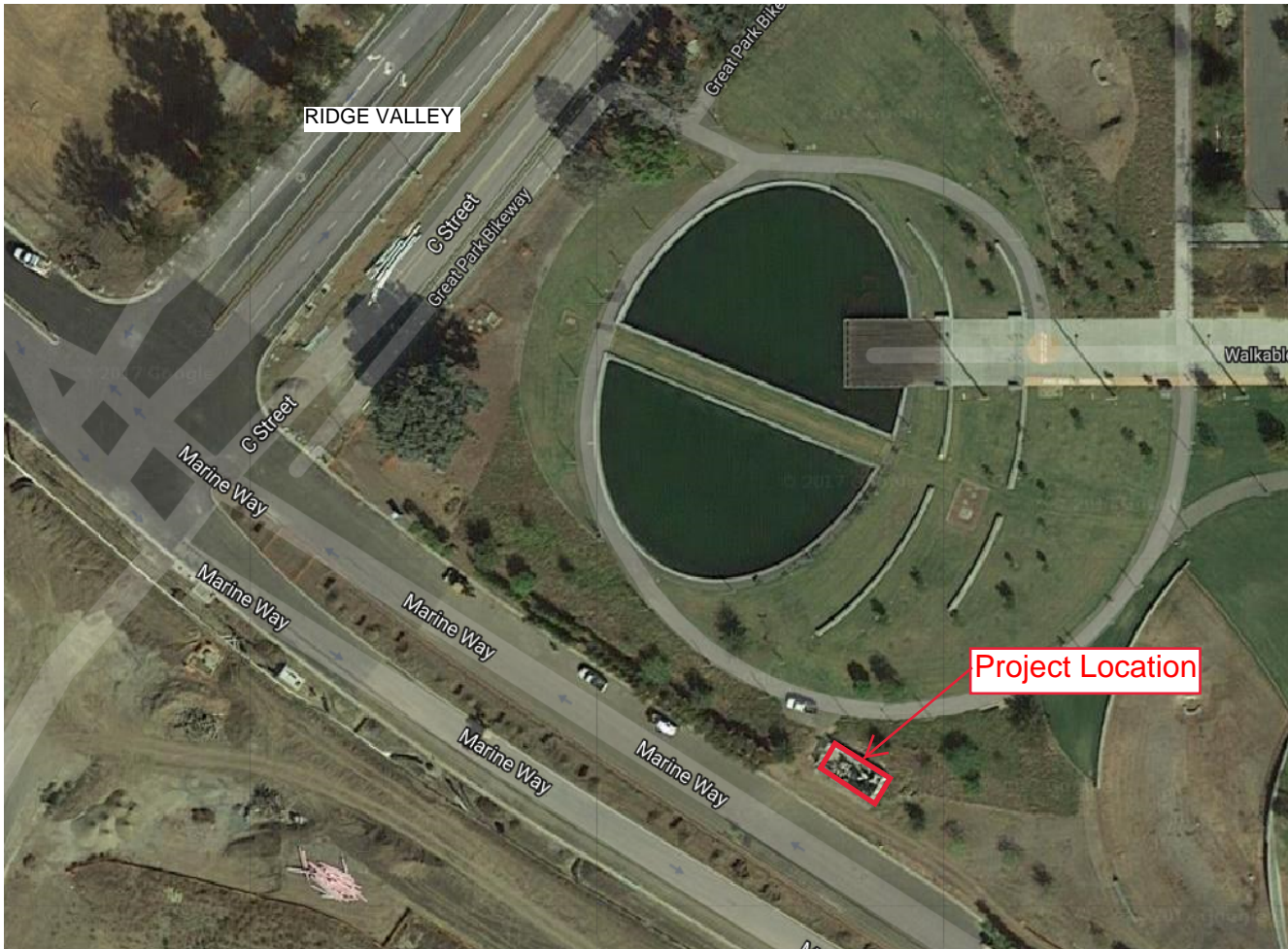
SOUTH LAWN PUMP STATION ENCLOSURE



VICINITY MAP



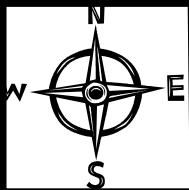
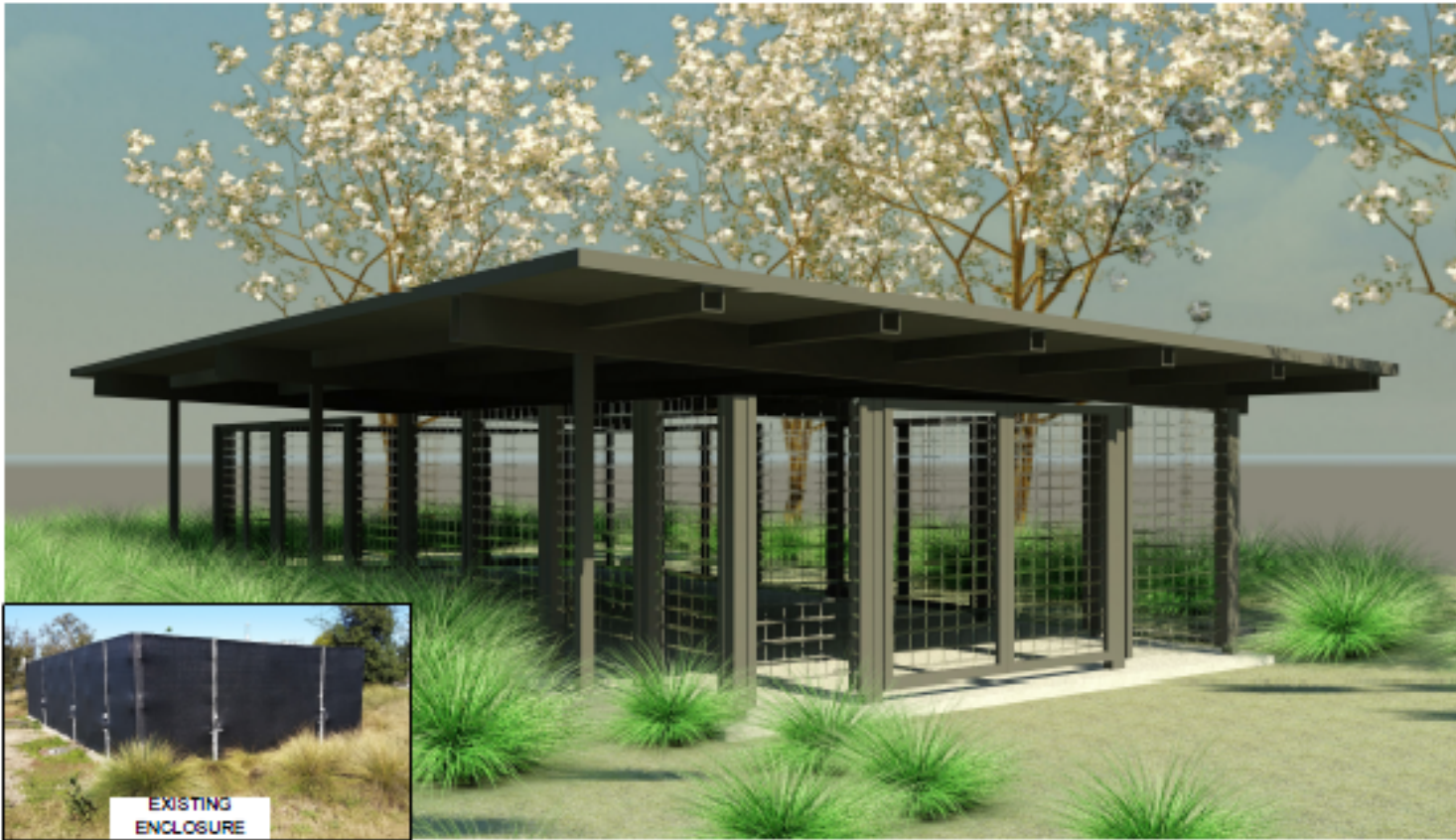
SOUTH LAWN PUMP STATION ENCLOSURE



SITE MAP
ATTACHMENT 2



SOUTH LAWN PUMP STATION ENCLOSURE



PROJECT RENDERING
ATTACHMENT 3



Project Funding Summary

South Lawn Pump Station Enclosure

CIP 381703

August 8, 2017

Project Expenditures

| | |
|---|-------------------|
| Design Engineering | \$ 32,900 |
| Construction Contract (Engineer's Estimate) | \$ 262,515 |
| Construction Engineering | \$ 40,000 |
| Construction Contingency | <u>\$ 52,500</u> |
| Total Estimated Project Cost | \$ 387,915 |

Project Funding

| | |
|--|-------------------|
| CIP 381703 South Lawn Pump Station Enclosure | <u>\$ 387,915</u> |
| Total Funding Available | \$ 387,915 |



CITY OF IRVINE

ORANGE COUNTY, CALIFORNIA

**NOTICE INVITING BIDS, PROPOSAL,
CONTRACT AND SPECIAL PROVISIONS
FOR**

**ORANGE COUNTY GREAT PARK
SOUTH LAWN PUMP STATION ENCLOSURE**

**CIP 381703
BID NO. 17-1256**

CITY OF IRVINE
ONE CIVIC CENTER PLAZA
P.O. BOX 19575
IRVINE, CALIFORNIA 92623-9575

PREPARED BY:
BOA ARCHITECTURE
1511 Cota Avenue
Long Beach CA. 90813

JULY 2017

ATTACHMENT 5

ORANGE COUNTY GREAT PARK
SOUTH LAWN PUMP STATION ENCLOSURE
CIP 381703

THE SPECIAL PROVISIONS CONTAINED HEREIN HAVE BEEN PREPARED BY OR
UNDER THE DIRECTION OF:

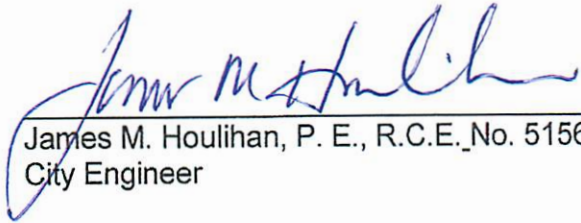


Edward Lok Ng, Architect No C-16840
BOA Architecture

6-16-17

Date

APPROVED BY:



James M. Houlihan, P. E., R.C.E. No. 51568
City Engineer

7/18/17

Date

TABLE OF CONTENTS

| | <u>PAGE</u> |
|---|-------------|
| NOTICE INVITING BIDS | |
| INSTRUCTIONS TO BIDDERS, PROPOSAL REQUIREMENTS AND CONDITIONS ... | 1 |
| BIDDER'S PROPOSAL..... | 12 |
| SCHEDULE OF WORK..... | 13 |
| INSTRUCTIONS FOR ENTERING ELECTRONIC BIDS | 14 |
| ADDENDA..... | 16 |
| INFORMATION REQUIRED OF BIDDERS | 17 |
| THE CITY OF IRVINE RESERVES THE RIGHT TO REJECT ALL BIDS..... | 21 |
| LIST OF SUBCONTRACTORS..... | 23 |
| NON-COLLUSION DECLARATION-CONTRACTOR..... | 24 |
| FORM OF BID BOND | 25 |
| FALSE CLAIMS | 27 |
| CIVIL LITIGATION AND ARBITRATION HISTORY | 28 |
| CRIMINAL CONVICTIONS | 29 |
| VIOLATION OF LAW OR A SAFETY REGULATION..... | 30 |
| CONSTRUCTION CONTRACT | 31 |
| PERFORMANCE BOND..... | 36 |
| PAYMENT BOND..... | 38 |
| SPECIAL PROVISIONS..... | 40 |
| PART 1 - GENERAL PROVISIONS..... | 41 |
| SECTION 1 - TERMS, DEFINITIONS, ABBREVIATIONS, UNITS OF MEASURE AND SYMBOLS..... | 41 |
| SECTION 2 - SCOPE AND CONTROL OF THE WORK | 43 |
| SECTION 3 - CHANGES IN WORK | 55 |
| SECTION 4 - CONTROL OF MATERIALS..... | 59 |
| SECTION 5 - UTILITIES | 64 |
| SECTION 6 - PROSECUTION, PROGRESS AND ACCEPTANCE OF THE WORK.. | 70 |
| SECTION 7 - RESPONSIBILITIES OF THE CONTRACTOR..... | 78 |
| SECTION 8 - FACILITIES FOR AGENCY PERSONNEL | 116 |
| SECTION 9 - MEASUREMENT AND PAYMENT | 117 |
| PART 2 - CONSTRUCTION MATERIALS..... | 124 |
| SECTION 201 – CONCRETE, MORTAR, AND RELATED MATERIALS | 124 |
| PART 6 - TEMPORARY TRAFFIC CONTROL | 125 |
| SECTION 600 – ACCESS..... | 125 |
| SECTION 601 – WORK AREA TRAFFIC CONTROL..... | 127 |
| PART 7 - STEEL STRUCTURE..... | 134 |
| SECTION 7-013300 SUBMITTAL PROCEDURE | 134 |
| SECTION 7-055000 METAL FABRICATION | 137 |
| SECTION 7-074113 METAL ROOF PANEL | 142 |
| SECTION 7-075000 MEMBRANE ROOFING..... | 150 |
| SECTION 7-076200 SHEET METAL FLASHING AND TRIM..... | 152 |
| SECTION 7-077233 ROOF HATCHES..... | 157 |
| SECTION 7-099100 PAINTING..... | 160 |

APPENDIX

A – Project Plans

CITY OF IRVINE, CALIFORNIA
NOTICE INVITING BIDS
Bid No. 17-1256

NOTICE IS HEREBY GIVEN that sealed bids with online bid price submittal will be received by the Purchasing Agent of the City of Irvine, California, for furnishing all labor services, materials, tools, equipment, supplies, transportation, utilities and all other items and facilities necessary therefore, as provided in the contract documents for **South Lawn Pump Station Enclosure, CIP 381703** together with appurtenances thereto, in strict accordance with the Specifications on file at the **Department of Public Works**, 6427 Oak Canyon, Bldg. 1, Irvine, California 92618-5202.

DATE OF OPENING BIDS: Bid prices for each line item of the Schedule of Work must be entered on the BidsOnline system in accordance with the instructions beginning on page 14. All other required documents for the bid proposal packet (pages 12, 16-30) must be received at One Civic Center Plaza, Irvine, California, 92606-5207 no later than **XX:XX:00 a.m. on Month Date, 20XX**, at which time and place bids will be publicly opened and read aloud. No late bids will be accepted. Hand-delivered or courier-delivered bid packages shall be brought to the RECEPTIONIST for the Purchasing Agent at the reception desk located on the first floor of the Civic Center building at the City of Irvine, located at One Civic Center Plaza, Irvine, California 92606-5207. Mailed bids shall be sent to City of Irvine, c/o Purchasing Agent, P.O. Box 19575, Irvine, CA 92623-9575. All bids shall be submitted in sealed envelopes marked on the outside with **"BID NO. 17-1256 FOR SOUTH LAWN PUMP STATION ENCLOSURE, CIP 381703."** If mailed to the Purchasing Agent, include a label on outside of sealed bid **"SEALED BID--Do Not Open With Regular Mail."**

LOCATION OF THE WORK: The work to be performed hereunder is located in the City of Irvine, County of Orange, on **Orange County Great Park, vicinity of the intersection of Marine Way and Ridge Valley.**

DESCRIPTION OF WORK: The work to be performed shall include, but not be limited to:

Construct pump station enclosure which consists of new steel structure, steel columns on concrete footings, standing seam metal roof with double leaf 12'X12' roof hatch for equipment access, roof lighting and new paint and other items not mentioned here, but are required by the plans and the special provisions. The Engineer's construction cost estimate for the project is above \$262,515.

LICENSE REQUIREMENT: Prime Contractor must possess a valid **Class B license**. At the time of submitting the bid, the Bidder shall be licensed as a contractor in accordance with the provisions of California Business and Professions Code Chapter 9, Division 3.

DEBARRED CONTRACTORS: The City of Irvine Municipal Code Section 2-12-101 *et seq.* sets forth procedures to debar Contractors from bidding or performing work on City of Irvine contracts at any tier, whether prime, subcontractor, etc. Accordingly, certain

Contractors have been debarred and are listed on the City's website at www.cityofirvine.org/purchasing. Click on the link which states: "For a list of Debarred Contractors, please [click here](#)."

COMPLETION OF WORK AND LIQUIDATED DAMAGES: All work shall be completed in a total of **Sixty (60) Working Days** from the date specified in the Notice to Proceed. Liquidated damages shall be **Seven Hundred Dollars (\$700)** per Calendar Day, for each and every Calendar Days delay in finishing the work, in excess of the number of Working Days prescribed above.

AWARD OF CONTRACT: The award of the Contract, if it is awarded, will be to the lowest responsive and responsible Bidder whose bid complies with all the requirements prescribed. The City reserves the right, after opening bids, to reject any or all bids, to waive any informality in a bid, to make awards in the interest of the City, and to reject all other bids.

PROPOSAL GUARANTEE AND BONDS: Each bid proposal packet shall be accompanied by cash, a certified or cashier's check or by a bid bond issued by a surety company, admitted to do business in the State of California, on the form furnished by the Agency as guarantee that Bidder will, if an award is made to him in accordance with the terms of his bid, promptly secure Workers' Compensation insurance, and liability insurance, execute a contract in the required form, and furnish satisfactory bonds for the faithful performance of the contract ("Performance Bond") and for the payment of claims of material men and laborers thereunder ("Payment Bond"). Said cash, check or bid bond shall be in an amount of not less than ten percent (10%) of the amount of the bid. The Performance Bond and Payment Bond shall be not less than one hundred percent (100%) of the total amount of the bid price named in the contract. Only bonds issued by companies admitted to do business in the State of California will be accepted in accordance with the Code of Civil Procedure Section 995.311. Failure to submit acceptable Payment Bond and Performance Bond as required shall result in a rejection of the bid and a forfeiture of the Bid Bond.

PREVAILING RATES OF WAGES: **Prevailing wage requirements apply to public works projects with a value exceeding \$1,000.00. The definition of "public works" is found at Labor Code Section 1720, et seq.**

The City is subject to the provisions of law relating to public contracts in the State of California. It is agreed that all provisions of law applicable to public contracts are a part of this Agreement to the same extent as though set forth herein, and will be complied with by Contractor. Contractor shall abide by all applicable Sections of the California Labor Codes including Sections 1770 -1781, *et seq.* In accordance with the provisions of Section 1773 of the California Labor Code, the general prevailing rates of per diem wages and holiday and overtime work in the locality in which the Work is to be performed shall be in accordance with the rates posted on the Department of Industrial Relations website, found at <http://www.dir.ca.gov/dirdatabases.html>. The Contractor, and any subcontractor under him, shall pay not less than the specified prevailing rates of wages to all workers employed in the execution of this Agreement.

The City of Irvine reminds all contractors and subcontractors of the adoption of **State of California Senate Bill No. 854 (SB 854)**, and encourages them to understand and comply with the requirements as set forth on the Department of Industrial Relations

(DIR) website at <http://www.dir.ca.gov/Public-Works/PublicWorks.html>. All contractors and subcontractors who plan to bid on a public works project (including maintenance work) with a value exceeding \$1,000.00 must first be registered and pay an annual fee with the DIR. Effective March 1, 2015, the City will require all contractors and subcontractors to be registered with the DIR prior to submitting a bid on any public works project. Subject to the exceptions set forth in Labor Code Section 1725.5, bids from contractors that are not currently registered will be deemed nonresponsive. Further, effective April 1, 2015, the City will not award a contract to and no contractor or subcontractor will be allowed to work on a City public works project unless they are registered with the DIR pursuant to Labor Code Section 1725.5. Please visit the DIR website for further information.

A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.

LABOR REGULATIONS: The Contractor shall comply with all applicable requirements of the California Labor Code and the City of Irvine Municipal Code.

PLANS AND SPECIFICATIONS: A full set of bid documents consisting of Notice Inviting Bids, Proposal, Contract, Special Provisions and Contract Plans are available for inspection without charge at the Department of Public Works, Project Management Division, City of Irvine Operations Support Facility, 6427 Oak Canyon, Building 1, Irvine, California 92618-5202.

To obtain a copy of the bid documents, please visit the City of Irvine web site at www.cityofirvine.org/purchasing. Click on the "[Supplier Registration and Bid Opportunities](#)" link, and review the information about our online system. Next, click on the "[BidsOnline](#)" link. If you are not currently registered with the City of Irvine, please click on the "[New Vendor Registration](#)" button and then complete the electronic supplier registration to include your Contractors State License information. After registering your firm, click on the "[Bid Opportunities](#)" button to view and download the Bid Documents, which include the complete Notice Inviting Bids document. Contractors must register on the City's web site and download the Bid Documents in order to submit a bid. Firms must also check the web site periodically for addenda information as failure to download any and all addenda, and acknowledge in the bid submittal, will result in bid disqualification.

SECURITY FOR COMPLETION OF WORK: The Contract Documents establish a provision for monthly progress payments based upon the percentage of work completed as determined by the Engineer. The City will retain a portion of each progress payment as security for completion of the balance of the work. At the request and expense of the successful bidder, the City will pay the amount so retained upon compliance with the requirements of California Public Contract Code § 22300 and the provisions of the Contract Documents, Special Provisions Subsection 9-3.2.2 pertaining to "Substitution of Securities."

PROJECT ADMINISTRATION: All questions relative to this project prior to opening bids shall be prepared in writing and transmitted to the attention of Mr. Thomas Perez, P.E. CIP Administrator by email to tperez@cityofirvine.org, with a copy to Mr. Brian Brown, Senior Buyer at bbrown@cityofirvine.org. No inquiries will be accepted later than five (5) business days prior to the bid opening date as this would not allow time to respond to all plan holders. No phone inquiries will be accepted.

CITY OF IRVINE

Published by:
Publication Date:

INSTRUCTIONS TO BIDDERS, PROPOSAL REQUIREMENTS AND CONDITIONS

1. CONTRACT DOCUMENTS: The Contract Documents shall consist of:

- a) Permits and Agreements
- b) Contract
- c) Addenda
- d) Instructions to Bidders, Proposal Requirements and Conditions
- e) Special Provisions
- f) Contract Plans
- g) Standard Plans
- h) Standard Specifications
- i) Reference Specifications,

all of which are on file at the City of Irvine in the Public Works Department, Project Management Division, Operations Support Facility, 6427 Oak Canyon, Bldg. 1, Irvine, California, and are hereby referred to and made a part hereof.

2. BID PROPOSALS: To be considered, bids shall be made according to the following instructions:

- a) For the convenience of bidders, the "SCHEDULE OF WORK AND BID PRICES" has been posted on the City's BidsOnline system. Bidders must enter their unit price information online in accordance with the INSTRUCTIONS FOR ENTERING ELECTRONIC BIDS included herein. Unit prices must be entered online. The extended prices and total bid price will be automatically calculated.
- b) Bids shall be submitted only on bid items stated in the Bid Documents; bids on other bases will not be considered. Bids that do not reference all addenda or that are not submitted on the prescribed forms, and in accordance with the INSTRUCTIONS FOR ENTERING ELECTRONIC BIDS may be rejected. The completed forms shall be without interlineations or alterations; any such bid may be declared non-responsive.
- c) Unless called for, additive bids will not be considered.
- d) Pursuant to the provisions of Public Contract Code § 4101 to 4108, inclusive, every Bidder shall set forth in its bid:
 - 1) The Bidder shall list the name, license number and location of the place of business of each subcontractor performing work in an amount in excess of one-half of one percent (1/2%) of the prime contractor's total bid, or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half of one percent (1/2%) of the prime contractor's total bid or ten thousand dollars (\$10,000), whichever is greater.

- 2) The bid item numbers and the percentage of the bid item subcontracted.
- e) In the event additive bids are called for and the Bidder intends to use different or additional subcontractors on the additive(s), the Bidder shall fill out additional forms of the list of subcontractors and shall identify such forms with relation to whether they apply to the base or additive bids.
 - f) If the Bidder fails to specify a subcontractor for any portion of the work to be performed under the contract in excess of one-half of one percent (1/2%) of the Bidder's total bid, or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half of one percent (1/2%) of the Bidder's total bid or ten thousand dollars (\$10,000), whichever is greater, the Bidder agrees to perform that portion of work himself. The successful Bidder shall not, without the consent of the City, either:
 - 1) Substitute any person, firm or corporation as subcontractor in place of the subcontractor designated in the original bid, or
 - 2) Permit any subcontract to be assigned or transferred or allow the work to be performed by anyone other than the original subcontractor listed in the bid.
 - g) Bid proposal packets shall be accompanied by cash, a certified or cashier's check, or an acceptable bid bond on the form furnished by the City for an amount not less than ten percent (10%) of the bid, made payable to the order of the City of Irvine. The cash, check or bid bond shall be a guarantee that the Bidder will enter into a contract and provide all required insurance and bonds if awarded the work; and in case of refusal or failure to enter into the contract, the cash, check or bid bond shall be forfeited. The City will return Bidder's cash or check if the project is not awarded to Bidder.

Only bonds issued by companies admitted to do business in the State of California will be accepted, in accordance with Code of Civil Procedure § 995.311 and Insurance Code § 12090.
 - h) Before submitting a bid, bidders shall carefully examine the work site, the Contract Documents and the form of Contract and shall fully inform themselves about all existing conditions and limitations. Bidders shall include in their bids a sum to cover the cost of all work included in the Contract.
 - a. Bid proposal packets shall be delivered to the office of the Purchasing Agent, City of Irvine, Irvine, California, on or before the day and hour set for the bid opening in the Notice Inviting Bids, in a sealed envelope that bears the title of the Work, Bidder's name, and the words "BID NO. 17-1256 FOR SOUTH LAWN PUMP STATION ENCLOSURE, CIP 381703" If mailed to the Purchasing Agent, include a label on the outside of the sealed bid: "SEALED BID--Do Not Open with Regular Mail."
 - i) A bid may be considered non-responsive if it does not comply with the requirements set forth in these bid documents. A responsive bid is one that complies with the solicitation in all acceptability and material respects and contains no material defects.

3. WITHDRAWAL OF BIDS: Bids may be withdrawn at any time before the bid deadline, by going back into the BidsOnline system and selecting "Withdraw."
4. INTERPRETATION OF DRAWINGS AND DOCUMENTS; REQUESTS FOR CLARIFICATION: If any person contemplating submitting a bid for the proposed Contract is in doubt as to the true meaning of any part of the plans and specifications, or other proposed Contract Documents, or finds discrepancies in, or omissions from, the drawings or specifications, he shall submit to the Purchasing Agent a written request for all interpretations or corrections thereof via email to the project manager and purchasing staff prior to the deadline for submitting questions, as set forth in the Notice Inviting Bids section herein. Any clarification or correction of the proposed documents will be made only by Addendum duly issued, with notice provided to all firms who downloaded the bid documents from the City's website. The City is not responsible for any other explanations or interpretations of the proposed documents.
5. ADDENDA TO THE CONTRACT DOCUMENTS: Any addenda issued during the time of bidding, or forming a part of the Contract Documents after the Bidder has downloaded the bid documents from the City's website, shall be taken into account in the bid and shall be made a part of the Contract.

Addenda may be issued by the City of Irvine for any reason, including but not limited to, clarifying or correcting the Notice Inviting Bids, Special Provisions, Plans, or Bid.

Bidders will be notified of such Addenda during the period of advertising either by email or posting on the City's website, provided however; each Bidder shall be solely responsible for obtaining any such Addenda.

The Bidder shall acknowledge the receipt of Addenda on the form provided in the Bid package. Bids that do not reference all Addenda on the prescribed form may be rejected as non-responsive.

6. BIDDER RESPONSIVENESS: Failure of the Bidder to provide requested information in a complete and accurate manner may be considered non-responsive resulting in rejection of the bid. The use of "N/A" or "n/a" in response to any request for information without an explanation as to why that abbreviation is being used may render the bid non-responsive.
7. BIDDER RESPONSIBILITY: Bidders are hereby notified that, in accordance with the City of Irvine Municipal Code § 2-12, the City may make a determination that the Contractor is non-responsible if the hearing officer finds evidentiary support that the Bidder has committed any of the following: (1) violated a term of a contract, present or past, with the City or other entity; (2) committed an act or omission which negatively reflects on the Contractor's quality, fitness, or capacity to perform a contract with the City or any other entity or engaged in a pattern or practice which negatively reflects on the same; (3) committed an act or omission which evidences a lack of business integrity or business honesty; (4) made or submitted a false claim against the City or any other entity; or (5) received a fine or citation for performing work in an unsafe manner; or (6) violated a condition,

rule, regulation, permit, or standard applicable to a contract with the City or any other entity. In arriving at his or her determination, the hearing officer may consider Bidder's past conduct on City projects or on any other public or private projects upon which Bidder performed work.

8. **BIDDER DEBARMENT:** Bidders are hereby notified that, in accordance with the City of Irvine Municipal Code § 2-12, the City may make a determination that the Bidder shall be debarred if the hearing officer finds evidentiary support that the Bidder has committed any of the following: (1) violated a term of a contract, present or past, with the City or other entity; (2) committed an act or omission which negatively reflects on the Contractor's quality, fitness, or capacity to perform a contract with the City or any entity or engaged in a pattern or practice which negatively reflects on the same; (3) committed an act or omission which evidences a lack of business integrity or business honesty; (4) made or submitted a false claim against the City or any other entity; (5) received a fine or citation for performing work in an unsafe manner; or (6) violated a condition, rule, regulation, permit, or standard applicable to a contract with the City or any other entity. In arriving at his or her determination, the hearing officer may consider past conduct of the Contractor on City projects or on any other public or private projects which Contractor performed work.
9. **OPENING BIDS:** Bids will be publicly opened and read at the time and place set in the Notice Inviting Bids.
10. **BID PROTEST PROCEDURES:**
 - a) **BASIS FOR PROTEST:** It is the policy of the City to ensure that free and open competition takes place in all procurement activities. If, in the course of a procurement action, an interested party has reason to believe that these conditions do not exist, the interested party may file a protest in accordance with the provisions of these procedures with the City of Irvine Purchasing Agent requesting a review of the claim and a timely resolution of the issue. Any bidder on a project for which it submitted a timely bid may protest the contract award for that project; however, subcontractors, suppliers or other third parties may not protest contract awards. Moreover, complaints about alleged ambiguity of the bid documents and/or estimates are not appropriate subject matters for bid protests.
 - b) **BID PROTEST CONTENTS:** The bid protest shall be submitted in writing via email to the attention of the Purchasing Agent. The written protest shall include:
 - 1) The solicitation number and project description.
 - 2) The name, address, phone number, and email address of the protesting party.
 - 3) A detailed statement of all the legal and factual grounds for the protest and all relevant, supporting documentation (including all written documentation). The grounds for protest must be fully supported.
 - 4) Statement of the form of relief requested from the City.

- 5) Signature of an authorized representative of the protesting party.
- c) **DEADLINE TO SUBMIT BID PROTESTS:** Bid protests must be filed within five (5) business days after the deadline for receiving bids.
- d) **WHERE TO FILE:** All protests are to be directed to the City of Irvine Purchasing Agent. Protests must be submitted in writing via email to: purchasing@cityofirvine.org. A copy of the email must also be sent to the project manager whose email address is set forth in the bid documents. (A document is considered filed on a particular calendar day when it is received via email by the City of Irvine Purchasing Agent by 5:00 p.m., Pacific Standard Time, on that calendar day.) Although not required, in addition to submitting a protest via email, an original protest letter may be sent via United States Postal Service to: Attn: Purchasing Agent, City of Irvine, P.O. Box 19575, Irvine, CA 92623-9575.
- e) **BID PROTEST REVIEW:** Upon receipt, the Purchasing Agent shall consider the protest and may give notice of the protest and its basis to other persons including bidders involved in or affected by the protest. A protest shall be dismissed for failure to comply with any of the requirements set forth in the “Bid Protest Contents” section above. The Purchasing Agent shall review all material submitted with the protest. No additional material will be accepted for consideration from the protesting party unless specifically requested by the Purchasing Agent. If additional material is requested, it must be submitted by the requested date. The Purchasing Agent shall respond to the protesting party via email within ten (10) business days after receipt of the protest. Final determinations shall be binding, except as otherwise provided below.
- f) **RECONSIDERATION OF PROTEST DECISION:** A protesting party may request the Purchasing Agent’s reconsideration of a decision prior to contract award only if one or both of the following conditions are met:
- 1) New information becomes available that was not previously known, or could not have been reasonably known, at the time of the original protest; and/or
 - 2) The Purchasing Agent’s decision contains an error of law.
- Any request for reconsideration of a protest decision must be submitted in writing via email to the Purchasing Agent within three (3) business days from the date of issuance of the initial decision. The request must include a detailed explanation of the basis for reconsideration as set forth above. The Purchasing Agent shall respond to the request for reconsideration within seven (7) business days from receipt of the request.
- g) **CONTRACT AWARD:** At its discretion, the City may delay the execution of any proposed agreement pending the resolution of a protest unless one or both of the following conditions are present:
- 1) The project or service being procured is urgently required; and/or
 - 2) Failure to make prompt award will otherwise cause undue harm to the City.

h) REMEDIES: There shall be no limitation on remedies selected by the City. Nothing contained herein shall be considered to either act as a limitation on the City's choice of remedies or confer any right upon any interested party to a remedy. In determining the appropriate remedy, the City shall consider all the circumstances surrounding the solicitation, the contract selection, and/or the contract award, including, but not limited to: the seriousness of any deficiency found to exist in the contracting process; the effect of the action of the competitive process; any urgency surrounding the contract requirement; and the effect that implementing the remedy will have on the City's overall ability to accomplish its mission. If the City determines that the award or proposed award was not made in accordance with the applicable City statutes, regulations, policies, and procedures, the City may, in its sole discretion, grant any of the following or any other remedy it deems appropriate: If pre-award, reject all bids and issue a new solicitation, make a new contractor selection or award a contract consistent with applicable statutes, regulations, policies, and procedures; or if post-award, refrain from extending the term of the contract or awarding task orders under an existing task order agreement; or at its sole discretion, take no further action.

11. AWARD OR REJECTION OF BIDS AND EXECUTION OF CONTRACT: The award of the Contract will be as of the date specified in the Notice of Award issued by the City. The award of the Contract shall not constitute a binding obligation on City until the Contract has been lawfully executed by all parties and the Contractor has submitted all required insurance certificates and bonds to the City.

The Contractor shall not commence work in advance of the execution of the Contract and the delivery of the bonds and insurance certificates, as specified above.

The award of the Contract, if it is awarded, will be to the responsive and responsible Bidder who submitted the lowest Bid complying with these Proposal Requirements and Conditions and with the Notice Inviting Bids. Such award, if made, will be made within ninety (90) Calendar Days after the opening of the proposals. The ninety (90) Calendar Days period shall be subject to extension for such further period as may be agreed upon in writing between the City and the Bidder(s) concerned. All bids will be compiled on the basis of the estimated quantities of work to be done as shown in the Proposal. However until an award is made, the City of Irvine reserves the right to reject any and all bids or to waive any informality in bids received, if doing so is deemed to best serve the interest of the City.

12. CONTRACT AND BONDS: The Contract, which the successful Bidder, as Contractor, will be required to execute, is included in the Contract Documents and should be carefully examined by the Bidder.

The successful Bidder, simultaneously with his execution of the Contract, will be required to furnish a Payment Bond and a Performance Bond. Said bonds shall be in the form of the two (2) sample bonds included in these Contract Documents and based upon conditions specified in the Standard Specifications Section 2-4,

"Contract Bonds," and as specified in the Special Provisions and shall be secured from a surety company satisfactory to the City.

Only bonds issued by companies admitted to do business in the State of California will be accepted, in accordance with Code of Civil Procedure § 995.311 and Insurance Code § 12090. Failure to submit acceptable Payment and Performance Bonds as required shall result in rejection of bid and forfeiture of the proposal guarantee.

All alterations, extensions of time, extra and additional work, and other changes authorized by the Contract Documents will be made without securing the consent of the surety or sureties on the Contract bonds.

The Contract shall be signed by the successful Bidder, and delivered to the City together with the Contract bonds within ten (10) days of the date specified in the Notice of Award issued by the City, not including Saturdays, Sundays and legal holidays. The Contractor shall submit insurance certificates electronically in accordance with 7-3 of the Standard Specifications and the Special Provisions. The executed Contract, together with the required bonds, will be filed with the Clerk of the City of Irvine.

Failure of the lowest responsive and responsible Bidder to execute the Contract and file acceptable insurance certificates and bonds as provided herein within ten (10) days of award of the Contract, not including Saturdays, Sundays and legal holidays, shall be just cause for the forfeiture of the bid bond. The successful Bidder may file with the City a written notice, signed by the Bidder or his authorized representative, specifying that the Bidder will refuse to execute the Contract if presented to him. The filing of such notice shall have the same force and effect as the failure of the Bidder to execute the Contract and furnish acceptable certificates of insurance and bonds within the time herein before prescribed.

13. SPECIAL NOTICE: Bidders are required to inform themselves fully of the conditions relating to construction and labor under which the Work will be performed, and the Contractor must employ, so far as possible, such methods and means in the carrying out of this work as will not cause any interruption or interference with any other contractor.
14. BIDDERS INTERESTED IN MORE THAN ONE BID: No person, firm or corporation shall be allowed to make or file or be interested in more than one bid as prime contractor for the same work.
15. BIDS TO BE LEFT ON DEPOSIT: No Bidder may withdraw its bid for a period of ninety (90) Calendar Days after the time set for opening thereof. However, the City will return all cash or check proposal guarantees within fifteen (15) days, not including Saturdays, Sundays and legal holidays, after the award of the Contract or rejection of the bids, as the case may be, to respective Bidders whose bids are not accepted.
16. NON-COLLUSION DECLARATION: All Bidders shall submit with their bids an executed non-collusion declaration on the form provided in the bidding documents.

Failure to provide completed form shall result in the bid being deemed non-responsive.

The U.S. Department of Transportation (DOT) provides a toll-free hotline to report bid rigging activities. Use the hotline to report bid rigging, bidder collusion, and other fraudulent activities. The hotline number is 800-424-9071. The service is available 24 hours 7 days a week and is confidential and anonymous. The hotline is part of the DOT's effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General.

17. **SUBSTITUTIONS:** Where the Specifications or drawings specify any material, product, thing, or service by one or more brand names, whether or not "or equal" is added, and a Bidder wishes to propose the use of another item as being equal, he shall request approval therefore as set forth in 4-1.6 of the Standard Specifications and Special Provisions.
18. **REPORTING SUSPECTED IMPROPRIETY, GROSS WASTE, FRAUD AND OTHER ACTS:** Any City and/or Great Park official, employee, and/or contractor who suspects any type of impropriety relating to purchasing or contracting activities, or gross waste, fraud, or abuse of City and/or Great Park funds or resources, a gross abuse of authority, a specified and substantial danger to public health or safety due to any act or omission of any City and/or Great Park official, employee, or contractor, or the use of a City and/or Great Park office or position or of City and/or Great Park resources for personal gain, should report the act by calling the City's Integrity Line at 866-428-1509. All such reports shall remain anonymous if desired by the reporting party. Suspected fraudulent activities include bid rigging, product substitution, theft, overcharging, false certifications and representations, and the like. Any allegations of bribery, kickbacks, gratuities, and conflicts of interest involving City employees should also be reported.
19. **ASSIGNMENT OF CONTRACT:** No assignment by the Contractor of any Contract to be entered into hereunder or of any part thereof, or of funds to be received thereunder by the Contractor, will be recognized by the City unless such assignment has had the prior written approval of the City and the surety has been given due notice of such assignment in writing.
20. **OTHER REQUIREMENTS:** Before entering into a Contract, the Bidder to whom the Contract has been awarded shall satisfy all insurance requirements per Section 7-3 of the Standard Specifications and Special Provisions and such insurance shall be maintained in full force and effect at its own expense during the life of this Contract.

Upon request, the successful Bidder shall furnish to the City a statement of its financial condition and previous construction experience or such other evidence of his qualifications.

21. **LABOR CODE:**
PUBLIC WORKS CONTRACTOR REGISTRATION PROGRAM

In accordance with State of California Senate Bill No. 854 (SB 854), contractors bidding on and/or engaging in the performance of public works projects (the definition of “public works” is found at Labor Code Section 1720, *et seq.*) shall be registered with the Department of Industrial Relations. By submitting a bid for City of Irvine Public Works project, the contractor acknowledges the above requirements and agrees to maintain a valid Department of Industrial Relations (DIR) Public Works Contractor registration during the term of this project.

- a) A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.
- b) Pursuant to Labor Code Section 1771.4, all bidders are hereby notified that this project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

In addition to the requirement for submittal of certified payroll records to the City, contractors and subcontractors shall furnish electronic certified payroll records to the Labor Commissioner (**State of California, Division of Labor Standards Enforcement**).

Contractors and subcontractors shall be responsible for complying and staying current with all DIR requirements and regulations. More information on SB 854 can be found at <http://www.dir.ca.gov/Public-Works/SB854.html>

Attention is directed to Labor Code § 1735, which reads as follows:

No discrimination shall be made in the employment of persons upon public works because of the race, religious creed, color, national origin, ancestry, physical handicap, medical condition, marital status, or sex of such persons, except as provided in the Government Code §12940, and every contractor for public works violating this section is subject to all the penalties imposed for a violation of this chapter.

The Contractor shall abide by the provisions of the California Labor Code § 1770-1781, *et seq.* In accordance with the provisions of the California Labor Code § 1773, the general prevailing rates of per diem wages and holiday and overtime work in the locality in which the work is to be performed has been obtained from the Director of the Department of Industrial Relations, a copy of which is on file in the office of the City Clerk of the City of Irvine and will be made available to any interested party upon request. The Contractor shall post a copy of the prevailing rate of per diem wages at the job site. The Contractor, and any subcontractor under him, shall pay not less than the specified prevailing rates of wages to all workers employed in the execution of the contract.

Failure to comply with the subject sections will subject the Contractor to penalty and forfeiture provisions of the Labor Code § 1775.

In accordance with of the Labor Code § 1773.1, the Contractor must make travel and subsistence payments to each worker employed in the execution of the Contract.

The City will not recognize any claim for additional compensation because of the payment by the Contractor of any wage rate in excess of the prevailing wage rate set forth in the Contract. The possibility of wage increases is one of the elements to be considered by the Contractor in determining his bid, and will not under any circumstances be considered as the basis of a claim against the City on the Contract.

The Contractor shall familiarize itself with the provisions of the Labor Code § 1777.5 regarding employment of apprentices, and shall be responsible for compliance therewith, including compliance by his subcontractors.

The Contractor and subcontractors shall comply with Labor Code § 1777.6 which stipulates that it shall be unlawful to refuse to accept otherwise qualified employees as registered apprentices solely on the grounds of race, religious creed, color, national origin, ancestry, sex, or age except as provided in Labor Code § 3077, of such employee.

The Contractor and subcontractors shall comply with Labor Code § 1810 and § 1811 which stipulates that eight hours labor constitutes a legal day's work, and § 1812 which stipulates that the Contractor and subcontractors shall keep an accurate record showing the name of and actual hours worked each calendar day and each calendar week by each worker employed by him in connection with the work performed under the terms of the Contract. Failure to comply with these sections of the Labor Code will subject the Contractor to penalty and forfeiture provisions of the Labor Code § 1813.

22. RESERVATION OF RIGHTS:

The City reserves the right to:

- a) Disqualify any Bidder in accordance with the instructions herein.
- b) Reject any bids, at its discretion, including bids found to be conditional or incomplete, contain irregularities or found to be not responsive to this Invitation for Bids (IFB).
- c) Investigate the qualifications of any Bidder under consideration.
- d) Require confirmation of information furnished by the Bidder.
- e) Require additional evidence of Bidder's ability to perform the Work described in this IFB.
- f) Contact the submitted references to confirm information provided in the bid.
- g) Postpone or cancel the entire IFB or a portion thereof.

- h) Postpone the bid opening or award for its own convenience.
- i) Award a Contract in part or in combination of items.
- j) Issue subsequent IFB.
- k) Seek the assistance of outside technical experts to review the bids.
- l) Disqualify a bid upon evidence of collusion, with intent to defraud, or other illegal practices on the part of the Bidder.
- m) Waive any errors or informalities in any bid to the extent permitted by law.
- n) Require bidder to provide proof as to the equality, substitutability, and compatibility of any items proposed as alternates or equals.
- o) Determine, at the City's sole discretion, the equality, substitutability, and compatibility of any items proposed as alternates or equals.
- p) Exercise any other rights under the City's charter or municipal code.

The City has no obligation to consider any bid unless it is responsive to this IFB and conforming in all respects to the Form of Contract. This IFB does not commit the City to enter into a Contract.

BIDDER'S PROPOSAL
CONSTRUCTION
OF
ORANGE COUNTY GREAT PARK
SOUTH LAWN PUMP STATION ENCLOSURE

CIP 381703
BID NO. 17-1256

HONORABLE MAYOR AND MEMBERS OF THE CITY COUNCIL
CITY HALL
IRVINE, CALIFORNIA

THE UNDERSIGNED, HAVING CAREFULLY EXAMINED ALL OF THE CONTRACT DOCUMENTS; PERMITS ISSUED BY JURISDICTIONAL REGULATORY AGENCIES; CONTRACT; CONTRACT ADDENDA; INSTRUCTIONS TO BIDDERS; PROPOSAL REQUIREMENTS AND CONDITIONS; SPECIAL PROVISIONS; THE PLANS (SHEETS 1 THROUGH 9); STANDARD PLANS; STANDARD SPECIFICATIONS; REFERENCE SPECIFICATIONS; AND ALL OTHER INFORMATION PROVIDED BY THE AGENCY FOR THE CONSTRUCTION LISTED ABOVE IN AND FOR THE CITY OF IRVINE, IS FAMILIAR WITH THE CONDITIONS, HAVING PERSONALLY VISITED THE SITE OF THE WORK, AND HEREBY PROPOSES TO FURNISH ALL LABOR, MATERIALS AND EQUIPMENT, AND ALL INCIDENTAL WORK NECESSARY TO DELIVER ALL THE IMPROVEMENTS COMPLETE, IN PLACE AND IN STRICT CONFORMITY WITH THE CONTRACT DOCUMENTS, FOR THE UNIT PRICES NAMED IN THE FOLLOWING SCHEDULE OF WORK AND BID PRICES.

Bidder's Company Name (please print or type)

Signature of Bidder

Print Name

CITY OF IRVINE
ORANGE COUNTY GREAT PARK
SOUTH LAWN PUMP STATION ENCLOSURE
CIP 381703
BID NO. 17-1256

SCHEDULE OF WORK

All applicable sales taxes, State and/or Federal taxes, and any other special taxes, patent rights or royalties are included in the prices quoted in this Proposal.

| BID ITEM NO. | BID ITEM DESCRIPTION | UNIT | EST. QTY. |
|--------------------|---|------|--------------|
| 1 | Construct Orange County Great Park South Lawn Pump Station Enclosure | LS | 1 |
| | | | |

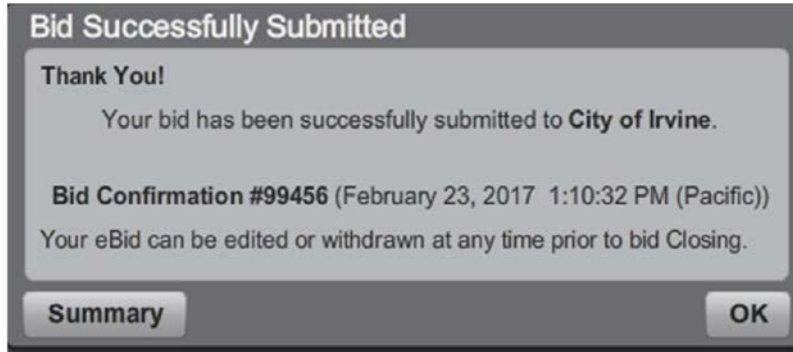
CITY OF IRVINE
ORANGE COUNTY GREAT PARK
SOUTH LAWN PUMP STATION ENCLOSURE
CIP 381703
BID NO. 17-1256

INSTRUCTIONS FOR ENTERING ELECTRONIC BIDS

In order to access the BidsOnline system and ensure successful online submission of your bid prices, follow these steps:

1. Go to <https://www.planetbids.com/portal/portal.cfm?CompanyID=15927#>
2. On the Vendor Portal page, log into the system (lower right hand corner of screen) with your assigned user name and password. (You must be registered in order to download documents and submit a bid.)
3. Click on "Bid Opportunities" and then on the Bid # and Description that you wish to bid on. The selected bid will open to allow you to access all tabs, documents and the pricing sheet.
4. Click on the "Documents & Attachment" tab to be sure you have downloaded all documents that are part of this bid.
 - *If you have not already downloaded all bid documents, you must download them now, in order to submit your bid. The screen will indicate which documents you've already downloaded.*
5. Click on the tab "Addenda & Emails" to be sure you have read and acknowledged all addenda that have been issued for this bid.
 - *The screen will display "yes" or "no" next to each addendum to indicate whether you have viewed and acknowledged it. If you have not previously acknowledged an addendum, do so now by clicking on the addendum to open and read it, then click on the "Acknowledge" button on the lower left hand corner of screen.*
6. To begin entering your bid, click on "Place eBid" on the lower right corner of the screen. The bid "Terms and Conditions" will pop up with a button for you to click "Accept" to acknowledge your agreement to the terms of the bid.
7. Enter the Respondee information on the "Detail" tab.
8. Go to the "Line Items" tab and enter your unit prices on each line. The system will calculate the extended costs and grand total for you.
9. When you have finished entering all pricing and attachments, click on the "Save" button. This saves your bid as a draft for you to review or revise as needed anytime up to the bid submittal deadline. When you are ready to submit your bid, click the "Submit" button. You will receive a confirming message that looks like this:

CITY OF IRVINE
ORANGE COUNTY GREAT PARK
SOUTH LAWN PUMP STATION ENCLOSURE
CIP 381703
BID NO. 17-1256



Note: E-Bids are sealed and cannot be viewed by the City until the closing date and time. As noted in the screen print above, if you need to withdraw your bid, you may do so any time before the bid deadline, by going back into the system and selecting "withdraw".

Please begin entering your bid in sufficient time to complete and submit it prior to the stated deadline. The official closing time for the bid is determined, and controlled, by the electronic clock in the bid management system. Once the deadline is reached, the system will not allow any bids to be submitted, and any in process that are not completed will be rejected. The amount of time required to enter and submit your bid depends on the complexity of the bid and the processing speed of your server and internet connections.

Technical Support

In the event you encounter technical difficulties during the uploading process, please contact the Planet Bids, BidsOnline system team as shown below (M-F from 8 a.m. to 5 p.m.):

support@planetbids.com or call 818-992-1771, ext. 0

Bid prices must be entered on the BidsOnline system, and Bid Submittal Documents must be received at One Civic Center Plaza, Irvine, California, 92606-5207, before the date and time indicated in the Notice Inviting Bids. If bid prices are not entered by the deadline, or Bid Submittal Documents are not received by the deadline, the bid shall be declared non-responsive.

CITY OF IRVINE
ORANGE COUNTY GREAT PARK
SOUTH LAWN PUMP STATION ENCLOSURE
CIP 381703
BID NO. 17-1256

ADDENDA

Bidder acknowledges receipt of addenda to plans, specifications and other Contract Documents listed below, if any, and agrees this Bid Proposal is submitted on the basis of all changes in the work specified herein and said addenda are by this reference made a part hereof.

Addenda to Contract Documents Received:

| <u>No.</u> | <u>Date Received</u> |
|------------|----------------------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
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| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

If the Bidder does not list all applicable Agency-issued addenda above, the Bid Proposal will be rejected.

Bidder's Name: _____

CITY OF IRVINE
 ORANGE COUNTY GREAT PARK
 SOUTH LAWN PUMP STATION ENCLOSURE
 CIP 381703
 BID NO. 17-1256

INFORMATION REQUIRED OF BIDDERS

In determining the lowest “responsible” bidder, consideration will be given to the general competency of the bidder in regard to the work covered by the Bid Proposal. To this end, each proposal shall be supported by a statement of the Bidder’s experience on this form. **Failure of the Bidder to provide requested information in a complete and accurate manner shall render the bid non-responsive.** Additionally, the City reserves the right to disqualify or refuse to consider a proposal if a Bidder is determined to be non-responsible in accordance with Irvine Municipal Code § 2-12-103 “Determination of Contractor Non-Responsibility.”

The Bidder shall supply the following information. Use additional sheets as necessary.

1. Contact person name: _____ Email: _____
 Address: _____
 Telephone: (____) _____ Fax: (____) _____
2. Type of firm (Individual, Partnership, or Corporation): _____
3. State Contractor’s License Number and Classification: _____
4. DIR Registration Number: _____ Expiration Date _____
5. Number of years your firm has operated as a contractor: _____
6. Number of years your firm operated under its present business name: _____
7. List the **names and addresses** of all principals or officers authorized to bind your firm.

| Name: | Address: |
|-------|----------|
| | |
| | |
| | |
| | |

8. List any project(s) your firm has **failed to complete** within the last five years due to a termination of contract. For each project, list the type of project, client’s name, contact person, current telephone number, email address, and provide a brief description of the grounds for the termination.

Check appropriate box: None See list below

Bidder’s Name: _____

CITY OF IRVINE
 ORANGE COUNTY GREAT PARK
 SOUTH LAWN PUMP STATION ENCLOSURE
 CIP 381703
 BID NO. 17-1256

| Type of Project | Client Name | Contact Person | Contact Phone No. and email address |
|---------------------|-------------|----------------|-------------------------------------|
| | | | |
| Description: | | | |

| Type of Project | Client Name | Contact Person | Contact Phone No. and email address |
|---------------------|-------------|----------------|-------------------------------------|
| | | | |
| Description: | | | |

| Type of Project | Client Name | Contact Person | Contact Phone No. and email address |
|---------------------|-------------|----------------|-------------------------------------|
| | | | |
| Description: | | | |

9. List projects of similar nature to the **SOUTH LAWN PUMP STATION ENCLOSURE** your firm is **currently** constructing. For each project, list the type of project, contract amount, client's name, contact person, current telephone number, email address, and a brief description.

Check appropriate box: None See list below

| Type of Project | Contract Amount | Client Name | Contact Person | Contact Phone No. and email address |
|---------------------|-----------------|-------------|----------------|-------------------------------------|
| | | | | |
| Description: | | | | |

| Type of Project | Contract Amount | Client Name | Contact Person | Contact Phone No. and email address |
|---------------------|-----------------|-------------|----------------|-------------------------------------|
| | | | | |
| Description: | | | | |

Bidder's Name: _____

CITY OF IRVINE
 ORANGE COUNTY GREAT PARK
 SOUTH LAWN PUMP STATION ENCLOSURE
 CIP 381703
 BID NO. 17-1256

| Type of Project | Contract Amount | Client Name | Contact Person | Contact Phone No. and email address |
|---------------------|-----------------|-------------|----------------|-------------------------------------|
| | | | | |
| Description: | | | | |

10. List projects of a similar nature to the **SOUTH LAWN PUMP STATION ENCLOSURE** your firm has **completed** within the last five years. For each project, list the type of project, contract amount, date of completion, client's name, contact person, current telephone number, email address, and a brief description.

Check appropriate box: None See list below

| Type of Project | Contract Amount | Date of Completion | Client Name | Contact Person | Contact Phone No. and email address |
|---------------------|-----------------|--------------------|-------------|----------------|-------------------------------------|
| | | | | | |
| Description: | | | | | |

| Type of Project | Contract Amount | Date of Completion | Client Name | Contact Person | Contact Phone No. and email address |
|---------------------|-----------------|--------------------|-------------|----------------|-------------------------------------|
| | | | | | |
| Description: | | | | | |

| Type of Project | Contract Amount | Date of Completion | Client Name | Contact Person | Contact Phone No. and email address |
|---------------------|-----------------|--------------------|-------------|----------------|-------------------------------------|
| | | | | | |
| Description: | | | | | |

Bidder's Name: _____

CITY OF IRVINE
 ORANGE COUNTY GREAT PARK
 SOUTH LAWN PUMP STATION ENCLOSURE
 CIP 381703
 BID NO. 17-1256

11. List the name of the person(s) (**A MINIMUM OF ONE**) who inspected the site of the proposed work for your firm.

| Name: | Date of Inspection: |
|-------|---------------------|
| | |
| | |
| | |

12. Complete the following in conformance with Labor Code Section 1725.5

| Name of Subcontractor | Registered with DIR? | DIR Registration No. |
|-----------------------|----------------------|----------------------|
| | Yes ___ No ___ | |
| | Yes ___ No ___ | |
| | Yes ___ No ___ | |
| | Yes ___ No ___ | |
| | Yes ___ No ___ | |
| | Yes ___ No ___ | |
| | Yes ___ No ___ | |
| | Yes ___ No ___ | |
| | Yes ___ No ___ | |
| | Yes ___ No ___ | |
| | Yes ___ No ___ | |
| | Yes ___ No ___ | |
| | Yes ___ No ___ | |

13. If requested by the City, the Bidder shall furnish a notarized financial statement, financial data, or other information and references sufficiently comprehensive to permit an appraisal of its current financial condition or ability to perform the work.

Failure to furnish information upon request will render the bid nonresponsive.

All of the above statements regarding Contractor's experience and financial qualifications are submitted in conjunction with the Bid Proposal, as a part thereof, and the truthfulness and accuracy of the information is guaranteed by the Bidder.

Bidder's Name: _____

THE CITY OF IRVINE RESERVES THE RIGHT TO REJECT ALL BIDS

The undersigned understands the contract time limit allotted for the completion of the work required by the Contract is **Sixty (60) Working Days**.

The undersigned agrees, if awarded the Contract, to sign the Contract and furnish the necessary insurance certificates and bonds within ten (10) days of the date specified in the Notice of Award of Contract, not including Saturdays, Sundays and legal holidays, and to begin work within ten (10) Working Days from the date specified in the City's Notice to Proceed. Contract time accounting shall begin on the date shown in the Notice to Proceed.

Accompanying this Bid Proposal is (check appropriate box):

- Cash Cashier's Check Certified Check Bid Bond

Sign Here if Individual:

(Signature) _____
(Print Name) _____
(Address) _____

Affix notary's acknowledgement

Sign Here if Co-Partnership:

Co-Partnership Name of Firm: _____
(Address) _____

Members Signing:

(Signature) _____
(Print Name) _____
(Address) _____

(Signature) _____
(Print Name) _____
(Address) _____

Affix notary's acknowledgement

Sign Here if Corporation:

(Name of Corporation) _____

(Address) _____

Officers of Corporation Signing:

(Signature) _____

(Print Name) _____

(Title) _____

And

(Signature) _____

(Print Name) _____

(Title) _____

If executed by other than President and Secretary of the Corporation, attach a certified copy of resolution authorizing signature on behalf of the Corporation.

Affix notary's acknowledgement

LIST OF SUBCONTRACTORS

The Bidder shall list each subcontractor performing work in an amount in excess of one-half of one percent (1/2%) of the prime contractor's total bid, or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half of one percent (1/2%) of the prime contractor's total bid or ten thousand dollars (\$10,000), whichever is greater. Complete columns (1) and (2) and submit with the bid. Complete columns (3) and (4) and submit with the bid or hand-deliver to the Receptionist for the Purchasing Agent at the reception desk located on the first floor of the Civic Center building at the City of Irvine, located at One Civic Center Plaza, Irvine, California 92606-5207 within 24 hours after the bid opening. Failure to provide complete information in columns (1) through (4) within the time specified shall render the bid non-responsive.

Subcontractors listed must not be debarred from performing the designated work.

| BUSINESS NAME and LOCATION (1) | CONTRACTOR LICENSE NUMBER (2) | BID ITEM NUMBERS (3) | PERCENTAGE OF BID ITEM SUBCONTRACTED (4)* |
|-----------------------------------|-------------------------------------|-------------------------|---|
| | | | |

Information must be typed or clearly printed.

*** If you are subcontracting a whole bid item insert one hundred percent (100%), if less insert actual percentage.**

NON-COLLUSION DECLARATION-CONTRACTOR
To be Executed by Bidder and Submitted with Bid
City of Irvine Bid No. 17-1256

The undersigned declares:

I am the _____ [title] of _____ [company name], the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on _____ [date], at _____ [city], _____ [state].

Signature

Print Name

FORM OF BID BOND

ORANGE COUNTY GREAT PARK
SOUTH LAWN PUMP STATION ENCLOSURE
CIP 381703
BID NO. 17-1256

(10% of the Proposal Amount)

KNOW ALL PERSONS BY THESE PRESENTS that we _____
_____ as Principal, and _____
_____ as Surety, are held and firmly bound unto City of Irvine, hereinafter
called the City in the sum of _____
Dollars (\$_____), for the payment of which sum well and truly to be made, we bind
ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly
by these presents.

The conditions of this obligation are such that whereas the Principal submitted to the City a
certain Bid Proposal, attached hereto and hereby made a part hereof, to enter into a
contract in writing for the South Lawn Pump Station Enclosure, CIP 381703 and will
furnish all required certificates of insurance and bonds as required by the Contract.

NOW THEREFORE, if said Bid Proposal shall be rejected; or in the alternate, if said Bid
Proposal shall be accepted, and the Principal shall execute and deliver a contract in the
prescribed Form of Contract, shall deliver certificates evidencing that the required
insurance is in effect and shall execute and deliver Performance and Payment Bonds in
the forms prescribed, and shall in all other respects perform the Contract created by the
acceptance of said Bid Proposal, then this obligation shall be void; otherwise this
obligation shall remain in force and effect, it being expressly understood and agreed that
the liability of the Surety for any and all default of the Principal hereunder shall be the
amount of this obligation as herein stated. In the event suit is brought upon this bond by
City and judgment is recovered, Surety shall pay all costs incurred by City in said suit,
including a reasonable attorney's fee to be fixed by the court.

The Surety, for the value received, hereby stipulates and agrees that the obligations of
said Surety and its bond shall in no way be impaired or affected by an extension of the
time within which the City may accept such a Bid Proposal; and said Surety does hereby
waive notice of any such extension.

IN WITNESS WHEREOF, the above-bounded parties have executed this instrument this
____ day of _____, 20____, the name of each party being hereto written below
and these presents duly signed by each party's undersigned representative, pursuant to
authority of its governing body. This bond shall be authenticated by way of notarized
acknowledgment, including a copy of the power of attorney, for the Surety.

ATTEST:

(Principal) _____

(Address) _____

(By) _____

(Title) _____

ATTEST:

(Surety) _____

(Address) _____

(By) _____

(Title) _____

FALSE CLAIMS

Bidder shall complete the **False Claims Act Certification** below or in the alternative, provide the information requested under **False Claims Act Violations** below. **Failure to certify or provide the requested information shall render the bid non-responsive.**

"False Claims Act" as used herein is defined as either or both the Federal False Claims Act, 31 U.S.C. § 3729, *et seq.*, and the California False Claims Act, Government Code § 12650, *et seq.*

FALSE CLAIMS ACT CERTIFICATION

I _____ hereby certify that neither
Print name

Contractor name

nor _____
Name of qualifying person licensed by Contractors State License Board

has been determined by a court or tribunal of competent jurisdiction to have violated the False Claims Act as defined above.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed this _____ day of _____ at _____
(Month and year) (City and State)

By _____
(Signature of owner, officer, manager or licensee responsible for submission of Bid Proposal)

FALSE CLAIMS ACT VIOLATIONS

With regard to any determinations by a tribunal or court of competent jurisdiction that the False Claims Act, as defined above, has been violated by (1) the Contractor submitting this Bid Proposal or (2) the qualifying person licensed by the State Contractors License Board to perform the work described in this Bid Proposal, shall provide on a separate sheet the following information: (1) the date of the determination of the violation, (2) the identity of the tribunal or court, (3) the identity of the government contract or project involved, (4) the identity of the government department involved, (5) the amount of fine imposed, and (6) any exculpatory information of which the Agency should be aware.

CIVIL LITIGATION AND ARBITRATION HISTORY

Bidder shall provide the certification or information requested below. **Failure to certify or provide such certification or information shall render the bid non-responsive.**

For five (5) years preceding the submittal date of this Bid Proposal, identify civil litigation and arbitration arising out of the performance of a construction contract within the State of California in which the (1) Contractor submitting this bid proposal or (2) the qualifying person licensed by the State Contractors Licensing Board to perform the work described in this Bid Proposal was a named as a party in a lawsuit brought by or against the project owner or any action to confirm, vacate or modify an arbitration award involving an owner.

CIVIL LITIGATION AND ARBITRATION CERTIFICATION

If the Bidder has no civil litigation and arbitration history to report as described above, complete the following:

I _____ certify that neither
Print name

Contractor name
nor _____
Name of qualifying person licensed by Contractors State License Board

has been involved in civil litigation and arbitration as described above.

I declare under penalty of perjury that the foregoing is true and correct.

Executed this _____ day of _____ at _____
(Month and year) (City and State)

By _____
(Signature of owner, officer, manager or licensee responsible for submission of Bid Proposal)

Do not include litigation and arbitration which are limited solely to enforcement of mechanics' liens or stop notices. Provide on a separate sheet (1) the name and court case identification number of each case, (2) the jurisdiction in which it was filed, and (3) the outcome of the litigation, e.g. whether the case is pending, a judgment was entered, a settlement was reached, or the case was dismissed.

CRIMINAL CONVICTIONS

Bidder shall provide the certification or information requested below. **Failure to certify or provide such certification or information shall render the bid non-responsive.**

CRIMINAL CONVICTION CERTIFICATION

If the Bidder has no criminal convictions to report as described above, complete the following:

I _____ hereby certify that neither
Print name

Contractor name

nor _____
Name of qualifying person licensed by Contractors State License Board

has been convicted of a criminal violation as described above.

I declare under penalty of perjury that the foregoing is true and correct.

Executed this _____ day of _____ at _____
(Month and year) (City and State)

By _____
(Signature of owner, officer, manager or licensee responsible for submission of Bid Proposal)

For the five (5) years preceding the date of this Bid Proposal is due, identify on a separate sheet any criminal conviction in any jurisdiction in the United States for a violation of law arising out of the performance of a construction contract (1) by the Contractor submitting this Bid Proposal or (2) by the qualifying person licensed by the State Contractors License Board to perform the work described in the Bid Proposal.

Provide on the following page labeled "Criminal Convictions Information." (1) the date of conviction, (2) the name and court case identification number, (3) the identity of the law violated, (4) the identity of the prosecuting agency, (5) the contract or project involved, (6) the punishment imposed, and (7) any exculpatory information of which the Agency should be aware.

VIOLATION OF LAW OR A SAFETY REGULATION

Has the Bidder, any officer of the Bidder, or any employee who has proprietary interest in the Bidder, ever been disqualified, removed, or otherwise prevented from bidding on, or completing a federal, state, or local government project because of a violation of a law or a safety regulation?

Yes **No**

If the answer is yes, explain the circumstances in the following space.

Name of bidder (print)

Signature

Address

State Contractors' License No. & Classification

City

Zip Code

Telephone

CONSTRUCTION CONTRACT
FOR CAPITAL IMPROVEMENTS

CITY OF IRVINE

ORANGE COUNTY GREAT PARK
SOUTH LAWN PUMP STATION ENCLOSURE
CIP 381703
BID NO. 17-1256

This Contract made and entered into this _____ day of _____, 20____, by and between City of Irvine, a municipal corporation of the State of California, hereinafter referred to as "CITY" and _____, hereinafter referred to as "CONTRACTOR."

W I T N E S S E T H:

That the CITY and the CONTRACTOR, for the consideration hereinafter named, mutually agree as follows:

1. The complete Contract includes all of the Contract Documents, which are incorporated herein by this reference, to wit:
 - a) Permits and Agreements
 - b) Contract
 - c) Addenda
 - d) Instructions to Bidders, Proposal Requirements and Conditions
 - e) Special Provisions
 - f) Contract Plans
 - g) Standard Plans
 - h) Standard Specifications
 - i) Reference Specifications

The Contract Documents are complementary, and that which is required by one shall be as binding as if required by all.

2. CONTRACTOR shall provide and furnish all labor, materials, necessary tools, expendable equipment, and all utility and transportation services required for the following work of improvement:

Pump Station Enclosure which consists of new steel structure, steel columns on concrete footings, standing seem metal roof with double leaf 12'X12' roof hatch for equipment access, roof lighting and new paint and other items not mentioned here, but are required by the plans and the special provisions. .

3. CONTRACTOR agrees to perform all the said work and furnish all the said materials at his own cost and expense that are necessary to construct and complete in strict conformance with Contract Documents and to the satisfaction of

the Engineer, the work hereinafter set forth in accordance with the Contract therefore adopted by the City Council and as prepared by Boa Architecture, 1511 Cota Avenue, Long Beach, CA 90813.

- CITY agrees to pay and CONTRACTOR agrees to accept in full payment for performance of this work of improvement as described, the stipulated sum of

___ (\$_____) the "Contract Price."

CITY agrees to make progress payments and final payment in accordance with the method set forth in the Special Provisions.

- CONTRACTOR agrees to commence construction of the work provided for herein within ten (10) Calendar Days after the date specified in the Notice to Proceed, and to continue diligently in strict conformance with Contract Documents and without interruption, and to complete the construction thereof within **Sixty (60) Working Days** after the date specified in the Notice to Proceed.
- Time is of the essence of this Contract, and it is agreed that it would be impracticable or extremely difficult to ascertain the extent of actual loss or damage which the CITY will sustain by reason of any delay in the performance of this Contract. It is, therefore, agreed that CONTRACTOR will pay as liquidated damages to the CITY the following sum Five Hundred (\$500) per Calendar Day, for each and every Calendar Days delay in finishing the Work. If liquidated damages are not paid, as assessed by the CITY, the CITY may deduct the amount thereof from any money due or that may become due the CONTRACTOR under this Contract in addition to any other remedy available to CITY. By executing this Contract, CONTRACTOR agrees that the amount of liquidated damages is reasonable and shall not constitute a penalty.
- In accordance with State of California Senate Bill No. 854, CONTRACTOR will maintain and will require all subcontractors to maintain valid and current Department of Industrial Relations (DIR) Public Works Contractor registration during the term of this project. CONTRACTOR shall notify the CITY in writing immediately, and in no case more than twenty-four (24) hours, after receiving any information that CONTRACTOR'S or any of its subcontractor's DIR registration status has been suspended, revoked, expired, or otherwise changed.
- CONTRACTOR will pay, and will require all subcontractors to pay, all employees on said Contract a salary or wage at least equal to the prevailing salary or wage established for such work as set forth in the wage determinations and wage standards applicable to this work, a copy of which is on file in the office of the City Clerk of the City of Irvine. Federal prevailing wage rates apply for federally funded projects. Travel and subsistence pay shall be paid in accordance with Labor Code § 1773.1.
- CONTRACTOR shall be subject to the penalties in accordance with Labor Code of § 1775 for each worker paid (either by him or by any subcontractors under him) less than the prevailing rate described above on the work provided for in this Contract.

10. CONTRACTOR and subcontractors shall comply with Labor Code § 1810 and § 1811 which stipulates that eight hours labor constitutes a legal day's work, and § 1812 which stipulates that the CONTRACTOR and subcontractors shall keep an accurate record showing the name of and actual hours worked each calendar day and each calendar week by each worker employed by him in connection with the work performed under the terms of the Contract. Failure to comply with these sections of the Labor Code will subject the CONTRACTOR to penalty and forfeiture provisions of the Labor Code § 1813.
11. CONTRACTOR will comply with the provisions of Labor Code § 1777.5 pertaining to the employment of apprentices to the extent applicable to this Contract.
12. CONTRACTOR, by executing this Contract, hereby certifies:

“I am aware of, and will comply with the Labor Code § 3700 by securing payment for, and maintaining in full force and effect for the duration of the contract, complete Workers’ Compensation Insurance, and shall furnish a Certificate of Insurance to the Agency before execution of the Contract. The CITY, its officers, or employees, will not be responsible for any claims in law or equity occasioned by failure of the CONTRACTOR to comply with this paragraph.”

CONTRACTOR further agrees to require all subcontractors to carry Workers’ Compensation Insurance as required by the Labor Code of the State of California.

13. CONTRACTOR shall, concurrent with the execution of this Contract, furnish two bonds approved by the CITY, one in the amount of One Hundred Percent (100%) of the Contract Price, to guarantee the faithful performance of the work “Performance Bond”, and one in the amount of One Hundred Percent (100%) of the Contract Price to guarantee payment of all claims for labor and materials furnished “Payment Bond.” This Contract shall not become effective until such bonds are supplied to and approved by the CITY.
14. CONTRACTOR shall, prior to commencing work, furnish certificates evidencing compliance with all requirements of the Contract Documents pertaining to insurance.
15. Any amendments to any of the Contract Documents must be in writing executed by the CONTRACTOR and the CITY. Any time an approval, time extension, or consent of the CITY is required under the Contract Documents, such approval, extension, or consent must be in writing in order to be effective.
16. This Contract contains all of the agreements and understandings of the parties and all previous understandings, negotiations, and contracts are integrated into and superseded by this Contract.
17. In the event that any one or more of the phrases, sentences, clauses, paragraphs, or sections contained in this Contract shall be declared invalid or unenforceable by a valid judgment or decree of a court of competent jurisdiction,

such invalidity or unenforceability shall not affect any of the remaining phrases, sentences, clauses, paragraphs, or sections of this Contract which are hereby declared as severable and shall be interpreted to carry out the intent of the parties hereunder.

18. The persons executing this Contract on behalf of the parties hereto warrant that they are duly authorized to execute this Contract on behalf of said parties and that, by so executing this Contract, the parties hereto are formally bound to the provisions of this Contract.
19. This Contract shall be binding upon and shall inure to the benefit of the parties hereto and their respective heirs, personal representatives, successors, and assigns.
20. In performing its obligations and duties under this Contract, each party shall comply with all applicable local, state, and federal laws, regulations, rules, standards and ordinances.
21. In the event any action is brought between the parties hereto relating to this Contract or the breach thereof, the prevailing party in such action shall be entitled to recover from the other party reasonable expenses, attorneys' fees and costs in connection with such action or proceeding.
22. This Contract may be executed by the parties in counterparts, which counterparts shall be construed together and have the same effect as if all of the parties had executed the same instrument.
23. This Contract is to be governed by the laws of the State of California.

IN WITNESS WHEREOF, the said CONTRACTOR and the Director of Public Works, City Manager and City Clerk of the CITY have caused the names of said parties to be affixed hereto, the day and year first above written.

CONTRACTOR

(If Corporation, 2 signatures are required)

By _____

Print Name

Title

By _____

Print Name

Title

CITY OF IRVINE
A Municipal Corporation

Sean Joyce
City Manager of the City of Irvine

Manuel Gomez
Director of Public Works

ATTEST:

Molly McLaughlin
City Clerk

APPROVED AS TO FORM:
RUTAN & TUCKER, LLP

Jeffrey Melching

PERFORMANCE BOND

ORANGE COUNTY GREAT PARK
SOUTH LAWN PUMP STATION ENCLOSURE
CIP 381703
BID NO. 17-1256

KNOW ALL PERSONS BY THESE PRESENTS that we _____, as Principal, and _____ as Surety, are held and firmly bound unto City of Irvine, hereinafter called the City in the sum of _____ (\$ _____) (this amount being not less than one hundred percent (100%) of the total bid price of the contract awarded by the owner to the Principal), for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

The conditions of this obligation are such that whereas the Principal entered into a contract attached hereto, with the City of Irvine.

NOW THEREFORE, if the Principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions and agreements of said Contract during the original terms thereof, and any extensions thereof that may be granted by the Owner with or without notice of the Surety, and during the life of any guarantee required under the Contract, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions and agreements of any and all duly authorized modifications of said Contract that may hereafter be made, then this obligation shall be void otherwise this obligation shall remain in full force and effect.

Further, the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or modifications of the Contract Documents and/or of the Work to be performed thereunder shall in any way affect its obligations on this bond; and it hereby waives notice of any and all such changes, extensions of time, and alterations or modifications of the contract documents and/or of the work to be performed thereunder.

As a part of the obligation secured hereby and in addition to the face amount specified therefore, there shall be included costs and reasonable expenses and fees, including reasonable attorneys' fees, incurred by the City in successfully enforcing such obligation, and all to be taxed as costs and included in any judgment rendered by a court of law.

IN WITNESS WHEREOF, the above-bounded parties have executed this instrument this ____ day of _____, 20____, the name of each party being hereto written below and these presents duly signed by each party's undersigned representative, pursuant to authority of its governing body. This bond shall be authenticated by way of notarized acknowledgment, including a copy of the power of attorney, for the Surety.

ATTEST:

(Principal) _____

(Address) _____

(By) _____

(Title) _____

ATTEST:

(Surety) _____

(Address) _____

(By) _____

(Title) _____

PAYMENT BOND

ORANGE COUNTY GREAT PARK
SOUTH LAWN PUMP STATION ENCLOSURE
CIP 381703
BID NO. 17-1256

KNOW ALL PERSONS BY THESE PRESENTS that we _____
_____, as Principal, and _____ as Surety, are held and
firmly bound unto City of Irvine, hereinafter called the City in the sum of _____
_____ (\$_____) (this
amount being not less than one hundred percent (100%) of the total bid price of the
contract awarded by the owner to the Principal), for the payment of which sum well and
truly to be made, we bind ourselves, our heirs, executors, administrators and successors,
jointly and severally, firmly by these presents.

The conditions of this obligation are such that whereas the Principal entered into a
contract, attached hereto, with the City of Irvine.

NOW THEREFORE, if the Principal shall promptly make payment to all persons supplying
labor and material in the prosecution of the work provided for in said contract, and any and
all duly authorized modifications of each contract that may hereafter be made, then this
obligation shall be void, otherwise this obligation shall remain in full force and effect.

The condition of this obligation is such that, if said Principal or his subcontractors, or heirs,
executors, administrators, successors, or assigns thereof, shall fail to pay any of the
persons named in the Civil Code § 9100 for any material used in, upon, for or about the
performance of the work contracted to be done, or for any work or labor thereon of any
kind, or shall fail to pay any amount due under the Unemployment Insurance Code with
respect to work or labor performed by any such claimant or any amount required to be
deducted, withheld, and paid over to the Franchise Tax Board from the wages of
employees of the Contractor and his subcontractors with respect to such work and labor,
then said Surety will pay and, also, in case suit is brought upon the bond, will pay a
reasonable attorney's fee to be fixed by the court. This bond shall inure to the benefit of all
persons named in the aforesaid Civil Code § 9100 to give a right of action to them or their
assigns in any suit brought upon the bond.

Further, the said Surety, for value received, hereby stipulates and agrees that no change,
extension of time, alteration or modification of the Contract Documents or of the Work to
be performed thereunder shall in any way affect its obligations on this bond; and it hereby
waives notice of any and all such changes, extensions of time, and alterations or
modifications of the Contract Documents and/or of the work to be performed thereunder.

IN WITNESS WHEREOF, the above-bounded parties have executed this instrument this
____ day of _____, 20____, the name of each party being hereto written below
and these presents duly signed by each party's undersigned representative, pursuant to
authority of its governing body. This bond shall be authenticated by way of notarized
acknowledgment, including a copy of the power of attorney, for the Surety.

ATTEST:

(Principal) _____

(Address) _____

(By) _____

(Title) _____

ATTEST:

(Surety) _____

(Address) _____

(By) _____

(Title) _____

SPECIAL PROVISIONS

- A. THESE ADDITIONS, DELETIONS, AND AMENDMENTS MODIFY THE SPECIFICATIONS IN THE “STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION”, 2015 EDITION.
- B. THESE ADDITIONS, DELETIONS, AND AMENDMENTS SHALL TAKE PRECEDENCE IN THE EVENT OF A CONFLICT WITH ANY STANDARD SPECIFICATIONS.
- C. AS A CONVENIENCE, THESE ADDITIONS, DELETIONS, AND AMENDMENTS HAVE BEEN ARRANGED IN A FORMAT THAT PARALLELS THE “STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION”, 2015 EDITION.

IN ADDITION, SECTIONS OF THE FOLLOWING CODES ARE APPLICABLE TO THIS PROJECT:

- CALIFORNIA BUILDING CODE 2016
- CALIFORNIA GREEN BUILDING STANDARD
- CALIFORNIA MECHANICAL CODE 2016
- CALIFORNIA ELECTRICAL CODE 2016
- CALIFORNIA PLUMBING CODE 2016
- CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS 2016

PART 1 - GENERAL PROVISIONS

SECTION 1 - TERMS, DEFINITIONS, ABBREVIATIONS, UNITS OF MEASURE AND SYMBOLS

REVISE as follows:

1-1 GENERAL. *ADD the following term:*

The word *provide* shall mean furnish and install.

1-2 TERMS AND DEFINITIONS. *MODIFY to ADD the following:*

Acceptance, Final Acceptance – Formal action by the Agency acknowledging the Work is complete.

Agency/Board/City – The City of Irvine, a municipal corporation.

Agency Representative – The person or engineering/architectural firm Agency authorizes to represent it during the performance of the Work by the Contractor and until Final Acceptance. The Agency Representative means the Agency Representative or his assistants.

Calendar Day – The 24-hour day denoted on the calendar.

Calendar Month – The period including the first through the last day of a month.

City – See Agency.

Clarification – Verbal or written interpretation of Contract Documents by the Agency Representative to clarify intent, procedures, materials or processes with no change in contract sum or time.

REPLACE the definition for “Engineer” with the following:

Engineer – The City Engineer acting either directly or through the Agency Representative.

Field Order – Authorization by Agency Representative to proceed with Change Order work after completion of negotiations, but before the issuance of the Change Order.

Laboratory – The laboratory authorized by the Agency or the Agency Representative to test material and work involved in the project.

Major Bid Item – A single Contract item constituting ten percent (10%) or more of the original Contract Price.

Request for Quotation – Contemplated revision of Contract Documents by the Agency requesting detailed information from the Contractor on impacts to contract sum or contract time.

State Standard Specifications – Standard Specifications issued by the State of California, Department of Transportation, 2015.

Traffic Control Devices – All signs, signals, markings, and other devices used to regulate, warn, or guide traffic, placed on, over, or adjacent to a street, highway, pedestrian facility, or bikeway, by authority of the Engineer.

1-3. ABBREVIATIONS

1-3.2 Common Usage. *MODIFY to ADD the following:*

| Abbreviation | Word or Words |
|---------------------|---------------------------------------|
| CSMP | Construction Site Monitoring Program |
| DBE | Disadvantaged Business Enterprise |
| ESA | Environmentally Sensitive Area |
| HMA | Hot Mix Asphalt |
| NOI | Notice of Intent |
| SWMP | Storm Water Management Plan |
| SWRCB | State Water Resources Control Board |
| WPCP | Water Pollution Control Program |
| WDID | Waste Discharge Identification Number |

DELETE the abbreviation of MUTCD and SUBSTITUTE with the following:

| | |
|-------|--|
| MUTCD | California Manual on Uniform Traffic Control Devices |
|-------|--|

1-3.3 Institutions. *MODIFY to ADD the following:*

| Abbreviation | Word or Words |
|---------------------|--|
| AI | The Asphalt Institute |
| AIA | American Institute of Architects |
| APWA | American Public Works Association |
| AREMA | American Railway Engineering and Maintenance of Way Association |
| ASHRAE | American Society of Heating, Refrigerating, and Air Conditioning Engineers |
| ASME | American Society of Mechanical Engineers |
| CRSI | Concrete Reinforcing Steel Institute |
| NFPA | National Fire Protection Association |
| PCA | Portland Cement Association |
| SSPC | Steel Structures Painting Council |
| UBC | Uniform Building Code, Pacific Coast Building Officials Conference of the International Conference of Building Officials |

SECTION 2 - SCOPE AND CONTROL OF THE WORK

REVISE as follows:

2-2 ASSIGNMENT. *MODIFY to ADD the following:*

The performance of the Contract may not be assigned, except upon the written consent of the Agency. Consent will not be given to any proposed assignment that would relieve the original Contractor or its Surety of their responsibilities under the Contract, nor will the Agency consent to any assignment of any part of the Work under the Contract.

Assignment of this Contract shall contain a provision that the funds to be paid to the assignee under the assignment are subject to a prior lien for services rendered or materials supplied for performance of the work called for under the Contract in favor of all persons, firms, or corporations rendering such services or supplying such materials.

2-3 SUBCONTRACTS.

2-3.1 General. *MODIFY to ADD the following:*

If the Contractor subcontracts any part of this Contract, the Contractor shall be as fully responsible to the Agency for the acts and omissions of his subcontractor as he is for the acts and omissions of persons directly employed by him. Nothing contained in the Contract Documents shall create any contractual relationship between any subcontractor and the Agency. The Contractor shall bind every subcontractor to be bound by the terms of the Contract Documents as applicable to his work.

Debarred contractors shall not be employed on the Work pursuant to the provisions of Labor Code § 1777.1 and the City of Irvine Council Ordinance No. 08-10. The Labor Commissioner publishes and distributes a list of contractors ineligible to perform work as a subcontractor on a public works project. This list of debarred contractors is available from the Department of Industrial Relations web site:

<http://www.dir.ca.gov/dlse/debar.html>

A list of individuals, firms and organizations debarred, suspended or who have voluntarily excluded themselves from Federal Procurement and Non-Procurement Programs is maintained by the US General Services Administration. This excluded parties list is available from the website: <http://www.sam.gov>

In accordance with SB 854, the Contractor and each of its subcontractors shall maintain a valid and current Department of Industrial Relations (DIR) Public Works Contractor registration during the term of this project.

Prior to including a subcontractor's name on the bid, the Contractor shall be responsible for verifying that each of its subcontractors are properly licensed and not debarred from performing the designated work.

This requirement shall be enforced as follows: Noncompliance shall be corrected. Payment for subcontracted work involved will be withheld from progress payments due, or to become due, until correction is made. Failure to comply may result in termination of the Contract.

If any subcontractor or person employed by the Contractor is deemed by the Engineer to be incompetent or to act in an improper manner, at the request of the Engineer, they shall be dismissed immediately from the job and shall not be employed again on the Work.

A copy of each subcontract is required to be filed with the Agency before the subcontractor begins work. Each subcontract shall contain a reference to the Contract between the Agency and the Contractor, and the terms of that Contract and all parts thereof shall be made a part of such subcontract insofar as applicable to the work covered thereby. Each subcontract shall provide for its annulment by the Contractor at the order of the Agency if in the Agency's opinion the subcontractor fails to comply with the requirements of the Contract.

2-3.2 Self Performance. *DELETE in its entirety and SUBSTITUTE with the following:*

The Contractor shall perform, with its own organization, Contract work amounting to at least 15 percent of the Contract Price on building/facility contracts, and at least 50 percent of the Contract Price on all other Public Works contracts except that any designated "Specialty Items" may be performed by subcontract and the amount of any such "Specialty Items" so performed may be deducted from the Contract Price before computing the amount required to be performed by the Contractor with its own organization. "Specialty Items" will be identified by the Agency in the Bid or Proposal. Where an entire item is subcontracted, the value of work subcontracted will be based on the Contract Unit Price. When a portion of an item is subcontracted, the value of work subcontracted will be based on the estimated percentage of the Contract Unit Price. This will be determined from information submitted by the Contractor, and subject to approval by the Engineer.

The provisions in 2-3.2 of these Special Provisions require that the Contractor shall perform with the Contractor's own organization contract work amounting to not less than 50 percent of the original Contract Price is not changed by the Federal Aid requirement specified under "Required Contract Provisions Federal Aid Construction Contracts" of these Special Provisions that the Contractor perform not less than 30 percent of the original contract work with the Contractor's own organization.

2-3.3 Status of Subcontractors. *MODIFY to ADD the following:*

The City will not conduct business with an individual, firm or organization, and the Contractor shall not employ or otherwise use any subcontractor, supplier, or equipment vendor at any tier that is on the City's debarment list, the Department of Industrial Relations debarment list, or on the US General Services Administration "List of Parties Excluded from Federal Procurement and Non Procurement Programs."

2-5 PLANS AND SPECIFICATIONS.

2-5.1 General. *ADD the following after the 2nd paragraph:*

All work of the Contract including, but not limited to, the general nature and character of the work area and conducting of Contractors' operations shall be performed in accordance with the Standard Specifications for Public Works Construction, 2015 edition, and all supplements thereto, except as modified in these Special Provisions and as follows:

Work to be performed which is directly related to the construction and/or modification of traffic, striping, signing, markings or signals; work within State right of way; and, work which is directly related to the construction of bridges and

bridge appurtenances shall be performed in accordance with the State Standard Specifications, current edition as of bid date.

As applicable, unless modified elsewhere in these Special Provisions, Work of the Contract shall conform to current editions of: Uniform Building, Plumbing, Mechanical Codes; Uniform Fire Code; National Electrical Code; and, City of Irvine amendments thereto.

DELETE last paragraph in its entirety and SUBSTITUTE with the following:

If the Contractor, either before commencing work or in the course of the work, finds any discrepancy between the Specifications and the Plans or between either of them and the physical conditions at the site of the work or finds any error or omission in any of the Plans or in any survey, the Contractor shall promptly notify the Agency of such discrepancy, error, or omission. If the Contractor observes that any plans or specifications are at variance with any applicable law, ordinance, regulation, order, or decree, he shall promptly notify the Agency in writing of such conflict.

The Agency, on receipt of any such notice, will investigate the circumstances and give appropriate instructions to the Contractor. Until such instructions are given, any work done by the Contractor after its discovery of such an error, discrepancy, or conflict that is directly or indirectly affected by such error, discrepancy, or conflict, will be at its own risk and it shall bear all cost arising therefrom.

The Agency will provide, free of charge, three (3) copies of Plans and Special Provisions for the Contractor and one (1) copy of Plans and Special Provisions for each subcontractor listed in the Bidder's Proposal. Any Plans or Special Provisions required by the Contractor/subcontractor in addition to the above can be provided by Agency at Contractor's expense. The Contractor shall keep one set of Plans and Special Provisions in good order and available to the Agency Representative at the site of the Work.

2-5.2 Precedence of Contract Documents. *DELETE the order of precedence and SUBSTITUTE with the following:*

- a) Permits and Agreements
- b) Change Orders and/or Supplemental Agreements; whichever occurs last
- c) Contract
- d) Addenda
- e) Instructions to Bidders, Proposal Requirements and Conditions
- f) Bid/Proposal
- g) Special Provisions
- h) Contract Plans
- i) Standard Plans
- j) Standard Specifications
- k) Reference Specifications

ADD:

2-5.2.1 Interpretation of Plans and Specifications. Figured dimensions on Plans shall govern, but work not dimensioned shall be as directed. Work not particularly shown or specified shall be the same as similar parts that are shown or specified. Specifications shall govern as to materials, workmanship, and installation procedures. Plans and Specifications requiring higher quality material or workmanship shall prevail. In the event of any discrepancy between any drawings and the figures thereon, the figures shall be taken as correct. In the event of any doubt or question arising respecting the true meaning of the Specifications, reference shall be made to Engineer whose decision thereon shall be final.

2-5.3 Submittals.

2-5.3.1 General. *MODIFY to ADD the following:*

The review period begins anew upon each submittal or resubmittal.

In providing specified submittals, the Contractor certifies that they are complete in all respects and all materials, equipment, and other work shown thereon conforms to the Contract Documents.

Where a manufactured item is designed or engineered by the manufacturer, fabricator, subcontractor, consultant or designee, the drawings and supporting calculations shall be stamped and signed by an engineer registered by the State of California executing the design within the scope of his registration. Unless otherwise accepted by the Engineer, data shall be submitted only by the prime Contractor. Data that, in the opinion of the Engineer, are incomplete or have not been checked by the prime Contractor or are illegible will be considered as not complying with the Contract requirements and will be returned to the Contractor for resubmittal in the proper form. The City may make this determination at any time during the review period.

Data shall be submitted in a format similar to the arrangement of the applicable section(s) of the Specifications unless otherwise specified. Any submittal not following the format specified, and not conforming to the requirements listed below, will be returned for resubmittal without review.

- a) Data shall include drawings and descriptive information in sufficient detail to show the kind, size, arrangement, and operation of component materials and devices, the external connections, anchorages, and supports required, performance characteristics, dimensions needed for installation and correlation with other materials and equipment, and all additional information as required in the detailed section(s) of the Contract Documents. Identify field dimensions; show relation to adjacent or critical features, work or products.
- b) Calculations to support the adequacy of the design in meeting specified performance ratings or requirements shall be submitted when required by the Specifications.
- c) Each drawing or data sheet shall be clearly marked with the name of the project, the Contractor's name, and references to applicable Specification paragraphs and Plan sheets. Submittals containing multiple drawings or data sheets shall be collated prior to submittal for review.

- d) Data sheets, catalog cuts or drawings showing more than the particular item under consideration shall be marked to cross out all but the applicable information. Submit only pertinent pages; mark each copy of standard printed data to identify pertinent products, referenced to Specification Section and Article number. Show reference standards, performance characteristics, and capacities; wiring and piping diagrams and controls; component parts; finishes; dimensions; and required clearances.
- e) Data submitted shall include drawings showing wiring and/or pipe layouts. Any changes proposed by the Contractor shall be stated in a cover letter and essential details of such changes shall be clearly shown in the data submitted.
- f) Present in a clear and thorough manner. Title each drawing with project name and number; identify each element of drawings by reference to sheet number and detail, schedule, or room number of Contract Documents.
- g) Provide manufacturer's preparation, assembly and installation instructions.
- h) Submit full range of manufacturer's standard finishes except when more restrictive requirements are specified, indicating colors, textures, and patterns, for Engineer's selection.
- i) Submit samples to illustrate functional characteristics of products, including parts and attachments. Label each sample with identification required for transmittal letter. Approved samples which may be used in the Work are indicated in the Specification section.
- j) Provide field samples of finishes for the Work, at location acceptable to Agency Representative, as required by individual Specifications section. Install each sample complete and finished. Finishes in place that have been accepted by the Agency Representative may be retained in completed work.

Submittals shall be accompanied by a letter of transmittal listing the contents of the submittal. Drawings shall show the name of the project, the name of the Contractor, and, if any, the names of suppliers, manufacturers, and subcontractors. Shop drawings shall be submitted with sufficient time for Agency's review and in orderly sequence in accordance with the progress schedule to cause no delay in prosecution of the Work. Drawings shall be submitted on 11"x17" or 24"x36" sheet sizes only. Any submittal not accompanied by such a transmittal, or where all applicable items on the form are not complete, will be returned for resubmittal.

A separate letter of transmittal shall be used for each specific item or class of materials or equipment for which a submittal is required. Transmittal of shop drawings on various items using a single letter of transmittal will be permitted only when the items taken together constitute a manufacturer's "package" or are so functionally related that expediency indicates review of the group or package as a whole. Submittals transmitted by facsimile will not be accepted.

The Agency will return any submittal sent (1) without a transmittal letter, (2) with an incomplete form, or (3) by facsimile.

The Contractor shall assign a unique sequential number to each submittal package, which shall be clearly written in the space provided on the transmittal letter. This number shall be used in all correspondence to the Agency when referencing to a

particular submittal. The Contractor shall be responsible for ensuring the same submittal number is not assigned to different submittal packages.

Resubmittals shall incorporate the original submittal number followed by the revision number (i.e., the first resubmittal of submittal #1 is numbered 1R1, the second 1R2, etc.). The Agency will return improperly numbered submittals without review. The Contractor shall indicate on the transmittal letter that either no exceptions to the Contract Documents are taken or deviations are submitted. All deviations indicated shall be listed on the transmittal letter and the Contractor shall be solely responsible for any omitted deviations. If any deviations are omitted, the Agency will return the submittal and the engineering data without review for resubmittal. Any consequences from the resulting delay shall be fully borne by the Contractor.

The Engineer's review of the Contractor's submittals will cover only general conformity to the Contract Documents. The Engineer's acceptance of drawings returned marked NO EXCEPTION TAKEN or RESUBMITTAL NOT REQUIRED (CORRECTIONS ARE NOTED) shall not constitute a blanket approval of dimensions, qualities, and details of the materials, equipment, device, or item shown, and does not relieve the Contractor from any responsibility for errors, omission or deviations from conforming to the Contract Documents. The Agency reserves the right to subsequently reject any previously accepted equipment, material, and/or construction method that deviates from the Contract Documents. When the drawings and data are returned marked CORRECT AND RESUBMIT, the corrections shall be made as noted thereon and as instructed by the Engineer, resubmittal shall be made in the same manner as the original submittal.

If the Engineer rejects the submittals, the Contractor is responsible for any subsequent time delays at no additional compensation from the Agency. Subject to these requirements, drawings and data, after final processing by the Engineer, shall become a part of the Contract Documents, and the work shown or described thereby shall be performed in conformity therewith unless otherwise required by the Engineer. In the event of conflict between accepted submittals and the other Contract Documents, the most stringent requirements shall apply unless the Agency has agreed in writing to less stringent requirements in response to a deviation listed on a submittal letter of transmittal.

No portion of the work requiring a submittal shall be commenced until the submittal has been reviewed by the Engineer and returned to the Contractor with a notation indicating that resubmittal is not required.

The review by the Engineer is only of general conformance with the design concept of the project, and general compliance with the Contract Documents and shall not be construed as relieving the Contractor of these full responsibilities for providing materials, equipment, and work required by the Contract; the proper fitting and construction of the Work; the accuracy and completeness of the submittals; selecting fabrication processes and techniques of construction; and performing the Work in a safe manner.

2-6 WORK TO BE DONE. *ADD the following after the 1st paragraph:*

The Contractor shall leave the Work area in a neat condition. Any work not shown in the Plans or Specifications but necessary to complete the Work according to law and governmental codes and regulations shall be performed by the Contractor as if in the Plans and Specifications.

The Contractor shall remove and dispose of all structures, debris, or other obstructions of any character necessary to accommodate the Work. Where such obstructions consist of improvements not required by law to be removed by the Agency thereof, all such improvements shall be removed, maintained, and permanently replaced by the Contractor at his expense.

2-8 RIGHT OF WAY. *DELETE the 1st sentence and SUBSTITUTE with the following:* Rights of way, easements, agreements, licenses, or rights of entry (all referred to as right of way) for the Work have been provided by the Agency. Temporary right-of-way to construct one or more portions of the Work may also have been acquired by the Agency. If temporary right of way was acquired, the documents or their contractual terms and obligations are included in the Contract Documents. The Contractor shall comply with all the terms and obligations related to the physical use of the temporary right of way and its eventual return of the property to the owner. The Contractor shall schedule the Work that may include landscape establishment, maintenance periods, and final acceptance within the temporary right of way to start and finish within the time allotted in each temporary right of way agreement. Should the Work be delayed through no fault of the Agency, the Contractor shall be responsible for all costs incurred by the Agency to extend use of the temporary right of way.

MODIFY to ADD the following:

Work in the public right of way shall be done in accordance with the requirements of the permit issued by the public agency in whose right of way the Work is located in addition to conforming to the Contract Documents. If a permit or traffic control plan is not required, the Work shall conform to the standards set forth in the MUTCD.

The Contractor shall not allow his employees to use private property for any reason or to use water or electricity from such property without providing the City written permission from the owner. The Contractor shall comply with all applicable federal, state and local laws, ordinances, codes and regulations in performing any work or doing any activity on lands outside the public rights of way.

The Contractor shall hold harmless, indemnify, and defend the Agency, the Agency Representative and each of their officers, employees, and agents from all claims or suits for damages occasioned by such work or activity, whether done according to this section and with permission from the Agency or in violation of this section without permission from the Agency. To the maximum extent permitted by law, all obligations of the Contractor stated in 7-3.2 shall apply in the case of any such claims or suits.

The Contractor shall comply with City of Irvine Municipal Code § 5-9-521 Construction Site and Vacant Property Security, and be fully responsible for locating and obtaining permission to use equipment yards or material storage site(s). The Contractor shall assume full responsibility and costs for property rental, site preparation, maintenance and cleanup in a manner satisfactory to the City and the property owner.

If, through the failure of the Agency to acquire or clear right of way, the Contractor sustains loss which could not have been avoided by the judicious handling of forces, equipment and plant, the Contractor will be paid an amount as the Engineer may find to be a fair and

reasonable compensation for such part of the Contractor's actual loss as, in the opinion of the Engineer, was unavoidable, determined as follows:

Compensation for idle time of equipment will be determined in the same manner as determinations are made for equipment used in the performance of extra work paid for as provided in 3-3 with the following exceptions:

- a) The right of way delay factor for each classification of equipment shown in the State of California, Department of Transportation publication entitled "Equipment Rental Rates and Labor Surcharge," current edition at the time of bid opening will be applied to such equipment rental rate.
- b) The time for which such compensation will be paid will be the actual normal working time during which such delay condition exists, but in no case will exceed eight (8) hours in any day.
- c) The days for which compensation will be paid will be the Calendar Days, excluding Saturdays, Sundays and legal holidays, during the existence of such delay.

Actual loss shall be understood to include no items of expense other than idle time of equipment and necessary payments for idle time of men, cost of extra moving of equipment, and cost of longer hauls. Compensation for idle time of equipment will be determined, as provided herein, and compensation for idle time of men will be determined as provided in 3-3.

If the performance of the Contractor's work is delayed as a result of the failure of the City to acquire or clear right of way, an extension of time determined pursuant to the provisions in 6-6 will be granted.

2-9 SURVEYING.

2-9.2 Survey Service. *DELETED*

ADD:

2-9.5 Conformity with Contract Documents. The Work shall conform to the lines, grades, dimensions, tolerances, and material and equipment requirements shown on the Contract Documents. Although measurement, sampling, and testing may be considered evidence as to such conformity, the Engineer shall be the sole judge as to whether the work or materials deviate from the Contract Documents and his decision as to any allowable deviations therefrom shall be final.

If specific lines, grades, and dimensions are not shown on the Plans, those furnished by the Engineer shall govern.

2-10 AUTHORITY OF BOARD AND ENGINEER. *MODIFY to ADD the following:*

The Contractor is subject to the provisions of Government Code § 8546.7, which provides that this Contract and related documents are subject to the examination and audit of the State Auditor, at the request of the Agency or as part of any audit of the Agency, for a period of three (3) years after final payment under the Contract.

The Agency reserves the right to audit the Contractor's books, records, and documents related to the Contractor's performance and the Contractor's compliance with all of the terms and conditions of this Contract at any time. Upon request by Agency, Contractor

shall prepare and submit to Agency any reports concerning Contractor's performance of the services rendered under this Contract. With 72 hours advance written notice delivered to Contractor, Agency shall have access to the books, records and documents of Contractor related to Contractor's performance of this Contract in the event any audit is requested.

All drawings, documents, and other materials prepared by Contractor in the performance of this Contract:

- a) Shall be the property of Agency and shall be delivered at no cost to Agency upon request of Agency or upon the termination of this Contract, and
- b) Are confidential and shall not be made available to any individual or entity without prior written approval of the Agency.

2-11 INSPECTION. *DELETE in its entirety and SUBSTITUTE with the following:* Inspection of the Work will be conducted by an Agency Representative and will include monitoring and enforcing compliance of materials, equipment, installations, workmanship, methods and requirements of the Contract Documents.

The Agency Representative shall, at all times, have safe access to the Work during construction and shall be furnished with every reasonable facility for ascertaining full knowledge respecting the progress, workmanship, and character of materials and equipment used and employed in the Work.

Whenever the Contractor varies the work hours in which inspection is required, the Contractor shall give at least two (2) Working Days written notice to the Agency Representative so that inspection may be made.

All installations which are to be backfilled or otherwise covered will be inspected by the Agency Representative prior to backfilling or covering. The Contractor shall give the Agency Representative a minimum of two (2) days advance notice prior to backfilling or covering any part of the Work.

Work or materials concealed or performed without the prior notice specified above, will be subject to such tests or exposure as may be necessary to prove to the satisfaction of the Engineer, that all materials used and the work done are in strict conformity with the Contract Documents. All labor and equipment necessary for exposing and testing shall be furnished and paid for by the Contractor. The Contractor shall replace, without additional cost to the Agency, any materials or work damaged by exposure or testing.

Defective work shall be made good at the Contractor's expense including any unsuitable materials and equipment that may have been previously inspected by the Agency Representative, and/or that payment therefore has been included in an estimate for payment.

Inspection of the Work shall not relieve the Contractor of the obligation to fulfill all requirements of the Contract.

All submittals and correspondence between the Agency and the Contractor, related to inspection of the Work of this Contract, shall be directed to the Engineer.

ADD:

2-11.1 Inspection Requirements. The Contractor shall notify the Agency Representative a minimum of 48 hours before inspection is required.

- a) Unless specified elsewhere in the Special Provisions, inspection of the Work will be provided by the Agency between the hours of 7:00 a.m. and 3:30 p.m., Monday through Friday, exclusive of Agency holidays. Any inspections requested by or made necessary as a result of the actions of the Contractor beyond the hours stated above shall be paid for by the Contractor at the prevailing rate of 1-1/2 times the regular hourly wage rate, plus 21% for overhead costs.

The Contractor shall submit a request to the Engineer for approval, a minimum five (5) Calendar Days, in advance of inspections requested by or made necessary as a result of the actions of the Contractor on Saturdays, Sundays or Agency and/or Federal holidays. The Contractor shall pay for these inspections at the prevailing rate of 1-1/2 times for Saturdays and 2 times the regular hourly wage rate for Sundays or Agency and/or Federal holidays plus associated overhead costs.

For purposes of this section, the following holidays are observed by the Agency:

- New Year's Day
- Martin Luther King Jr. Day
- Presidents' Day
- Memorial Day
- Independence Day
- Labor Day
- Veterans Day
- Thanksgiving Day
- Day after Thanksgiving
- Christmas Eve
- Christmas Day

A construction calendar showing the days that each of the above holidays will be observed is available upon request from the Engineer.

- b) The Contractor shall telephone the designated Agency Representative at least two (2) Working Days prior to starting construction or resuming construction following suspension of the Work for any reason.

Prior to commencing any work on the Contract, the Contractor shall submit a completed Inspection Overtime Permit form provided by the City of Irvine.

- c) In addition to any inspection required by Codes and/or Ordinances or Contract Documents, Contractor shall notify the Engineer a minimum of 2 days prior to the permanent concealment of any materials or work. The following list is typical but not all inclusive of such required inspections:
 - 1) Foundation/subgrade material, footing and slab beds
 - 2) Reinforcing for concrete, masonry and plaster
 - 3) Contact surface of concrete forms
 - 4) Concrete and masonry surfaces
 - 5) Piping and conduit

- 6) Finish grade prior to paving, seeding or planting
- 7) All soil mixes prior to installation
- 8) All chemicals and amendments prior to installation or application

2-12 SPECIAL NOTICES. *MODIFY to ADD the following:*

Any notice required or given by one party to the other under the Contract shall be in writing and shall be dated and signed by the party giving such notice or by a duly authorized representative of such party. Any such notices shall not be effective for any purpose whatsoever, unless served in the following manner:

- a) If the notice is given to the Agency, by personal delivery or by depositing the same in the United States mail, enclosed in a sealed envelope addressed to the Agency, postage prepaid and registered.
- b) If the notice is given by the Engineer to the Contractor by personal delivery to said Contractor or to his authorized representative or by depositing the same in the United States mail, enclosed in a sealed envelope addressed to said Contractor at his regular place of business or such other address as may have been established for the conduct of the work under this Contract, postage prepaid and registered.
- c) If notice is given to the surety or any other person by personal delivery to said surety or other person, or by depositing the same in the United States mail, enclosed in a sealed envelope addressed to such surety or person at the address of said surety or person last communicated by him to the party giving the notice, postage prepaid and registered.

ADD:

2-13 CORRESPONDENCE. Unless specified otherwise or requested by the Engineer, the use of facsimile (fax) machines or internet email for the transmittal of routine correspondence, including submittals, shall not be allowed. The City will allow the use of fax machines or internet email for urgent matters such as notification of change of conditions. Unless otherwise allowed by the Engineer, all faxes or internet email shall be directed to the Engineer. The fax number and internet email address for the Engineer will be provided at the pre-construction meeting. Faxes or internet email received after 2:00 p.m. shall be considered as being received the following working day. All faxes or internet email shall be followed up with a paper copy that is mailed to the Engineer on the same day the fax or internet email is forwarded. The Engineer will not accept any illegible faxed or internet email correspondence.

ADD:

2-14 CONTRACT COORDINATION. The Contractor shall coordinate scheduling, submittals, and the Work to assure efficient and orderly sequence of installation of construction elements, with provisions for accommodating items to be installed later.

In addition to weekly progress meetings, as required by the Agency, the Contractor shall hold coordination meetings and pre-installation conferences with Agency Representatives and subcontractors to assure coordination of Work.

Should the Agency exercise partial Acceptance or beneficial occupancy of premises, the Contractor shall coordinate access to site to complete work or to correct defective work

and work not in strict conformance with Contract Documents to minimize disruption of Agency's activities.

SECTION 3 - CHANGES IN WORK

REVISE as follows:

3-1 CHANGES REQUESTED BY THE CONTRACTOR.

3-1.1 General. *ADD the following after the 1st paragraph:*

The Contractor may initiate changes by submitting a written Change Order Request to the Engineer containing:

- a) Description of the proposed changes.
- b) Statement of the reason for making the changes.
- c) Reference applicable specifications sections and specific plans in support of the request.
- d) Statement of the effect on the Contract Price and Contract time.
- e) Statement of the effect on the work of separate subcontractors.
- f) Documentation supporting any change in Contract Price or Contract time as appropriate.

3-2 CHANGES INITIATED BY THE AGENCY.

3-2.1 General. *DELETE in its entirety and SUBSTITUTE with the following:*

The Agency may issue a Change Order for modifications of Work including, but not limited to, the Plans, Specifications, character, quantity or time of Work. Change Orders shall be in writing and state the dollar value of the change or establish the method of payment, and any adjustment in the Contract time of completion.

The Engineer may order minor changes in the Work not involving an increase or decrease in the contract amount, nor involving a change in the time for completion but consistent with the purposes for which the works are being constructed. If the Contractor believes that any order for minor changes in the work involves changes in the Contract Price or time of completion, the Contractor shall not proceed with the minor changes so ordered and shall immediately, upon the receipt of such order, notify the Engineer in writing of his estimate of the changes in the Contract Price and time of completion he believes to be appropriate.

No payment for changes in the Work will be made and no change in the time of completion by reasons of changes in the Work will be made, unless the changes are covered by a written Change Order approved by the Agency in advance of the Contractor's proceeding with the changed work.

Once a Change Order is finalized and executed by both parties, the Contractor waives its right to seek any additional compensation for the work covered by the Change Order or any project impacts. The Contractor agrees that all Change Orders constitutes full payment for the work covered by the Change Orders, including all direct and indirect overhead expenses.

Notwithstanding any other provision in the Contract Documents, the Agency's issuance of a Change Order shall not constitute a waiver by the Agency of, or preclude the Agency in any way from, asserting any claim with respect to the same, including but not limited to, a

claim of breach of contract or claim that the issued Change Order covers work included in the scope of Work set forth in the Contract Documents for which the Contractor was not entitled to any additional funds.

A Change Order is approved when the Agency signs the Change Order.

A Contract Change Order approved by the Engineer may be issued to the Contractor at any time. Should the Contractor disagree with any terms or conditions set forth in an approved Contract Change Order not executed by the Contractor, the Contractor shall proceed with the Change Order work in accordance with 3-5 of the Standard Specifications, and submit a written protest to the Engineer within fifteen (15) days after the receipt of the approved Contract Change Order. The protest shall state the points of disagreement citing the Specification references, quantities and costs involved. If a written protest is not submitted, payment will be made as set forth in the approved Contract Change Order, and that payment shall constitute full compensation for all work included therein or required thereby. Unprotested approved Contract Change Orders will be considered as executed Contract Change Orders.

The Engineer may initiate changes by submitting a Request for Quotation to Contractor. Such request will include detailed description of the change, products, and location of the change in the Work, supplementary or revised Plans and Specifications. Such request is for information only and is not an instruction to execute the changes, or to stop work in progress.

The Contractor shall support each quotation for a lump-sum proposal, and for each unit price that has not previously been established, with sufficient substantiating data to allow Engineer to evaluate the quotation.

On request, the Contractor shall provide additional data to support time and cost computations, labor required, equipment required, products required, recommended source of purchase and unit cost, and quantities required, taxes, insurance and credit for work deleted from Contract, similarly documented, justification for any change in Contract time.

The Contractor shall support each claim for additional costs, and for work done on a time-and-material/force account basis, with documentation as required for a lump-sum proposal, plus additional information as follows:

- a) Name of the Agency Representative who ordered the work, and date of the order.
- b) Dates and times work was performed, and by whom.
- c) Time record, summary of hours worked, and hourly rates paid.
- d) Receipts and invoices for equipment used, listing dates and times of use, products used, listing of quantities, and subcontracts.

In lieu of a Request for Quotation, the Engineer may issue a written Field Order for the Contractor to proceed with a change for subsequent inclusion in a Contract Change Order. Authorization will describe changes in the Work, both additions and deletions, with attachments of revised Contract Documents to define details of the change and will designate the method of determining any change in the Contract Price and any change in Contract time. Agency Representative will sign and date the Field Order as authorization for the Contractor to proceed with the changes. Contractor may sign and date the Field

Order to indicate agreement with the terms therein. Contractor shall proceed with the work so ordered prior to actual receipt of an approved Contract Change Order.

3-2.2 Contract Unit Prices.

3-2.2.1 General. *ADD the following after the 2nd paragraph:*

In the case of such an increase or decrease in a Major Bid Item, the use of this basis for the adjustment of payment will be limited to that portion of the change, which together with all previous changes to that item, is not in excess of twenty-five percent of the total cost of such item based on the original quantity and Contract Unit Price.

3-2.2.2 Increases of More than 25 Percent. *MODIFY to ADD the following:*

If payment for units of a bid item that exceeds 125 percent of the price shown on the Bid Item List is less than \$5,000 at the unit price, the Engineer may not adjust the unit price unless asked to do so in writing by the Contractor.

3-2.4 Agreed Prices. *ADD the following after the 1st sentence:*

Agreed prices shall be negotiated before commencement of the changed work.

3-3 EXTRA WORK.

3-3.2.1 General. *DELETE in its entirety and SUBSTITUTE with the following:*

When the price for the extra work cannot be agreed upon prior to the commencement of the work, the Agency will pay for the extra work based on the accumulation of costs as provided herein.

3-3.2.2.3 Tool and Equipment Rental. *DELETE in its entirety 2nd paragraph and SUBSTITUTE with the following:*

The rates to be used for determining equipment rental costs shall be those rates listed for such equipment in the State of California, Department of Transportation (Caltrans) publication entitled "Equipment Rental Rates and Labor Surcharge", which is in effect on the date upon which the work is accomplished, regardless of ownership and any rental or other agreement entered into by the Contractor, if such may exist, for the use of such equipment. If it is deemed necessary by the Engineer to use equipment not listed in the said publication, the Engineer will establish a suitable rental rate for such equipment. The Contractor may furnish any cost data, which might assist the Engineer in the establishment of such rental rate. Equipment Rental Rates and Labor Surcharge publication is available from Caltrans at <http://www.dot.ca.gov/hq/construc/equipmnt.html>. Rental time will not be allowed while equipment is inoperative due to breakdowns.

Operators of rented equipment will be paid for as provided in 3-3.

3-3.2.3 Markup.

3-3.2.3.1 Work by Contractor. *DELETE in its entirety and SUBSTITUTE with the following:*

The following percentages will be added to the Contractor's costs as determined under 3-3.2.2 and shall constitute the markup for all overhead, increase in Contractor's bonds, administrative expenses and profit on work by the Contractor:

- | | |
|--------------|-----|
| a) Labor | 20% |
| b) Materials | 15% |

- c) Equipment Rental 15%
- d) Other Items and Expenditures 15%

3-3.2.3.2 Work by Subcontractor. *DELETE in its entirety and SUBSTITUTE with the following:*

When any part of the extra work is performed by a subcontractor, of any tier, the markup established in 3-3.2.3.1 shall be applied to the subcontractor's actual cost of such work. Contractor markup on subcontractor work shall be limited to five percent.

No payment shall be made for any item not set forth in 3-3.2.3.1 and 3-3.2.3.2, including without limitation, Contractor's overhead, general administrative expense, supervision or damages claimed for delay in prosecuting the remainder of the work.

This provision shall not be construed to preclude the recovery of damages by the Contractor stemming from delay for which the Agency is responsible, which is unreasonable under the circumstances involved, and which was not within the contemplation of the Agency and the Contractor.

3-3.3 Daily Reports by Contractor. *ADD the following after the 1st sentence:*

The Contractor shall notify the Agency Representative at the beginning of each day when extra work is in progress. No payment will be made for work not verified by the Agency Representative.

SECTION 4 - CONTROL OF MATERIALS

REVISE as follows:

4-1 MATERIALS AND WORKMANSHIP.

4-1.1 General. *ADD the following before the 1st sentence in the 1st paragraph:*
The Contractor shall furnish all materials required to complete the Work, except materials that are designated in the Special Provision to be furnished by the Agency.

ADD:

4-1.1.1 Contractor Equipment and Plants. Only equipment and plants suitable to produce the quality of work and materials required will be permitted to operate on the project. Such equipment and plants shall be maintained in a good state of repair during the process of the Work. No obsolete or badly worn equipment and plants shall be used. Manufacturer's ratings shall not be exceeded.

Plants shall be designed and constructed in accordance with general practice for such equipment and shall be of sufficient capacity to ensure a production rate of sufficient material to carry to completion within the time limit(s) specified in the Contract Documents, if any.

The Contractor, when ordered by the Engineer, shall remove unsuitable equipment from the work site and discontinue the operation of unsatisfactory plants and equipment.

ADD:

4-1.1.2 Adoption or Revision Date for Standards, Codes, and Tests. Whenever reference is made to a standard, code, specification, or test and the designation representing the date of adoption or latest revision thereof is omitted, it shall mean the latest revision of such standard, code; specification or test in effect on the day of the Notice Inviting Bids is dated.

In accordance with the Public Contract Code § 3400, the Contractor shall submit data substantiating requests for substitution of "equal" items within thirty-five (35) days of Contract award or before ten percent of the Contract Working Days have expired, whichever is less. This time is included in the number of Working Days allowed for the completion of the Work. The Engineer's decision regarding the acceptability of the substitution is final.

Materials, equipment, and supplies provided shall, without additional charge to Agency, fully conform with all applicable local, State and Federal safety laws, rules and regulations, and orders, and it shall be the Contractor's responsibility to provide only such materials, equipment, and supplies notwithstanding any omission in the Contract Documents therefore on that particular material, equipment or supply as specified.

4-1.3 Inspection Requirements. *ADD the following before the 1st paragraph:*
Materials to be used in the Work will be subject to inspection and tests by the Engineer. The Contractor shall furnish without charge such samples as may be required. The Contractor shall furnish the Engineer a list of his sources of materials and the locations at which such materials will be available for inspection a minimum of twenty (20)

Calendar Days in advance of their intended use. The Engineer may inspect, sample or test materials at the source of supply or other locations, but such inspection, sampling or testing will not be undertaken until the Engineer is assured by the Contractor of the cooperation and assistance of both the Contractor and the supplier of the material. The Contractor shall assure that the Engineer has free access at all times to the material to be inspected, sampled or tested. It is understood that such inspections and tests, if made at any point other than the point of incorporation in the Work, in no way shall be considered as a guarantee of acceptance of such material nor of continued acceptance of material presumed to be similar to that upon which inspections and tests have been made, and that inspection and testing performed by the Agency shall not relieve the Contractor or his suppliers of responsibility for quality control.

Manufacturers' warranties, guarantees, instruction sheets and parts lists, which are furnished with certain articles or materials incorporated in the Work, shall be delivered to the Engineer before acceptance of the Contract Work.

Reports and records of inspections made and tests performed when available at the site of the Work, may be examined by the Contractor.

4-1.3.1 General. *MODIFY to ADD the following:*

The Engineer may inspect the production of material, or the manufacture of products at the source of supply. Plant inspection, however, will not be undertaken until the Engineer is assured of the cooperation and assistance of both the Contractor and the material producer. The Engineer shall have free entry at all times to such parts of the plant as concerns the manufacture or production of the materials. Adequate facilities shall be furnished free of charge to make the necessary inspection. The Agency assumes no obligation to inspect materials at the source of supply.

4-1.4 Test of Materials. *MODIFY to ADD the following:*

The Contractor shall furnish the Agency Representative with a list of his sources of materials in sufficient time to permit proper inspection and testing of materials to be furnished for such listed sources in advance of their use. The Contractor shall furnish without charge such samples as may be required.

Inspection and tests will be made by the Agency Representative or his designated representative, but it is understood that such inspections and tests, if made at any point other than the point of incorporation in the work, in no way shall be considered as guarantee of acceptance of such materials nor of continued acceptance of materials, presumed to be similar to that upon which inspection and tests have been made.

Tests of materials will be made in accordance with commonly recognized procedures of technical organizations and such special procedures as prescribed in the Contract Documents. Materials will be sampled and tested at such times during the process of the Work as deemed desirable by the Engineer, the Contractor shall cooperate in obtaining the samples.

ADD:

4-1.4.1 Testing Laboratory. The Contractor shall employ and pay for services of an independent testing laboratory, subject to approval by the Agency, to perform other testing and inspections services required by the Contract Documents.

Prior to start of Work, the Contractor shall submit his testing laboratory name, address and telephone number, and names of full-time registered engineer and responsible officer.

Employment of testing laboratories will in no way relieve Contractor of its obligation to perform the Work in accordance with Contract Documents.

Laboratory field technicians employed by the Agency shall have no authority to release, revoke, alter, or enlarge on requirements of Contract Documents, or to approve, accept or stop any portion of the Work.

The Contractor shall:

- a) Cooperate with laboratory personnel, provide access to work, arrange access to manufacturer's operations.
- b) Provide the laboratory with preliminary representative samples of materials to be tested, in required quantities.
- c) Furnish copies of mill test reports.
- d) Provide casual labor and facilities for access to work being tested; obtain and handle samples at the site; facilitate inspections and tests; provide facilities for the laboratory's exclusive use for storage and curing of test samples.
- e) Coordinate requests for testing through the Agency Representative. Notify Agency Representative a minimum of three (3) Working Days in advance of operations to allow for assignment of personnel and scheduling of tests.
- f) Pay for additional laboratory inspections, sampling and testing required for Contractor's convenience and when initial tests indicate that work does not comply with Contract Documents.
- g) When required by the Contract Documents, submit manufacturer's certificate, executed by responsible officer, certifying that the product(s) meet or exceed specified requirements. Provide certification in duplicate.

4-1.6 Trade Names or Equals. *MODIFY to ADD the following:*

The Contractor shall submit products list in accordance with the following:

- a) Within the time specified in 4-1.1.2 of the Standard Specifications and these Special Provisions, transmit number of copies Contractor needs plus four (4) of a list of major products which are proposed for installation, including name of manufacturer. Tabulate products by specification section number, title and article number.
- b) For products specified only by reference standards, give manufacturer, trade name, model or catalog designation, and reference standards.
- c) The Engineer will reply in writing, stating whether there is reasonable objection to listed items. Failure to object to a listed item shall not constitute a waiver of requirements of Contract Documents.

The following limitations shall apply to substitutions:

- a) During the bidding period, Instructions to Bidders govern times for submitting requests for substitutions under requirements specified in this Subsection.

- b) Requests for substitutions of products will be considered only within the time period specified in the Contract Documents. Subsequent requests will be considered only in the case of product unavailability or other conditions beyond control of Contractor. Material delivery schedules will not be considered justification for substitution.
- c) Substitutions will not be considered when indicated on shop drawings or product data submittals without separate formal request or when requested directly by subcontractor or supplier, or when acceptance will require substantial revision of Contract Documents.
- d) Substitute products shall not be ordered or installed without written acceptance by the Engineer.
- e) Only one request for substitution for each product line will be considered. When substitution is not accepted, provide specified product.
- f) The Engineer will determine acceptability of substitutions.

Requests for substitutions shall conform to the following:

- a) Submit separate request for each substitution. Document each request with complete data substantiating compliance of proposed substitution with requirements of Contract Documents.
- b) Identify product by specifications section and article numbers. Provide manufacturer's name and address, trade name or product, and model or catalog number. List fabricators and suppliers, as appropriate.
- c) Give itemized comparison of proposed substitution with specified product, listing variations, and reference to specifications section and article numbers.
- d) Give cost data comparing proposed substitution with specified product, and amount of net change to Contract sum.
- e) List availability of maintenance services and replacement materials.
- f) State effect of substitution on construction schedule, and changes required in other work or products.

Request for substitution constitutes a representation that Contractor has investigated proposed product and has determined that it is equal to or superior in all respects to specified product. The Contractor shall provide the same warranty for the substitution as for the specified product, shall coordinate installation of accepted substitute, making such changes as may be requested for Work to be complete in all respects, certifies that cost data presented is complete and includes all related costs under this Contract and waives claims for additional costs related to substitution which may later become apparent. The Contractor shall submit the number of copies the Contractor needs plus four of request for substitution. For accepted products, submit shop drawings, product data and samples, and tests conducted in accordance with 2-5.3.

ADD:

4-1.10 Agency-Furnished Materials. Materials which are listed as Agency-furnished materials in the Special Provisions will be available to the Contractor free of charge.

The Contractor shall submit a written request to the Engineer for the delivery of Agency-furnished material at least fifteen (15) Working Days in advance of the date of its intended use. The request shall state the quantity and the type of each material.

The locations at which Agency-furnished materials will be available to the Contractor free of charge will be designated in the Special Provisions. In those cases, the materials shall be hauled to the site of the Work by the Contractor at the Contractor's expense, including any necessary loading and unloading that may be involved. If the locations are not designated in the Special Provisions, the Agency-furnished materials will be furnished to the Contractor free of charge at the site of the Work. In either case, all costs of handling and placing Agency-furnished material shall be considered as included in the price paid for the contract item involving the Agency-furnished material.

The Contractor shall be responsible for Agency-furnished materials furnished to the Contractor, and shall pay all demurrage and storage charges. Agency-furnished materials, once furnished, delivered, or picked-up by the Contractor, that are lost or damaged from any cause whatsoever shall be replaced by the Contractor at the Contractor's expense. The Contractor shall be liable to the Agency for the cost of replacing Agency-furnished materials, and those costs may be deducted from any monies due or to become due the Contractor. All Agency-furnished material that is not used on the Work shall remain the property of the Agency, and the Contractor shall arrange with the Agency Representative for delivery back to the Agency at Contractor's expense.

SECTION 5 - UTILITIES

REVISE as follows:

ADD:

5-0 GENERAL. For purposes of this Section 5, the terms referenced below are defined as follows:

An “unidentified” underground main or trunk line utility is one that is not indicated at all on the Plans and a “misidentified” underground main or trunk line utility is one that is not indicated on the Plans with reasonable accuracy (a “misidentification”). An underground main or trunk line utility is indicated on the Plans with reasonable accuracy unless its actual location is substantially and materially different from that indicated on the Plans.

The term “rearrangement” of utilities means the relocation, alteration, reinstallation, and/or reconstruction of utilities (including removal of existing utilities incidental thereto) as necessary in order to accommodate the Work. Whenever in this Section 5 reference is made to any one or more of these rearrangement activities, such reference shall be deemed to include all other such activities as required in order to accommodate the Work.

5-1 LOCATION. *MODIFY to ADD the following:*

A list of utility companies that have facilities located within or near the construction area is included in the Special Provisions. The Engineer has endeavored to determine the existence of utility substructures at the site of the Work by reviewing the records of the owners of known utilities in that vicinity and consulting with those owners, and based on that information has indicated on the Plans those utility substructures (except for service connections) that may affect the Work.

The Contractor acknowledges that the utility information provided on the Plans and Special Provisions has not been verified and may not be accurate or complete. Except as expressly provided in this Section 5, the Contractor may not rely upon such utility information and the City assumes no responsibility for its accuracy or completeness. Changed conditions within the scope of 3-4 do not include utilities.

The Contractor shall determine the exact location (both horizontal and vertical), type and size of all existing utilities, including service connections, prior to commencing work which could result in damage to such utilities or could otherwise affect or be affected by such utilities or interfere with the service they provide. Where underground main distribution conduits such as water, gas, sewer, electric power, telephone or cable television are shown on the Plans, the Contractor shall assume that every adjacent property parcel will be served by a service connection for each type of utility shown. The Contractor shall do such investigation, research, surveys and potholing as the Contractor deems necessary to make such determinations. The Contractor shall immediately notify the Engineer as to any utility discovered by it which is in a different position than indicated on the Plans or is not indicated at all on the Plans.

The Contractor's cost of locating any unidentified or misidentified underground main or trunk line utility will be paid for as an addition to the Work in accordance with Section 3; provided, however, that the Contractor will not be entitled to such additional compensation if the existence and location (with reasonable accuracy) of such utility was (or should have been) known to the Contractor as of the date on which the Bids were due or could

otherwise have been inferred at that time from the presence of visible facilities such as buildings, meters, junction boxes or identifying markers. The cost of locating all other utilities shall be considered as included in prices in the Bid for other items of the Work.

The information regarding underground and internal utilities and appurtenances which the Contractor is required to record in the Record Documents as specified in 7-16 shall include (but not be limited to) the accurate locations of underground utilities determined pursuant to this 5-1 and remaining in place, as well as utilities rearranged by either the Contractor or the utility owners.

At least two (2) Working Days prior to commencing any excavation, the Contractor shall contact the regional notification center (Underground Service Alert of Southern California [USA] at 1-800-422-4133) to obtain an inquiry identification number. The Contractor shall comply in all respects with California Government Code § 4216 *et seq.*

Caltrans is not required by Section 4216 *et seq.* to become a member of the regional notification center. The Contractor shall contact Caltrans for the location of its subsurface installations. In addition, the Contractor shall be aware that non-pressurized sewer lines, non-pressurized storm drains, and other non-pressurized drain lines are not required by § 4216 *et seq.* to be marked by the respective owners. The Contractor shall contact those utility owners as necessary to locate their subsurface installations.

The Contractor shall request the City of Irvine Traffic Operations Division at 949-724-7649 to locate any existing traffic signal conductors and interconnect within the construction area before performing Work that may affect or be affected by the existing facilities.

Except as expressly provided in this Section 5 with respect to unidentified or misidentified underground main or trunk line utilities, the failure of any utility company to accurately mark its facilities shall not be justification for a time extension or for additional compensation from the City.

The Contractor shall obtain photographs of all markings made by its forces as well as all USA markings. All such photographs shall show the subject markings in relation to one or more identifiable landmarks that will remain in place after completion of the Work and completion of any utility removal and/or rearrangement work in the vicinity.

The right is reserved to governmental agencies and to the owner of utilities to enter at any time upon any street, alley, right of way, or easement for the purpose of maintaining and making repairs to their property.

5-1.2 Payment. *DELETE in its entirety and SUBSTITUTE with the following:*

Payment for utility location by the Contractor shall be included in the various items of work and no additional compensation will be allowed therefore.

5-2 PROTECTION. *DELETE in its entirety and SUBSTITUTE with the following:*

The Contractor shall not interrupt the service function or disturb the support of any utility without authority from the utility owner or direction from the Engineer. Valves, switches, vaults, and meters shall be maintained readily accessible for emergency shutoff.

Where protection is required to ensure support of utilities potentially impacted by the Work, the Contractor shall, unless otherwise specified on the Plans or in the Special Provisions, furnish and place the necessary protection and support.

Any additional cost incurred by the Contractor for protecting and supporting an unidentified underground main or trunk line utility or resulting from the misidentification of an underground main or trunk line utility will be paid for as an addition to the Work in accordance with Section 3, unless such utility's existence and location (with reasonable accuracy) was (or should have been) known to the Contractor as of the date on which the Bids were due or could otherwise have been inferred at that time from the presence of visible facilities such as buildings, meters, junction boxes or identifying markers. The cost of protecting and supporting all other utilities shall be considered as included in prices in the Bid for other items of the Work.

The Contractor shall immediately notify the Engineer and the utility owner if any utility is disturbed or damaged in the course of the Work. The Contractor shall, if directed by the Engineer, restore, repair or replace any such disturbed or damaged utility.

For any unidentified or misidentified underground main or trunk line utility that is disturbed or damaged in the course of the Work, the cost of restoration, repair or replacement incurred by the Contractor, if not made necessary by the Contractor's failure to perform its obligations pursuant to the Contract Documents (including without limitation Section 5-1) or to otherwise exercise reasonable care, will be paid for as an addition to the Work in accordance with Section 3. Except where additional compensation is allowed pursuant to this paragraph, all utilities disturbed or damaged in the course of the Work shall be restored, repaired or replaced at the Contractor's cost and expense, either by the utility owner or by the Contractor.

To the maximum extent permitted by law, all obligations of the Contractor stated in 7-3.2 shall apply in the case of any claims or liabilities (as defined therein) that may be asserted or claimed by any person or entity arising out of any disturbance or damage to utilities caused by the act or omission of the Contractor, whether or not such utilities are accurately marked either on the Plans or by the utility owner in the field, and whether or not there is concurrent active or passive negligence on the part of City and/or City Personnel, but excluding any such claims or liabilities arising from the sole active negligence or willful misconduct of City or City Personnel. All claims and liabilities for which the Contractor is responsible pursuant to this paragraph are sometimes referred to herein as "Utility Damage Claims."

When placing concrete around or contiguous to any non-metallic utility installation, the Contractor shall at its expense:

- a) Furnish and install a 2-inch (50 mm) cushion of expansion joint material or other similar resilient material; or
- b) Provide a sleeve or other opening which will result in a 2-inch (50 mm) minimum-clear annular space between the concrete and the utility; or
- c) Provide other acceptable means to prevent embedment in or bonding to the concrete.

Where concrete is used for backfill or for a structure which would result in embedment, or partial embedment, of a metallic utility installation; or where the coating, bedding or other

cathodic protection system is exposed or damaged by the Contractor's operations, the Contractor shall notify the Engineer, shall arrange to secure the advice of the affected utility owner regarding the procedures required to maintain or restore the integrity of the system, and shall implement such procedures at the Contractor's expense.

5-4 RELOCATION. *DELETE in their entirety 2nd and 3^d paragraphs and SUBSTITUTE with the following:*

If utilities are found to interfere with the Work after award of the Contract, such utilities will be rearranged by the respective utility owners, or the Engineer may order the Contractor to perform such rearrangement, as an addition to the Work in accordance with Section 3. Alternatively, the Engineer may order changes in the Work to avoid such interference, in accordance with Section 3. All work by the Contractor on utilities shall be done to the reasonable satisfaction of the utility owner as well as complying with the requirements of the Contract Documents.

When the Plans or Special Provisions provide for the Contractor to rearrange a utility as part of the Work, all costs for such work shall be considered included in the Bid for the items of work necessitating such work. However, if an underground main or trunk line utility to be rearranged by the Contractor is misidentified in the Plans, any additional cost incurred by the Contractor for such work resulting from the misidentification shall be treated as an addition to the Work in accordance with Section 3, unless the utility's location (with reasonable accuracy) was (or should have been) known to the Contractor as of the date on which the Bids were due or could otherwise have been inferred at that time from the presence of visible facilities such as buildings, meters, junction boxes or identifying markers. Except as provided in this paragraph, the Contractor shall not be entitled to any additional compensation on account of inaccuracies in the Plans with respect to rearrangements of utilities that are included in the Work.

Temporary or permanent rearrangement of utilities requested by the Contractor for its convenience shall be its responsibility and the Contractor shall make all arrangements necessary for such work and bear all related costs. The Contractor shall not be entitled to any additional compensation on account of any such utilities or work.

ADD the following at the beginning of the last paragraph:

The provisions of this paragraph are subject to the provisions of the previous paragraph. Where the Plans or Special Provisions provide for the Contractor to rearrange any service connections, such work is considered included in the Bid for the items of work necessitating such work.

5-5 DELAYS. *DELETE in its entirety and SUBSTITUTE with the following:*

The construction schedule developed in accordance with 6-1 shall allow adequate time for the necessary protection, removal and rearrangement of utilities by either the utility owner or the Contractor, as applicable. For work to be performed by a utility owner, the construction schedule shall allow for the time period required by the utility owner for such work. The Contractor shall notify the Engineer in writing of any subsequent changes in the construction schedule which will affect the time available for protection, removal, or rearrangement of utilities, and shall obtain the Engineer's approval of such changes.

The Contractor will not be entitled to any extensions of the Contract time or compensation for damages incurred due to delays attributable to utilities at the site of the Work except as

otherwise provided in 6-6.1 or as provided below. Delays described below will not be considered delays for which the City is responsible within the meaning of 6-6.3.

- a) Subject to 6-6.2 and 6-6.4, the Contractor shall be entitled to an extension of the Contract time to the extent that any delay in the Work is directly attributable to an unidentified underground main or trunk line utility or the misidentification of an underground main or trunk line utility in the Plans, unless the utility's location (with reasonable accuracy) was (or should have been) known to the Contractor as of the date on which the Bids were due or could otherwise have been inferred at that time from the presence of visible facilities such as buildings, meters, junction boxes or identifying markers. If the Contractor is entitled to such a time extension, the Contractor also shall be entitled to compensation for idle time of equipment on account of such delay, determined by the Engineer in the same manner as determinations are made for equipment used in the performance of Extra Work in accordance with Section 3. The Contractor shall not be entitled to any other compensation or damages on account of such delay.
- b) The Contractor may be given an extension of time (but no additional compensation) for unforeseen delays attributable to failure of a utility owner to complete utility rearrangement work within the time period reasonably scheduled for such work in the construction schedule, or to timely complete utility rearrangement work which the Contract Documents indicate will be completed in advance of the Contractor's construction operations.

The Contractor shall not be entitled to any time extension or additional compensation for any delays or losses described in 5-5: (a) to the extent resulting from the Contractor's actions or omissions or which could have been avoided by any reasonable means, such as the judicious handling of forces, equipment or plant, or (b) arising in connection with utilities being rearranged for the Contractor's convenience. The determination of what damages the Contractor could have avoided will be made by the Engineer.

The Contractor shall immediately notify the Engineer of any delays to the Contractor's operations described in 5-5. Delays described in 5-5 are not considered right of way delays within the scope of 2-8.

ADD:

5-7 CONTRACTOR RESPONSIBILITIES.

The Contractor shall:

- a) Cooperate with utility personnel; provide access to work site.
- b) Coordinate Work of the Contract with affected utilities. All USA markings shall be removed after completion of the work for which the markings were provided, and before Agency's Acceptance and/or approval of the Work.
- c) Asphalt concrete pavement not overlaid or slurry sealed as part of the project bid items which is damaged by trenching, potholing or where the contractor otherwise damages pavement shall be slurry sealed after the pavement section is repaired. "Perpendicular" street cuts shall be slurry sealed ten (10) feet each side of the cut and for "longitudinal" cuts shall be slurry sealed from pavement lane to pavement lane line for the entire damaged area or as directed by the Agency Representative. Type I slurry shall be used on non-arterial streets and

Type II slurry shall be used on arterial streets. Damaged traffic striping, legends and markers shall also be replaced if damaged. "Patchwork" application of slurry shall be avoided by joining closely grouped areas of slurry applications. Compensation for this requirement shall be considered as included in the prices paid for the related items of work and no additional compensation will be allowed therefore.

ADD:

5-8 PERMANENT UTILITIES. Contractor shall contact and make all arrangements with utility owners and coordinate all provisions for installation and connection of all permanent utilities that are necessary for the Work, such as, but not limited to, natural gas, electricity, water, sewer, and telephone. All costs for such installation and connection, as well as costs for operating permanent utilities prior to acceptance of the Work by the Agency, shall be considered as included in the prices in the Bid for the related items of work.

SECTION 6 - PROSECUTION, PROGRESS AND ACCEPTANCE OF THE WORK

REVISE as follows:

6-1 CONSTRUCTION SCHEDULE AND COMMENCEMENT OF WORK. *DELETE in its entirety and SUBSTITUTE with the following:*

The Contractor shall begin the Work on or before the date stipulated in the Notice to Proceed and shall diligently prosecute the Contract to completion within the time limit provided in the Contract.

The Contractor shall notify the Engineer of his intent to begin work at least two (2) Working Days prior to the start of any work.

The Contractor may, upon written approval from the Agency, begin work in advance of the date in the Notice to Proceed; however, no work shall be started in advance of the complete execution of the Contract and acceptance of the Contractor's construction schedule by the Agency. The Agency may, but shall not be required to, provide access to the site prior to the date specified in the Notice to Proceed.

Unless specified elsewhere in these Special Provisions, within ten (10) days after execution of the Contract, the Contractor shall deliver to the Agency Representative a construction progress schedule employing the critical path method, in a form satisfactory to the Engineer, showing the proposed dates of commencement and completion of each item of the Work and the anticipated amount of each monthly payment that will become due the Contractor in accordance with the progress schedule.

The schedule format shall be as follows:

- a) Prepare schedules as horizontal bar chart with separate bar for each portion of work or operation in accordance with approved schedule of values, identifying first workday of each week. Allow space for updating.
- b) Sequence of Listings: Chronological order of the start of each item of work.
- c) Sheet Size: Multiple of 8-1/2 x 11 inches.
- d) Provide a two week look-ahead schedules (updated weekly).

The content of the schedules shall:

- a) Show complete sequence of construction by activity, with dates for beginning and completion of each element of construction. Include any special sequencing specified in the Contract Documents.
- b) Show lane closures notifications and lane closure dates.
- c) Provide sub-schedules to define major and significant portions of entire schedule.
- d) Show accumulated percentage of completion of each item, and total percentage of Work completed as of first day of each month.
- e) Provide separate schedule of dates for product procurement and delivery dates, shop drawing submittals and equipment installation. Show decision dates for selection of finishes, if applicable.
- f) Show delivery dates for Agency-furnished products, if applicable.

- g) Show the critical path.

Revisions to schedules shall:

- a) Indicate progress of each activity to date of submittal, and projected completion date of each activity.
- b) Identify activities modified since previous submittal, major changes in scope, and other identifiable changes.
- c) Provide written report to define any problem areas, anticipated delays, and impact on schedule. Report corrective action taken, or proposed, and its effect.
- d) Revise periodically as directed by the Agency Representative. Failure to comply with directive will be considered as grounds to delay progress payment.
- e) Show the revised critical path.

Required submittals:

- a) Submit initial schedules within ten (10) days after execution of the Contract. If requested, resubmit required revisions within seven (7) days of request.
- b) Submit an update schedule on or before the first day of each month, beginning one month after the initial schedule as outlined in (a) above. If requested, resubmit required revisions within seven (7) days of request.
- c) Submit four (4) copies of schedules to Agency Representative.
- d) Submit under transmittal letter.

Contractor shall:

- a) Distribute copies of current schedules to job site file subcontractors, suppliers and other concerned parties.
- b) Instruct recipients to promptly report, in writing, problems anticipated by projections shown in schedules.

Payment for conforming to these requirements shall be included in the various items of work and no additional compensation will be allowed therefore.

6-2 PROSECUTION OF THE WORK.

ADD:

6-2.1 Time of Completion and Forfeiture Due to Delay. The Contractor shall complete the Work called for under the Contract within the time set forth in the Special Provisions.

In accordance with Government Code § 53069.85, Contractor agrees to forfeit and pay to the Agency the amount per day set forth in the Contract for each and every day of delay which shall be deducted from any payments due or to become due the Contractor.

The Agency has endeavored to identify all areas of the site which may contain hazardous waste, as defined by Health and Safety Code § 25117, and unless otherwise noted said hazardous waste in these areas has been mitigated. However, the parties expressly acknowledge the possibility of the existence of further hazardous waste not previously identified. If, during the course of his work, the Contractor encounters any

such hazardous waste, he shall promptly notify the Agency through its designated representative. If the material is indeed "hazardous waste" pursuant to Health and Safety Code § 25117, the Agency has the option to have the mitigation work performed by the Contractor or by a separate contract from the work being performed. If the Contractor performs said mitigation work, the cost will be paid for as an addition to the work in accordance with Section 3. To the maximum extent permitted by law, the Agency shall not be liable for any damages beyond an appropriate time extension for delays occasioned by the existence of hazardous waste conditions contemplated herein.

No forfeiture due to delay shall be made because of any delays in the completion of the work due to unforeseeable causes beyond the control and without the fault or negligence of the Contractor (including but not restricted to acts of nature or of the public enemy, acts of the government, acts of the Agency, or acts of another contractor in the performance of a contract with the Agency, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather). Any such delays, except for acts of the Agency, shall not entitle the Contractor to any additional compensation. The sole remedy of the Contractor shall be an extension of time obtained in accordance with this section.

The Contractor shall, within ten (10) Calendar Days from the beginning of any such delay, notify the Agency Representative in writing of the cause of delay, whereupon the Agency Representative will ascertain the facts and extent of the delay and extend the time for completing the Work if, in his judgment, the findings of the fact justify such an extension, and the Agency Representative's findings of facts thereon shall be final and conclusive.

ADD:

6-2.2 Order of Work Requirements. When required by these Special Provisions or the Plans, the Contractor shall follow the sequence of operations and restrictions as set forth therein.

The Work shall be performed in conformance with the staging of construction shown on the Plans and indicated below. Subject to approval by the Engineer, non-conflicting work in subsequent stages may proceed concurrently with work in preceding stages, provided satisfactory progress is maintained in the preceding stages of construction. The Engineer's approval of any Contractor-requested modifications to the order of work or staging of the work shall not be grounds for a Change Order request or time extension request by the Contractor. If the Contractor deviates from the specified order of work or the staging plans, it does so at its own risk and shall assume all time impacts and cost associated with such deviations.

The order of work described below is not intended to include all work items necessary to complete a particular construction stage and serves to only summarize the order of major work items.

- a) N/A

6-3 SUSPENSION OF THE WORK.

6-3.1 General. *DELETE in its entirety and SUBSTITUTE with the following:*

The Engineer shall have the authority to suspend the Work wholly or in part, for any time period as the Engineer deems necessary in the interest of Agency, for Agency's convenience, or due to the failure on the part of the Contractor to carry out orders given, or to perform any provision of the Contract. The Contractor shall immediately comply with the written order of the Engineer to suspend the Work wholly or in part. The suspended work shall be resumed as ordered or approved in writing by the Engineer.

Resumption of work shall be predicated on receipt of the following from the Contractor:

- a) A revised schedule showing each task yet to be accomplished and the time line to accomplish each – until final completion.
- b) The work force projections attached to each task listed per workweek.
- c) The cost expenditures attached to each task summarized per each workweek.
- d) Lien releases from each subcontractor, supplier, and vendor to which the Contractor has requested materials, equipment or any other service recognizing the payments received.
- e) An Income and Expense Statement projecting how the Contractor will finance the remainder of the project.

Such suspension shall be without liability to the Contractor on the part of the Agency except as otherwise specified in 6-6.3. For purposes of 6-6.3, delays resulting from suspensions ordered by the Engineer due to the failure on the part of the Contractor to carry out orders given, or to perform any provision of the Contract, shall not be delays for which the Agency is responsible.

In the event that a suspension of Work is ordered as provided above, the Contractor, at the Contractor's expense, shall do all the work necessary to provide a safe, smooth, and unobstructed passageway through construction for use by public traffic during the period of that suspension as provided in 7-10, and as specified in these Special Provisions. In the event that the Contractor fails to perform the work above specified, the Agency will perform that work and, if the suspension is due to Contractor's failure to carry out orders given or to perform any provision of the Contract, the cost thereof will be deducted from monies due or to become due the Contractor.

If a suspension of work is ordered by the Engineer, in accordance with this subsection, the days on which the suspension order is in effect shall be considered working days if those days are working days within the meaning of the definition set forth in 6-7.2.

The suspension of Work shall not relieve the Contractor of the responsibilities as set forth in the Contract Documents.

6-4 TERMINATION OF THE CONTRACT FOR DEFAULT. *ADD the following:*

In the event this Contract is terminated for grounds which are later determined not to justify a termination for breach, such termination shall be deemed to constitute a Termination of the Contract for Convenience pursuant to 6-5.

6-5 TERMINATION OF THE CONTRACT FOR CONVENIENCE. *DELETE in its entirety and SUBSTITUTE with the following:*

The Agency reserves the right to terminate the Contract at any time upon a determination by the Engineer that termination of the Contract is in the best interest of the Agency.

If the Agency elects to terminate the Contract, the termination of the Contract and the total compensation payable to the Contractor shall be governed by the following:

- a) The Engineer will issue the Contractor a signed written notice, specifying that the Contract is to be terminated. Upon termination of the Contract, the Contractor will be relieved of further responsibility for damage to the Work (excluding materials) as specified in 4-1.2 of the Standard Specifications, 7-16 of these Special Provisions and, except as otherwise directed in writing by the Engineer, the Contractor shall:
 - 1) Stop all work under the Contract except that specifically directed to be completed prior to Acceptance.
 - 2) Perform work the Engineer deems necessary to secure the project for termination.
 - 3) Remove equipment and plant from the site of the Work.
 - 4) Take action that is necessary to protect materials from damage.
 - 5) Notify all subcontractors and suppliers that the Contract is being terminated and that their contracts or orders are not to be further performed unless otherwise authorized in writing by the Engineer.
 - 6) Provide the Engineer with an inventory list of all materials previously produced, purchased or ordered from suppliers for use in the Work and not yet used in the Work, including its storage location, and such other information as the Engineer may request.
 - 7) Dispose of materials not yet used in the Work as directed by the Engineer. It shall be the Contractor's responsibility to provide the Agency with good title to all materials purchased by the Agency hereunder, including materials for which partial payment has been made as provided in 9-3.2 and with bills of sale or other documents of title for those materials.
 - 8) Subject to the prior written approval of the Engineer, settle all outstanding liabilities and all claims arising out of subcontracts or orders for materials terminated hereunder. To the extent directed by the Engineer, the Contractor shall assign to the Agency all the right, title and interest of the Contractor under subcontracts or orders for materials terminated hereunder.
 - 9) Furnish the Engineer with the documentation required to be furnished by the Contractor under the provisions of the Contract including, on projects as to which Federal funds are involved, all documentation required under the Federal requirements included in the Contract.
 - 10) Take other actions directed by the Engineer.
- b) Acceptance of the contract as hereinafter specified shall not relieve the Contractor of responsibility for damage to materials. The Contractor shall continue to be responsible for damage to materials after issuance of the Notice of Termination, except as follows:

- 1) The Contractor's responsibility for damage to materials for which partial payment has been made as provided in 9-3.2 and for materials furnished by the Agency for use in the Work and unused shall terminate when the Engineer certifies that those materials have been stored in the manner and at the locations the Engineer has directed.
- 2) The Contractor's responsibility for damage to materials purchased by the Agency subsequent to the issuance of the notice that the Contract is to be terminated shall terminate when title and delivery of those materials has been taken by the Agency.

When the Engineer determines that the Contractor has completed the Work under the Contract directed to be completed prior to termination and such other work as may have been ordered to secure the project for termination, the Engineer will formally accept the Contract, and immediately upon and after the acceptance by the Engineer, the Contractor will not be required to perform any further work thereon.

- c) Termination of the Contract shall not relieve the surety of its obligation for any just claims arising out of the work performed.
- d) Where Agency terminates the Contract for Agency's convenience and not due to the fault of Contractor, the total compensation to be paid to the Contractor shall be determined by the Engineer based on the following:
 - 1) The reasonable cost to the Contractor, without profit, for all work performed under the contract, including mobilization, demobilization and work done to secure the project for termination. In determining the reasonable cost, deductions will be made for the cost of materials to be retained by the Contractor, amounts realized by the sale of materials, and for other appropriate credits against the cost of the work. When, in the opinion of the Engineer, the cost of a contract item of work is excessively high due to costs incurred to remedy or replace defective or rejected work, the reasonable cost to be allowed will be the estimated reasonable cost of performing that work in compliance with the requirements of the Plans and Specifications and the excessive actual cost shall be disallowed.
 - 2) A reasonable allowance for profit on the cost of the work performed as determined under part (1) above, provided the Contractor establishes to the satisfaction of the Engineer that it is reasonably probable that the Contractor would have made a profit had the Contract been completed and provided further, that the profit allowed shall in no event exceed 4 percent of the cost.
 - 3) The reasonable cost to the Contractor of handling material returned to the vendor, delivered to the Agency or otherwise disposed of as directed by the Engineer.
 - 4) A reasonable allowance for the Contractor's administrative costs in determining the amount payable due to termination of the Contract.

All records of the Contractor and the Contractor's subcontractors, necessary to determine compensation in conformance with the provisions in this Section 6-5, shall be open to inspection or audit by representatives of the Agency at all times after issuance of the notice that the Contract is to be terminated and for a period of 3 years, thereafter, and those records shall be retained for that period.

After acceptance of the Work by the Agency, the Engineer may make payments on the basis of interim estimates pending issuance of the final estimate in conformance with the provisions in 9-3.2 and 9-4, when, in the Engineer's opinion, the amount thus paid, together with all amounts previously paid or allowed, will not result in total compensation in excess of that to which the Contractor will be entitled. All payments, including payment upon the final estimate shall be subject to deduction for prior payments and amounts, if any, to be kept or retained under the provisions of the Contract.

THE PROVISIONS IN THIS SECTION 6-5 SHALL BE PHYSICALLY INCLUDED IN ALL SUBCONTRACTS.

6-6.2 Extension of Time. *DELETE in its entirety and SUBSTITUTE with the following:* The Agency may extend the time fixed for completion of the Work under the Contract from time to time. All applications for extensions of time shall be in writing and shall be filed with the Agency before the expiration of the original time fixed in the Contract or as previously extended.

An extension of time may be granted by the Agency after the expiration of the time originally fixed in the Contract or as previously extended, and the extension so granted shall be deemed to commence and be effective from the date of such expiration. Any extension of time shall not release the sureties upon any bond required under the Contract nor effect forfeitures due to delay.

No extension of time will be granted for delays that are not on the critical path.

6-8.1 Completion. *DELETE in its entirety and SUBSTITUTE with the following:* When the Contractor considers the Work, or a designated portion of Work, if specified in the Contract Documents, is complete, the Contractor shall submit a written request to the Engineer for inspection. By submittal of such request, Contractor certifies that:

- a) Contract Documents have been reviewed by the Contractor.
- b) Work has been completed in accordance with Contract Documents and is ready for inspection.
- c) Equipment and systems have been tested, adjusted/balanced and are fully operational.

The Contractor shall submit the request a minimum of five (5) Working Days in advance of requested inspection date. Contractor shall be responsible for allowing sufficient time during the Contract period to complete inspections and make any corrections. Each day beyond the time prescribed to complete the Contract will be subject to assessment of liquidated damages in accordance with 6-9.

Should Agency Representative's inspection find Work incomplete, Agency Representative will notify the Contractor in writing, listing observed deficiencies. The Contractor shall remedy listed deficiencies immediately and send a request for final inspection. Failure of the Contractor to remedy deficiencies may, at the Agency's option, result in reinspection(s) of the work to identify additional deficiencies, if any. Agency's costs associated with reinspection(s) are subject to provisions of 6-8.2.

When the Agency confirms Work is complete and, closeout submittals, as referred to in 6-8.3 have been provided, Agency Representative will notify Contractor of date of completion on the Weekly Statement of Working Days.

ADD:

6-8.4 Reinspections. Should status of completion of Work require reinspection(s) by Agency due to failure of the Contractor to make corrections on initial inspection, Agency may deduct the amount of compensation for reinspection services from final payment to Contractor. Observed deficiencies in excess of ten (10) will be reason for reinspection.

Inspections initiated at the request of the Agency will not be subject to provisions of this Subsection.

ADD:

6-8.5 Closeout Submittals.

Contractor shall submit:

- a) Project Record Documents clearly marked with all changes to Plans within thirty (30) Calendar Days of Final Acceptance
- b) Operation and Maintenance Data
- c) Warranties and Bonds
- d) Spare Parts and Maintenance Materials, as specified
- e) Evidence of Payment and Release of Stop Payment Notices
- f) Other data and materials as may be required in the Contract Documents

6-9 LIQUIDATED DAMAGES. *DELETE in its entirety and SUBSTITUTE with the following:*

Liquidated damages shall be as specified in the Contract.

SECTION 7 - RESPONSIBILITIES OF THE CONTRACTOR

REVISE as follows:

7-1 THE CONTRACTOR'S EQUIPMENT AND FACILITIES.

7-1.1 General. *MODIFY to ADD the following:*

The Contractor shall render its machinery and equipment inoperable at all times except during actual construction. The Contractor shall be responsible for construction means, controls, techniques, sequences, procedures and construction safety.

ADD:

7-1.1.1 Equipment. Contractor shall stencil or stamp at a clearly visible location on each piece of equipment, except hand tools, an identifying number and:

- a) On compacting equipment, its make, model number, and empty gross weight that is either the manufacturer's rated weight or the scale weight.
- b) On meters and on the load-receiving element and indicators of each scale, the make, model, serial number, and manufacturer's rated capacity.

The Contractor shall submit a list describing each piece of equipment and its identifying number before commencement of the Work.

Upon request, the Contractor shall submit manufacturer's information that designates portable vehicle scale capacities.

The Contractor's measuring devices shall be tested and approved under California Test 109 in the Agency's presence or by any of the following:

- a) County Sealer of Weights and Measures
- b) Certified Scale Service Agency
- c) Division of Measurement Standards Official

7-1.2 Temporary Utility Services. *DELETE in its entirety and SUBSTITUTE with the following:*

The Contractor shall, at its own expense, make all arrangements to furnish, install and maintain temporary water, electricity, telephone, and sanitary facilities for construction needs throughout construction period. Materials may be new or used, but must be adequate for the purposes intended, and must not violate requirements of applicable codes, specifications or standards.

The Contractor shall maintain systems to provide continuous services, modify, and extend services, as work progress requires. The Contractor shall completely remove temporary materials and equipment when construction needs can be met by use of permanent utility facilities.

The Contractor shall clean and repair damage caused by installation or use of temporary facilities, restore existing facilities used for temporary services to original or better condition, and restore permanent facilities used for temporary services to original condition.

For water, the Contractor shall:

- a) Provide adequate supply of water suitable for construction usage and needs.

Water Source: Irvine Ranch Water District (IRWD)

- a) Obtain meter, inspections and approvals prior to use of existing system.
- b) Comply with IRWD requirements.

Conservation:

- a) Minimize water use whenever possible.
- b) Maintain watering equipment in good working order.
- c) Repair leaks promptly.

When necessary to maintain pressure, provide temporary pumps, tanks and compressors.

For electricity, the Contractor shall:

- a) Provide portable power plants and/or connection to existing system for construction needs.
- b) Source of existing power: Southern California Edison Company (SCE). Prior to connecting to existing system:
 - 1) Obtain permit from City of Irvine, Community Development Department for installation of temporary power pole and/or system.
 - 2) Arrange for required inspections and coordinate temporary meter installation with City and SCE.

For sanitary facilities, the Contractor shall:

- a) Furnish and maintain portable toilet units in a clean, operable and sanitary condition for use by construction personnel.
- b) Place units in conformance with applicable laws, codes and regulations.

Pay all fees and charges for applications, non-City permits and inspections, installations, temporary meters, utility usage, service charges, maintenance, removals and restoration.

Contractor shall use standard products of service companies. At Contractor's option with prior approval by the Agency, patented specialty devices may be used, when in compliance with applicable codes and service company requirements.

7-2.3 Payroll Records. *MODIFY to ADD the following:*

The Contractor and all its subcontractors shall submit to the City and the Labor Commissioner (Division of Labor Standards Enforcement) certified payroll records every Friday until Notice of Completion is filed and recorded.

7-3 INSURANCE.

7-3.1 General. *MODIFY to ADD the following:*

Without limiting Contractor's indemnification obligations, the Contractor shall not commence work until he procures and maintains, at his sole cost and for the duration of

this Contract, insurance coverage as provided below, against all claims for injuries against persons or damages to property which may arise from or in connection with the performance of the Work hereunder by Contractor, its agents, representatives, employees, and/or subcontractors. In the event that Contractor subcontracts any portion of the Work in compliance with 2-3 of the Standard Specifications and Special Provisions, the Contract between the Contractor and such subcontractor shall require the subcontractor to maintain the same policies of insurance that the Contractor is required to maintain pursuant to 7-3.

Insurance policies shall be deemed not be in compliance if they include any limiting provision or endorsement that has not been submitted for approval in accordance with 7-3.

The Contractor's insurance shall be "occurrence" rather than "claims made" insurance, except for Professional Liability insurance, which may be for claims made and shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

The insurance coverage required for General Liability, Automobile Liability and Contractor's Pollution Liability shall contain the following provisions or be endorsed to provide the following:

The Contractor shall name as additional insured the City of Irvine their elected officials, officers, employees, volunteers, boards and representatives shall be additional insured with regard to liability and defense of suits or claims arising out of the performance of the Contract.

Additional Insured Endorsements shall not:

- a) Be limited to "Ongoing Operations"
- b) Exclude "Contractual Liability"
- c) Restrict coverage to the "Sole" liability of contractor
- d) Contain any other exclusion contrary to the Contract

This insurance shall be primary and any other insurance, deductible, or self-insurance available to the insured added by endorsement shall be in excess of and shall not contribute with this insurance.

The Contractor shall immediately report all claims to its insurance carrier and acknowledge receipt within thirty (30) Calendar Days.

No officer, employee, or agent of the Agency, Agency Representative, the Engineer, or their consultants shall be personally responsible for any liability arising under or by virtue of the Contract.

To the maximum extent permitted by law, Contractor shall hold harmless, indemnify, and defend the City of Irvine their representatives and each of their officers, employees, and agents from and against any and all actions, suits, claims, demands, judgments, attorney's fees, costs, damages to persons or property, losses, penalties, obligations, expenses or liabilities (herein "claims" or "liabilities") that may be asserted or claimed by any person or entity arising out of the willful or negligent acts, errors or omissions of Contractor, its employees, agents, representatives or subcontractors in the performance of any tasks or services for or on behalf of Agency, whether or not there is concurrent active or passive negligence on the part of Agency and/or Agency Personnel, but excluding such claims or

liabilities arising from the active negligence or willful misconduct of Agency or Agency Personnel. In connection therewith:

- a) Contractor shall defend any action or actions filed in connection with any such claims or liabilities, and shall pay all costs and expenses, including attorney's fees incurred in connection therewith.
- b) Contractor shall promptly pay any judgment rendered against Agency or any Agency Personnel for any such claims or liabilities.
- c) In the event Agency and/or any Agency Personnel is made a party to any action or proceeding filed or prosecuted for any such damages or other claims arising out of or in connection with the negligent performance or a failure to perform the work or activities of Contractor, Contractor shall pay to Agency any and all costs and expenses incurred by Agency or Agency Personnel in such action or proceeding, together with reasonable attorney's fees and expert witness fees. So much of the money due to the Contractor under and by virtue of the Contract as shall be considered necessary by the Agency may be retained by the Agency until disposition has been made of such actions or claims for damages as aforesaid.

Any deductibles or self-insured retentions must be declared to and approved by Agency prior to the execution of this Contract by Agency. Prior to commencing work, the Contractor will provide the Agency, in accordance with 7-3, written confirmation of the deductible for each insurance coverage required by this contract or in the case of no deductible.

DELETE 4th paragraph and SUBSTITUTE with the following:

All policies shall be endorsed to state that coverage shall not be suspended, voided, cancelled, reduced in coverage or in limits, non-renewed, or materially changed for any reason, without thirty (30) days prior written notice thereof given by the insurer to Agency by U.S. mail, or by personal delivery, except for nonpayment of premiums, in which case ten (10) days prior notice shall be provided.

In lieu of this endorsement, the Contractor shall either:

- a) Submit a letter, signed by the insurance agent or broker, certifying that he/she shall notify the City should the coverage be suspended, voided, cancelled, reduced in coverage or in limits, non-renewed, or materially changed for any reason, without thirty (30) days prior written notice thereof given by the insurer to Agency by U.S. mail, or by personal delivery, except for nonpayment of premiums, in which case ten (10) days prior notice shall be provided; or
- b) Submit evidence that the insurance premium has been paid in full for the life of the policy.

The City project title or description MUST be included in the "Description of Operations" box on the certificate.

Certificate Holder:

City of Irvine
c/o EXIGIS Risk Management Services
P.O. Box 4668 - ECM #35050
New York, NY 10163-4668

The City's insurance certificate tracking services provider, EXIGIS, LLC, will send Contractor an email message providing instructions for submitting insurance certificates and endorsements.

7-3.2 General Liability Insurance. *DELETE the 2nd paragraph and SUBSTITUTE with the following:*

General Liability (including premises, operations and mobile equipment, products and completed operations, broad form property damage including completed operations, explosion, collapse and underground hazards, contractual liability, personal injury, independent contractors' liability): with a minimum limit of Two Million Dollars (\$2,000,000) for each occurrence (combined single limit for bodily injury and property damage). Minimum limit of Two Million Dollars (\$2,000,000) aggregate for products-completed operations and with a minimum limit of Four Million Dollars (\$4,000,000) general aggregate. This general aggregate limit shall apply separately to the Contractor's work under this Contract.

Products-Completed Operations: Contractor shall procure and submit evidence of insurance in accordance with 7-3 of the Standard Specifications and these Special Provisions for a period of at least three (3) years from the time that all Work under this Contract is completed.

7-3.3 Workers' Compensation Insurance. *MODIFY to ADD the following:*

Workers' Compensation and Employer's Liability: Workers' Compensation Insurance in an amount required by the laws of the State of California (Statutory Limits). Employer's Liability Insurance with a minimum limit of One Million Dollars (\$1,000,000) per occurrence.

In the event Contractor has no employees requiring Contractor to provide Workers' Compensation Insurance, Contractor shall so certify to Agency in writing prior to Agency's execution of this Contract. Agency and Agency Personnel shall not be responsible for any claims in law or equity occasioned by failure of the Contractor to comply with this section or with the provisions of law relating to Workers' Compensation.

If Contractor is providing on-site staffing services, then the Workers' Compensation insurance shall include an Alternative Employers Endorsement.

ADD:

7-3.5 Contractor's Pollution Liability. Contractors Pollution Liability Insurance covering all of the contractor's operations to include onsite and offsite coverage for bodily injury, property damage, defense costs, cleanup costs, coverage for offsite disposal facilities with minimum limits of Two Million Dollars (\$2,000,000) each loss and Four Million Dollars (\$4,000,000) in the aggregate.

Prior to commencing work, the Contractor shall provide the City the names and locations of disposal facilities for approval by the City.

7-3.6 Builders Risk Insurance. At its own expense, the successful Contractor will be required to obtain, pay for, and maintain, for the duration of the Agreement builders risk insurance for any property constructed on behalf of the City, to cover "all risks" of

physical loss providing coverage for loss or damage from collapse, including collapse resulting from builder's design error. The value of the insured shall cover 100% of the completed Contract cost and shall maintain until acceptance of the Work. Proceeds payable under this insurance policy shall be fully payable to the City as Loss Payee.

Such insurance shall be endorsed to waive the insurer's right of subrogation against the indemnified parties.

7-3.8 Self-Insurance. Self-insurance will be subject to the Agency's review and prior approval. If the Contractor uses any form of self-insurance, it shall submit:

- a) A notice of election to self-insure.
- b) The coverage for which self-insurance applies.
- c) The amount of self-insurance.
- d) Declaration under the penalty of perjury by a certified public accountant certifying the accountant has applied Generally Accepted Accounting Principles (GAAP) guidelines and the Contractor has sufficient funds or other resources to cover the self-insurance amounts.
- e) Copy of its commercial general liability policy and its excess policy, including the declarations page, all amendments, riders, endorsements and other modifications in effect at the time of contract execution, for those amounts not covered by self-insurance.

Self-insurance programs and self-insured retentions in insurance policies are subject to separate annual review and approval by the Agency of evidence of the Contractor's financial capacity to respond. Additionally, self-insurance programs or retentions must provide the Agency with at least the same protection from liability and defense of suits as would be afforded by first-dollar insurance.

7-5 PERMITS. *DELETE in its entirety and SUBSTITUTE with the following:*

7-5 PERMITS AND LICENSES. Except as otherwise specified in the Special Provisions, the Contractor shall procure all permits and licenses, pay all charges and fees, and give all notices necessary and incidental to the due and lawful prosecution of the Work. These permits and licenses shall be obtained in sufficient time to prevent delays to the Work. The Contractor shall maintain a copy of all permits on the site. The Contractor shall furnish the Agency with copies of permits and licenses within one (1) Working Day of obtaining them. The Contractor shall comply with all rules and regulations included in permits. Should the Contractor fail to conform to said rules and regulations, the Agency reserves the right to perform the work necessary to conform to the rules and regulations and the cost of such work will be deducted from any monies due or to become due to the Contractor.

The Contractor and all subcontractors shall obtain within five (5) Calendar Days of executing the Contract, a current City of Irvine Business License and maintain such license(s) throughout the term of the Contract.

In the event that the Agency has obtained permits, licenses or other authorizations applicable to the Work, the Contractor shall obtain a rider, pay all fees and comply with the provisions of said permits, licenses and other authorizations.

7-6 THE CONTRACTOR'S REPRESENTATIVE. *DELETE the 3rd sentence in the 1st paragraph and SUBSTITUTE with the following:*

Said authorized representative shall be present at the site of the Work at all times while Work is actually in progress on the Contract. When Work is not in progress and during periods when Work is suspended, arrangements acceptable to the Agency Representative shall be made for any emergency work, which may be required.

ADD the following after the last sentence of the 1st paragraph:

Whenever the Contractor or his authorized representative is not present on any particular part of the Work where it may be desired to give direction, orders will be given by the Agency Representative, which shall be received and obeyed by the superintendent or supervisor who may have charge of the particular work in reference to which the orders are given.

The Agency reserves the right to approve the Contractor's Superintendent. Once approved, the Superintendent shall remain on the project for the duration of the project so long as he is in the employment of the Contractor.

7-7 COOPERATION AND COLLATERAL WORK. *DELETE in its entirety 4th paragraph and SUBSTITUTE with the following:*

Nothing in the Contract shall be interpreted as granting to the Contractor exclusive occupancy of the site of the project. The Contractor must ascertain to his own satisfaction the scope of the project and the nature of any other contracts that have been or may be awarded by the Agency in the construction of the project, to the end that the Contractor may perform this Contract in the light of such other constraints, if any.

The Contractor shall not cause any unnecessary hindrance or delay to any other contractor working on or adjacent to the project. If the performance of any Contract for the project is likely to be interfered with by the simultaneous performance of some other contract or contracts, the Engineer will decide which contractor shall cease work temporarily and which contractor shall continue or whether the work under the contracts can be coordinated so that the Contractors may proceed simultaneously. On all questions concerning conflicting interest of Contractors performing related work, the decision of the Engineer shall be binding upon Contractors concerned. The Agency, the Engineer, the Agency Representative, and each of their officers, employees, and agents shall not be responsible for any damages suffered or extra costs incurred by the Contractor resulting directly or indirectly from the award of performance or attempted performance of any other contract or contracts on the project or caused by a decision or omission of the Engineer respecting the order of precedence in the performance of the contracts.

If, through acts of neglect on the part of the Contractor, any other contractor or any subcontractor shall suffer loss or damage on the Work, the Contractor agrees to settle with such other contractor or subcontractor by agreement or arbitration, if such other contractor or subcontractor will so settle. If such other contractor or subcontractor shall assert any claim against the Agency, the Engineer, the Agency Representative, or their consultants on account of any damage alleged to have been so sustained, the Agency will notify the Contractor. To the maximum extent permitted by law, all obligations of the Contractor stated in 7-3.2 shall apply in the case of the assertion of any such claims or liabilities against the Agency, the Engineer, the Agency Representative and each of their officers, employees, and agents against any such claim.

ADD:

7-7.1 Coordination. It is anticipated that work by other contractors, utility companies and City of Irvine forces will be underway adjacent to or within the limits of this project during progress of the Work on this contract.

It is anticipated that construction projects including, but not limited to, the following may be in progress concurrently with this project:

- a) The subject project area is adjacent to the development of the Orange County Great Park

The Contractor shall coordinate his operations with the operations of other contractors during stage construction, traffic shifts, opening of new lanes, closing of lanes, roads or ramps, detours, traffic signal facilities, shared irrigation facilities for landscaped areas and during any other operation that may affect or have influence on adjacent projects including, but not limited to, those identified in this subsection.

7-8 WORK SITE MAINTENANCE. *MODIFY to ADD the Following:*

Section 7-8 includes specifications for performing work site maintenance; including spill prevention and control, material management, waste management, water pollution control and nonstormwater management.

Projects are required to comply with the City of Irvine Resolution No. 07-18, which establishes requirements for recycling and diversion of construction and demolition waste.

The Contractor shall implement effective handling, storage, usage, and disposal practices to control material pollution and manage waste and nonstormwater at the job site before they come in contact with storm drain systems and receiving waters.

Linear sediment barriers must comply with 7-8.6.2 of the Standard Specifications and the Contract Special Provisions.

ADD:

7-8.1.1 Construction Cleaning. The Contractor shall:

- a) Initiate and maintain a daily program to prevent accumulation of debris on-site and along access roads and haul routes. Maintain areas under Contractor's control free of waste materials, debris, weeds 6" high, and rubbish. Maintain site in a clean and orderly condition.
- b) Provide suitable covered containers for deposit of debris and rubbish. Dispose of accumulation of extraneous materials, prohibit overloading of trucks to prevent spillages on access and haul routes and provide daily inspection of haul routes to enforce requirements.
- c) The Contractor shall supply self-loading motorized street sweepers equipped with a functional water spray system as part of his daily program.
- d) Schedule at a minimum, weekly collection and disposal of debris. Provide additional collections and disposals of debris whenever the weekly schedule is inadequate to prevent accumulation.

The Contractor shall remove debris from closed or remote spaces prior to closing the space, control cleaning operations to minimize dust and other particulates and immediately remove clay and earth which adhere to the paved surface of the roadway. Remove by hand scraping, washing, sweeping, and/or other method(s) which will leave a clean non-skid surface without impairing, injuring or loosening the surface.

The Contractor shall remove waste materials, debris, vegetation, other rubbish, and non-recyclable materials as required by the Contract Documents, and dispose of off-site in an approved disposal site or recycling center.

Unless otherwise specified in the Special Provisions, all concrete, asphalt, aggregate or sand base material, cement block, trees, shrubs, bushes, and all other recyclable material generated during cleaning, demolition, clearing and grubbing or other phases of the work is to be disposed of at appropriate recycling centers. The Contractor shall be responsible for removing reinforcing steel, wood, or other deleterious materials as required by the recycling center for acceptance of recycled materials. The Contractor shall supply proof of disposal at a recycling center. The proof of disposal shall include verification of tonnage by certified weigh masters tickets. If weigh masters tickets are not feasible, the Contractor and Agency Representative shall estimate the tonnage prior to disposal at the recycling centers.

Known recycling centers:

Ewles Materials
16081 Construction Circle West
Irvine

The Contractor is required to control dust throughout the life of the Contract. The control may be required by job conditions or Agency Representative. In any case, the Contractor shall use water or other means to control the dust. No chemical agents may be used without written authorization from the Agency. The Contractor shall be solely responsible for safety problems, accidents or any other complications or claims arising from inadequate dust control.

No separate payment will be made for any work performed or material used to control dust resulting from the Contractor's performance of the Work, or by public traffic, either inside or outside the right of way. Full compensation for such dust control will be considered as included in the price paid for the various items of work involved.

No separate payment will be made for any work performed or material used in cleaning the project. Full compensation for such cleaning shall be considered as included in the price paid for the various items of work involved and no additional compensation will be allowed therefore.

ADD:

7-8.1.2 Final Cleaning. The Contractor shall execute cleaning prior to inspection for completion of the Work. The Contractor shall use materials which will not create hazards to health or property, and which will not damage surfaces, remove debris from and otherwise clean exposed-to-view surfaces, remove temporary protection and labels not required to remain, clean finishes free of foreign substances, remove waste, debris, and surplus materials from site. Clean grounds; remove stains, spills, and foreign

substances from paved areas and sweep clean, clean other exterior surfaces and where applicable:

- a) Clean transparent and glossy materials to a polished condition; remove foreign substances. Polish reflective surfaces to a clear shine.
- b) Vacuum clean carpeted and similar soft surfaces.
- c) Clean resilient and hard surface floors.
- d) Clean surfaces of equipment; remove excess lubrication.
- e) Clean plumbing fixtures to a sanitary condition.
- f) Clean permanent filters of ventilating equipment and replace disposable filters when units have been operated during construction; in addition, clean ducts, blowers, and coils when units have been operated without filters during construction.
- g) Clean light fixtures and lamps.
- h) Remove waste, foreign matter, and debris from roofs, gutters, areaways, and drainage systems.

ADD:

7-8.4.3 Material Management.

7-8.4.3.1 General. The Contractor shall minimize or eliminate discharge of material into the air, storm drain systems, and receiving waters while taking delivery of, using, or storing the following materials:

- a) Hazardous chemicals, including acids, lime, glues, adhesives, paints, solvents, and curing compounds
- b) Soil stabilizers and binders
- c) Fertilizers
- d) Detergents
- e) Plaster
- f) Petroleum materials, including fuel, oil, and grease
- g) Asphalt and concrete components
- h) Pesticides and herbicides

The Contractor's employees trained in emergency spill cleanup procedures must be present during the unloading of hazardous materials or chemicals.

The Contractor shall use less hazardous materials if practicable.

The following activities must be performed at least 100 feet from concentrated flows of stormwater, drainage courses, and inlets if within the floodplain and at least 50 feet if outside the floodplain, unless otherwise authorized:

- a) Stockpiling materials
- b) Storing pile-driving equipment and liquid waste containers
- c) Washing vehicles and equipment in outside areas

- d) Fueling and maintaining vehicles and equipment

7-8.4.3.2 Material Storage. If materials are stored by the Contractor, he shall:

- a) Store liquids, petroleum materials, and substances listed in 40 CFR 110, 117, and 302 and place them in secondary containment facilities as specified by USDOT for storage of hazardous materials.
- b) Ensure that secondary containment facilities are impervious to the materials stored there for a minimum contact time of 72 hours.
- c) Cover secondary containment facilities during nonworking days and whenever precipitation is forecasted. Secondary containment facilities must be adequately ventilated.
- d) Keep secondary containment facilities free of accumulated rainwater or spills. After precipitation, or in the event of spills or leaks, collect accumulated liquid and place it into drums within 24 hours. Handle the liquid as hazardous waste in accordance with subsection 7-8 of the Standard Specifications and these Special Provisions.
- e) Not store incompatible materials, such as chlorine and ammonia, in the same secondary containment facility.
- f) Store materials in their original containers with the original material labels maintained in legible condition. Immediately replace damaged or illegible labels.
- g) Ensure that secondary containment facilities have the capacity to contain precipitation from a 24-hour-long, 25-year storm, plus 10 percent of the aggregate volume of all containers or the entire volume of the largest container within the facility, whichever is greater.
- h) Store bagged or boxed material on pallets. Protect bagged or boxed material from wind and rain during nonworking days and whenever precipitation is forecasted.
- i) Provide sufficient separation between stored containers to allow for spill cleanup or emergency response access. Storage areas must be kept clean, well-organized, and equipped with cleanup supplies appropriate for the materials being stored.
- j) Repair or replace perimeter controls, containment structures, covers, and liners as necessary. Inspect storage areas before and after precipitation and at least weekly during other times.

7-8.4.3.3 Stockpile Management. The Contractor shall minimize stockpiling of materials at the job site.

The Contractor shall implement water pollution control practices within 72 hours of stockpiling material or before a forecasted storm event, whichever occurs first. If stockpiles are being used, do not allow soil, sediment, or other debris to enter storm drains, open drainages, and watercourses.

Active and inactive soil stockpiles must be:

- a) Covered with soil stabilization material or a temporary cover

- b) Surrounded with a linear sediment barrier

Stockpiles of asphalt concrete and PCC rubble, HMA, aggregate base, or aggregate sub base must be:

- a) Covered with a temporary cover
- b) Surrounded with a linear sediment barrier

Stockpiles of pressure-treated wood must be:

- a) Placed on pallets
- b) Covered with impermeable material

Stockpiles of cold mix asphalt concrete must be:

- a) Placed on an impervious surface
- b) Covered with an impermeable material
- c) Protected from stormwater run-on and runoff

The Contractor shall control wind erosion year round.

The Contractor shall repair or replace linear sediment barriers and covers as needed to keep them functioning properly. Whenever sediment accumulates to 1/3 of the linear sediment barrier height, remove the accumulated sediment.

7-8.5.3 Spill Prevention and Emergency Response Plan.

ADD:

7-8.5.3.1 Spill Prevention and Control. The Contractor shall keep material or waste storage areas clean, well-organized, and equipped with enough cleanup supplies for the material being stored.

The Contractor shall implement spill and leak prevention procedures for chemicals and hazardous substances stored on the job site. Whenever the Contractor spills or leaks chemicals or hazardous substances at the job site, he is responsible for all associated cleanup costs and related liability.

The Contractor shall report minor, semi significant, and significant or hazardous spills to the WPC manager and the WPC manager must notify the Engineer immediately.

As soon as it is safe, the Contractor shall contain and clean up spills of petroleum materials and sanitary and septic waste substances listed under 40 CFR, parts 110, 117, and 302.

ADD:

7-8.5.3.2 Minor Spills. Minor spills consist of quantities of oil, gasoline, paint, or other materials that are small enough to be controlled by a first responder upon discovery of the spill.

The Contractor shall clean up a minor spill using the following procedures:

- a) Contain the spread of the spill

- b) Recover the spilled material using absorption
- c) Clean the contaminated area
- d) Dispose of the contaminated material and absorbents promptly and properly

ADD:

7-8.5.3.3 Semi Significant Spills. Semi significant spills consist of spills that can be controlled by a first responder with help from other personnel.

The Contractor shall clean up a semi significant spill immediately using the following procedures:

- a) Contain the spread of the spill.
- b) On paved or impervious surfaces, encircle and recover the spilled material with absorbent materials. Do not allow the spill to spread widely.
- c) If the spill occurs on soil, contain the spill by constructing an earthen dike and dig up the contaminated soil for disposal.
- d) If the spill occurs during precipitation, cover the spill with 10-mil plastic sheeting or other material to prevent contamination of runoff.
- e) Dispose of the contaminated material promptly and properly.

ADD:

7-8.5.3.4 Significant or Hazardous Spills. Significant or hazardous spills consist of spills that cannot be controlled by job site personnel.

The Contractor shall immediately notify qualified personnel of a significant or hazardous spill and take the following steps:

- a) Do not attempt to clean up the spill until qualified personnel have arrived.
- b) Notify the Engineer and follow up with a report.
- c) Obtain the immediate services of a spill contractor or hazardous material team.
- d) Notify local emergency response teams by dialing 911 and county officials by using the emergency phone numbers retained at the job site.
- e) Notify the California Emergency Management Agency State Warning Center at 916-845-8911.
- f) Notify the National Response Center at (800) 424-8802 regarding spills of Federal reportable quantities under 40 CFR 110, 119, and 302.
- g) Notify other agencies as appropriate, including:
 - 1) Fire Department
 - 2) Public Works Department
 - 3) Coast Guard
 - 4) Highway Patrol
 - 5) City Police or County Sheriff's Department
 - 6) Department of Toxic Substances

- 7) California Division of Oil and Gas
- 8) Cal/OSHA
- 9) Regional Water Resources Control Board

The Contractor shall prevent a spill from entering stormwater runoff before and during cleanup activities and shall not bury or wash the spill with water.

ADD:

7-8.5.4 Waste Management.

7-8.5.4.1 Paint Waste. The Contractor shall clean water-based and oil-based paint from brushes or equipment within a contained area in a way that does not contaminate soil, receiving waters, or storm drain systems. Handle and dispose of the following as hazardous waste: paints, thinners, solvents, residues, and sludges that cannot be recycled or reused. When thoroughly dry, dispose of the following as solid waste under: dry latex paint, paint cans, used brushes, rags, absorbent materials, and drop cloths.

7-8.5.4.2 Concrete Waste. The Contractor shall use practices to prevent the discharge of asphalt concrete, PCC, and HMA waste into storm drain systems and receiving waters.

The Contractor shall collect and dispose of asphalt concrete, PCC, and HMA waste at locations where:

- a) Concrete material, including grout, is used.
- b) Concrete dust and debris result from demolition.
- c) Saw cutting, coring, grinding, grooving, or hydro-concrete demolition creates a residue or slurry.
- d) Concrete trucks or other concrete-coated equipment is cleaned at the job site.

7-8.5.4.3 Sanitary and Septic Waste. The Contractor shall not bury or discharge wastewater from a sanitary or septic system anywhere at the site of Work. A sanitary facility discharging into a sanitary sewer system must be properly connected and free from leaks. The Contractor shall place a portable sanitary facility at least 50 feet away from storm drains, receiving waters, and flow lines.

The Contractor shall comply with local health agency provisions if using an on-site disposal system.

7-8.5.4.4 Liquid Waste. The Contractor shall use practices that will prevent job-site liquid waste from entering storm drain systems and receiving waters. Liquid wastes include the following:

- a) Drilling slurries or fluids
- b) Grease-free and oil-free wastewater and rinse water
- c) Dredgings, including liquid waste from cleaning drainage systems
- d) Liquid waste running off a surface, including wash or rinse water
- e) Other nonstormwater liquids not covered by separate permits

The Contractor shall hold liquid waste in structurally sound, leak-proof containers, such as roll-off bins or portable tanks.

Liquid waste containers must be of sufficient quantity and volume to prevent overflow, spills, and leaks.

The Contractor shall store containers at least 50 feet from moving vehicles and equipment.

The Contractor shall remove and dispose of deposited solids from sediment traps in accordance with 7-8 of the Standard Specifications and these Special Provisions. Liquid waste may require testing to determine hazardous material content before disposal.

The Contractor shall dispose of drilling fluids and residue.

If an authorized location is available within the job site, fluids and residue exempt under 23 CA Code of Regs § 2511(g) may be dried by evaporation in a leak-proof container. The Contractor shall dispose of the remaining solid waste in accordance with 7-8 of the Standard Specifications and these Special Provisions.

ADD:

7-8.5.5 Nonstormwater Management.

7-8.5.5.1 Water Control and Conservation. The Contractor shall manage water used for work activities in a way that will prevent erosion and the discharge of pollutants into storm drain systems and receiving waters. Obtain authorization before washing anything at the job site with water that could discharge into a storm drain system or receiving waters. Report discharges immediately.

The Contractor shall implement water conservation practices if water is used at the job site. Inspect irrigation areas. Adjust watering schedules to prevent erosion, excess watering, or runoff. Shut off the water source to broken lines, sprinklers, or valves and repair breaks within 24 hours. Reuse water from waterline flushing for landscape irrigation if practicable. Sweep and vacuum paved areas. Do not wash paved areas with water.

The Contractor shall direct runoff water, including water from water line repair, from the job site to areas where it can infiltrate into the ground. Do not allow runoff water to enter storm drain systems and receiving waters. Do not allow spilled water to escape filling areas for water trucks. Direct water from off-site sources around the job site if practicable. Minimize the contact of off-site water with job site water.

7-8.5.5.2 Illicit Connection and Illegal Discharge Detection and Reporting. Before starting work, the Contractor shall inspect the job site and the job site's perimeter for evidence of illicit connections, illegal discharges, and dumping. After starting work, inspect the job site and perimeter on a daily schedule for illicit connections and illegal dumping and discharges.

Whenever illegal connections, discharges, or dumping are discovered, The Contractor shall notify the Engineer immediately, should take no further action unless ordered and assume that unlabeled or unidentifiable material is hazardous.

The Contractor shall look for the following evidence of illicit connections, illegal discharges, and dumping:

- a) Debris or trash piles
- b) Staining or discoloration on pavement or soils
- c) Pungent odors coming from drainage systems
- d) Discoloration or oily sheen on water
- e) Stains and residue in ditches, channels, or drain boxes
- f) Abnormal water flow during dry weather
- g) Excessive sediment deposits
- h) Nonstandard drainage junction structures
- i) Broken concrete or other disturbances at or near junction structures

7-8.5.5.3 Vehicle and Equipment Cleaning. The Contractor shall limit vehicle and equipment cleaning or washing at the job site except for what is necessary to control vehicle tracking or hazardous waste. The Contractor shall notify the Engineer before cleaning vehicles and equipment at the job site with soap, solvents, or steam and contain and recycle or dispose of resulting waste under 7-10.4.4. The Contractor shall not use diesel to clean vehicles or equipment and minimize the use of solvents.

The Contractor shall clean or wash vehicles and equipment in a structure equipped with disposal facilities. The Contractor may wash vehicles in an outside area if the area is:

- a) Paved with asphalt concrete, HMA, or PCC
- b) Surrounded by a containment berm
- c) Equipped with a sump to collect and dispose of wash water

The Contractor shall use as little water as practicable whenever washing vehicles and equipment with water and hoses used must be equipped with a positive shutoff valve.

The Contractor shall discharge liquid from wash racks to a recycling system or to another authorized system. Remove liquids and sediment as necessary.

7-8.5.5.4 Vehicle and Equipment Fueling and Maintenance. If practicable, the Contractor shall perform maintenance on vehicles and equipment off-site.

If fueling or maintenance must be done at the job site, the Contractor shall assign a site or sites, and obtain authorization before using them. The Contractor shall minimize mobile fueling and maintenance activities. The Contractor's fueling and maintenance activities must be performed on level ground in areas protected from stormwater run-on and runoff.

The Contractor shall use containment berms or dikes around fueling and maintenance areas. Keep adequate quantities of absorbent spill-cleanup material and spill kits in the fueling or maintenance area and on fueling trucks. The Contractor shall dispose of spill-cleanup material and kits immediately after use and use drip pans or absorbent pads during fueling or maintenance.

The Contractor shall not leave fueling or maintenance areas unattended during fueling and maintenance activities. The Contractor's fueling nozzles must be equipped with an automatic shutoff control. The Contractor shall use equipment with vapor-recovery fueling nozzles where required by the Air Quality Management District, secure nozzles in an upright position when not in use and shall not top off fuel tanks.

The Contractor shall recycle or properly dispose of used batteries and tires.

If leaks cannot be repaired immediately, the Contractor shall remove the vehicle or equipment from the job site.

7-8.5.5.5 Material and Equipment Used Over Water. The Contractor shall place drip pans and absorbent pads under vehicles and equipment used over water, keep an adequate supply of spill-cleanup material with vehicles and equipment, place drip pans or plastic sheeting under vehicles and equipment on docks, barges, or other surfaces over water whenever vehicles or equipment will be idle for more than one (1) hour.

The Contractor shall furnish watertight curbs or toe boards on barges, platforms, docks, or other surfaces over water to contain material, debris, and tools and shall secure material to prevent spills or discharge into the water due to wind.

The Contractor shall report discharges to receiving waters immediately upon discovery and shall submit a discharge notification.

7-8.5.5.6 Structure Removal Over or Adjacent to Water. The Contractor shall not allow demolished material to enter storm drain systems and receiving waters, use authorized covers and platforms to collect debris, use attachments on equipment to catch debris during small demolition activities and empty debris-catching devices daily and dispose of debris in accordance with 7-8 of the Standard Specifications and these Special Provisions.

7-8.5.5.7 Paving, Sealing, Saw Cutting, Grooving, and Grinding Activities. The Contractor shall prevent material from entering storm drain systems and receiving waters including:

- a) Cementitious material
- b) Asphaltic material
- c) Aggregate or screenings
- d) Saw cutting, grooving, and grinding residue
- e) Pavement chunks
- f) Shoulder backing
- g) Methacrylate
- h) Sandblasting residue

The Contractor shall cover drainage inlets and use linear sediment barriers to protect downhill receiving waters until paving, sealing, saw cutting, grooving, and grinding activities are completed and excess material has been removed and cover drainage

inlets and manholes during the application of seal coat, tack coat, slurry seal, or fog seal.

Whenever precipitation is forecasted, the Contractor shall limit paving, saw cutting, and grinding to places where runoff can be captured.

The Contractor shall not start seal coat, tack coat, slurry seal, or fog seal activities whenever precipitation is forecasted during the application and curing period and shall not excavate material from existing roadways during precipitation.

The Contractor shall use a vacuum to remove slurry immediately after slurry is produced and shall not allow the slurry to run onto lanes open to traffic or off the pavement.

The Contractor shall collect the residue from PCC grooving and grinding activities with a vacuum attachment on the grinding machine. The Contractor shall not leave the residue on the pavement or allow the residue to flow across pavement.

The Contractor shall not coat asphalt trucks and equipment with substances that contain soap, foaming agents, or toxic chemicals.

The Contractor shall park paving equipment over drip pans or plastic sheeting with absorbent material to catch drips if the paving equipment is not in use.

7-8.5.5.8 Thermoplastic Striping and Pavement Markers. The Contractor shall not preheat, transfer, or load thermoplastic within 50 feet of drainage inlets and receiving waters.

The Contractor shall not unload, transfer, or load bituminous material for pavement markers within 50 feet of drainage inlets and receiving waters.

The Contractor shall collect and dispose of bituminous material from the roadway after removing markers.

7-8.5.5.9 Pile Driving. The Contractor shall keep spill kits and cleanup materials at pile driving locations; park pile driving equipment over drip pans, absorbent pads, or plastic sheeting with absorbent material; protect pile driving equipment by parking on plywood and covering with plastic whenever precipitation is forecasted.

The Contractor shall store pile driving equipment on level ground and protect it from stormwater run-on when not in use. Use vegetable oil instead of hydraulic fluid if practicable.

7-8.5.5.10 Concrete Curing. The Contractor shall not overspray chemical curing compounds and shall not allow runoff of curing compounds.

The Contractor shall minimize the drift by spraying as close to the concrete as practicable, cover drainage inlets before applying the curing compound, and minimize the use and discharge of water by using wet blankets or similar methods to maintain moisture when concrete is curing.

7-8.5.5.11 Concrete Finishing. The Contractor shall collect and dispose of water and solid waste from high-pressure water blasting, collect and dispose of sand and solid waste from sandblasting. Before sandblasting, the Contractor shall cover drainage inlets within 50 feet of sandblasting, and shall minimize the drift of dust and blast material by keeping the nozzle close to the surface of the concrete. If the character of the blast residue is unknown, the Contractor shall test it for hazardous materials and dispose of it properly.

The Contractor shall inspect containment structures for concrete finishing for damage before each day of use and before forecasted precipitation and remove liquid and solid waste from containment structures after each work shift.

7-8.5.5.12 Sweeping. The Contractor shall sweep by hand or mechanical methods, such as vacuuming, and shall not use methods that use only mechanical kick brooms. The Contractor shall sweep paved roads at construction entrance and exit locations and paved areas within the job site:

- a) During clearing and grubbing activities
- b) During earthwork activities
- c) During trenching activities
- d) During pavement structure activities
- e) When vehicles are entering and leaving the job site
- f) After soil-disturbing activities
- g) After observing off-site tracking of material
- h) As deemed necessary by the Engineer

The Contractor shall monitor paved areas and roadways within the project and sweep within:

- a) 1 hour whenever sediment or debris is observed during activities that requires sweeping.
- b) 24 hours whenever sediment or debris is observed during activities that do not require sweeping.

The Contractor shall remove collected material, including sediment, from paved shoulders, drain inlets, curbs and dikes, and other drainage areas, may stockpile collected material at the job site, and shall dispose of collected material at least once per week if stockpiled.

The Contractor shall keep dust to a minimum during street sweeping activities and use water or a vacuum whenever dust generation is excessive or sediment pickup is ineffective.

The Contractor shall remove and dispose of trash collected during sweeping.

7-8.5.5.13 Dewatering. Dewatering consists of discharging accumulated stormwater, groundwater, or surface water from excavations or temporary containment facilities. The Contractor shall perform dewatering work as specified for the work items involved, such as temporary active treatment system or dewatering and discharge.

If dewatering and discharging activities are not specified under a work item and the Contractor performs dewatering activities, he shall:

- a) Conduct dewatering activities under the Caltrans' *Field Guide for Construction Site Dewatering*.
- b) Ensure that any dewatering discharge does not cause erosion, scour, or sedimentary deposits that could impact natural bedding materials.
- c) Discharge the water within the project limits if approved by the Engineer. Dispose of the water if it cannot be discharged within project limits due to site constraints or contamination.
- d) Not discharge stormwater or nonstormwater that has an odor, discoloration other than sediment, an oily sheen, or foam on the surface.
- e) Notify the Engineer immediately upon discovering any such condition.

7-8.6 Water Pollution Control.

7-8.6.1 General. *ADD the following after the last paragraph:*

This project is Risk Level 2.

ADD:

7-8.6.1.1 Definitions and Abbreviations.

Active and inactive areas: (1) Active areas have soil disturbing work activities occurring at least once within 15 days, and (2) Inactive areas are areas that have not been disturbed for at least 15 days.

BMPs: Best Management Practices are water pollution control practices.

Construction phase: Construction phases are (1) Highway Construction including work activities for building roads and structures, (2) Plant Establishment including maintenance on vegetation installed for final stabilization, and (3) Suspension where work activities are suspended and areas are inactive.

NAL: Numeric Action Level.

NEL: Numeric Effluent Limit.

Normal working hours: The hours the Contractor normally works on this project.

Preparation Manual: The Caltrans' "Storm Water Pollution Prevention Plan and Water Pollution Control Program Preparation Manual."

QSD: Qualified SWPPP Developer.

QSP: Qualified SWPPP Practitioner.

Qualified rain event: A qualified rain event is a storm that produces at least 0.5 inch of precipitation with a 48 hour or greater period between storms.

REAP: Rain Event Action Plan.

SAP: Sampling and Analysis Plan.

SSC: Suspended Sediment Concentration.

SWRCB: State Water Resources Control Board.

WPC: Water Pollution Control.

WPC Manager: The Contractor's Water Pollution Control Manager. The WPC Manager implements water pollution control work described in the SWPPP and oversees revisions and amendments to the SWPPP.

7-8.6.1.2 Summary. Section 7-8.6 includes general specifications for preventing, controlling, and abating water pollution in streams, waterways, and other bodies of water.

Information on forms, reports, and other documents can be found in the following Caltrans manuals:

- a) *Field Guide for Construction Site Dewatering*
- b) *Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual*
- c) *Construction Site Best Management Practices (BMP) Manual*
- d) *Construction Site Monitoring Program (CSMP) Guidance Manual*

For the above-referenced manuals, go to the Caltrans' Web site for the Division of Construction, Storm Water and Water Pollution Control at ([Informationhttp://www.dot.ca.gov/hq/construc/stormwater/](http://www.dot.ca.gov/hq/construc/stormwater/)) or the Caltrans' publication distribution unit.

The Contractor shall not start job site activities until:

- a) The WPCP or SWPPP, in accordance with 7-8.6.3 of the Special Provisions, is authorized.
- b) The waste discharge identification number is issued if the project requires a SWPPP.
- c) WPCP or SWPPP review requirements have been fulfilled. If the RWQCB requires time for review, allow 30 days for the review.

If the Contractor operates a Contractor-support facility, the Contractor shall protect stormwater systems or receiving waters from the discharge of potential pollutants by using water pollution control practices.

Contractor-support facilities include:

- a) Staging areas
- b) Storage yards for equipment and materials
- c) Mobile operations
- d) Batch plants for PCC and HMA
- e) Crushing plants for rock and aggregate
- f) Other facilities installed by the Contractor for his, such as haul roads

Discharges from manufacturing facilities, such as batch plants and crushing plants, must comply with the general waste discharge requirements for *Order No. 97-03-DWQ, NPDES General Permit No. CAS000001*, issued by the State Water Resources Control Board for "*Discharge of Storm Water Associated with Industrial Activities Excluding*

Construction Activities” and referred to herein as “General Industrial Permit.” For the General Industrial Permit, go to the Web site for the State Water Resources Control Board.

If the Contractor operates a batch plant to manufacture PCC, HMA, or other material or a crushing plant to produce rock or aggregate, the Contractor shall obtain coverage under the General Industrial Permit. The Contractor must be covered under the General Industrial Permit for batch plants and crushing plants located:

- a) Outside of the job site
- b) Within the job site that serve 1 or more contracts

If the Contractor obtains or disposes of material at a no commercially operated borrow or disposal site, the Contractor shall prevent water pollution due to erosion at the site during and after completion of his activities. Upon completion of his work, the Contractor shall leave the site in a condition such that water will not collect or stand therein.

The Agency does not pay for water pollution control practices at Contractor-support facilities and no commercially operated borrow or disposal sites.

7-8.6.1.3 Submittals. Within 48 hours after the conclusion of a storm event resulting in a discharge, after a nonstormwater discharge, or after receiving a written notice or an order from the RWQCB or another regulatory agency, the Contractor’s WPC manager must submit the following information:

- a) Date, time, location and nature of the activity and the cause of the notice or order
- b) Type and quantity of discharge
- c) Water pollution control practices in use before the discharge or before receiving the notice or order
- d) Description of water pollution control practices and corrective actions taken to manage the discharge or cause of the notice

The Contractor shall submit water pollution control training records for all employees and subcontractors who will be working at the job site as an informational submittal that includes the training subjects, training dates, ongoing training, and tailgate meetings with the submittal. The Contractor shall submit records for:

- a) Existing employees within 5 business days of obtaining SWPPP or WPCP authorization
- b) New employees within 5 business days of receiving the training
- c) Subcontractor's employees at least 5 business days before a subcontractor starts work

At least Five (5) business days before operating any Contractor-support facility, the Contractor shall submit:

- a) A plan showing the location and quantity of water pollution control practices associated with the Contractor-support facility
- b) A copy of the notice of intent approved by the RWQCB and the WPCP or SWPPP approved by the RWQCB if the Contractor will be operating a batch plant or a crushing plant under the General Industrial Permit

7-8.6.1.4 Quality Control and Assurance.

Training

The Contractor shall employees must receive water pollution control training before starting work at the job site.

For the Contractor's project managers, supervisory personnel, subcontractors, and employees involved in water pollution control work:

- a) The Contractor shall provide stormwater training in the following subjects:
 - 1) Water pollution control rules and regulations
 - 2) Implementation and maintenance for:
 - (a) Temporary soil stabilization
 - (b) Temporary sediment control
 - (c) Tracking control
 - (d) Wind erosion control
 - (e) Material pollution prevention and control
 - (f) Waste management
 - (g) Nonstormwater management
- b) The Contractor shall conduct weekly training meetings covering:
 - 1) Deficiencies and corrective actions for water pollution control practices
 - 2) Water pollution control practices required for work activities during the week
 - 3) Spill prevention and control
 - 4) Material delivery, storage, usage, and disposal
 - 5) Waste management
 - 6) Nonstormwater management procedures

Training for personnel who collect water quality samples must include:

- a) CSMP review
- b) Health and safety review
- c) Sampling simulations

7-8.6.1.5 Water Pollution Control Manager.

General

The Contractor's WPC manager must be a QSP if the project requires a WPCP. The Contractor's WPC manager must be a QSD if the project requires a SWPPP.

The Contractor shall assign one (1) WPC manager to implement the WPCP or SWPPP, whichever is applicable for the project.

Qualifications

The Contractor's QSD must:

- a) Have completed the stormwater management training described in the Caltrans' Web site for the Division of Construction, Storm Water and Water Pollution Control Information
- b) Be registered or certified for at least one of the following:
 - 1) California registered civil engineer
 - 2) California registered professional geologist or engineering geologist
 - 3) California licensed landscape architect
 - 4) Professional hydrologist registered through the American Institute of Hydrology
 - 5) Certified Professional in Erosion and Sediment Control (CPESC)[™] registered through Enviro Cert International, Inc.
 - 6) Certified Professional in Storm Water Quality (CPSWQ)[™] registered through Enviro Cert International, Inc.
 - 7) Professional in erosion and sediment control registered through the National Institute for Certification in Engineering Technologies (NICET)

The Contractor's QSP must comply with the qualifications for a QSD or must:

- a) Have completed the storm water management training described in the Caltrans' Web site for the Division of Construction, Storm Water and Water Pollution Control Information
- b) Be certified for at least one of the following:
 - 1) Certified Erosion, Sediment and Storm Water Inspector (CESSWI)[™] registered through Enviro Cert International, Inc.
 - 2) Certified Inspector of Sediment and Erosion Control (CISEC) registered through CISEC, Inc.

Responsibilities

The Contractor's WPC manager must:

- a) Be responsible for water pollution control work
- b) Be the primary contact for water pollution control work
- c) Oversee:
 - 1) Maintenance of water pollution control practices
 - 2) Inspections of water pollution control practices identified in the SWPPP or WPCP
 - 3) Inspections and reports for visual monitoring
 - 4) Preparation and implementation of REAPs
 - 5) Sampling and analysis
 - 6) Preparation and submittal of:
 - (a) NAL exceedance reports
 - (b) NEL violation reports

- (c) SWPPP annual certification
- (d) Annual reports
- (e) BMP status reports
- a) Oversee and enforce hazardous waste management practices, including spill prevention and control measures
- b) Have authority to mobilize crews to make immediate repairs to water pollution control practices
- c) Ensure that all employees have current water pollution control training
- d) Implement the authorized SWPPP or WPCP
- e) Amend the SWPPP or WPCP if required
- f) Be at the job site within 2 hours of being contacted
- g) Have the authority to stop construction activities damaging water pollution control practices or causing water pollution

7-8.6.1.6 Construction.

General

The Contractor shall install facilities and devices used for water pollution control practices before performing work activities. The Contractor shall install soil stabilization materials for water pollution control practices in all work areas that are inactive and before storm events.

The Contractor shall repair or replace water pollution control practices within 24 hours of discovering any damage, unless a longer period is authorized.

The Agency will not pay for the cleanup, repair, removal, disposal, or replacement of water pollution control practices due to improper installation or the Contractor's negligence.

The Contractor shall retain a printed copy of the authorized WPCP or SWPPP at the job site at all times.

Monitoring

The Contractor shall monitor the National Weather Service's forecast on a daily basis. For the National Weather Service's forecast, go to the Web site for the National Weather Service.

Inspections

The Contractor shall use the *Stormwater Site Inspection Report* form for documenting site inspections.

The Contractor's WPC manager must oversee:

- a) Inspections of water pollution control practices identified in SWPPP or WPCP:
 - 1) Before a forecasted storm event
 - 2) After a qualifying rain event that produces site runoff

- 3) At 24-hour intervals during extended storm events
 - 4) On a predetermined schedule of at least once a week
- b) Daily inspections of:
- 1) Storage areas for hazardous materials and waste
 - 2) Hazardous waste disposal and transporting activities
 - 3) Hazardous material delivery and storage activities
- c) Inspections of:
- 1) Vehicle and equipment cleaning facilities:
 - (a) Daily if vehicle and equipment cleaning occurs daily
 - (b) Weekly if vehicle and equipment cleaning does not occur daily
 - 2) Vehicle and equipment maintenance and fueling areas:
 - (a) Daily if vehicle and equipment maintenance and fueling occurs daily
 - (b) Weekly if vehicle and equipment maintenance and fueling does not occur daily
 - 3) Vehicles and equipment at the job site for leaks and spills on a daily schedule. Verify that operators are inspecting vehicles and equipment each day of use.
 - 4) Demolition sites within 50 feet of storm drain systems and receiving waters daily.
 - 5) Pile driving areas for leaks and spills:
 - (a) Daily if pile driving occurs daily
 - (b) Weekly if pile driving does not occur daily
 - 6) Temporary concrete washouts:
 - (a) Daily if concrete work occurs daily
 - (b) Weekly if concrete work does not occur daily
 - 7) Paved roads at job site access points for street sweeping:
 - (a) Daily if earthwork and other sediment or debris-generating activities occur daily
 - (b) Weekly if earthwork and other sediment or debris-generating activities do not occur daily
 - (c) Within 24 hours of precipitation forecasted by the National Weather Service
 - 8) Dewatering work:
 - (a) Daily if dewatering work occurs daily
 - (b) Weekly if dewatering work does not occur daily
 - 9) Temporary active treatment system:
 - (a) Daily if temporary active treatment system activities occur daily

- (b) Weekly if temporary active treatment system activities do not occur daily

10) Work over water:

- (a) Daily if work over water occurs daily
- (b) Weekly if work over water does not occur daily

Deficiencies

Whenever the Contractor or the Engineer identifies a deficiency in the implementation of the authorized WPCP or SWPPP, The Contractor shall correct the deficiency:

- (a) Immediately, unless a later date is authorized
- (b) Before precipitation occurs

The Agency may correct the deficiency and deduct the cost of correcting the deficiency from payment if the Contractor fails to correct the deficiency by the agreed date or before the onset of precipitation.

7-8.6.2 Best Management Practices (BMPs). *MODIFY to ADD the following:*

BMPs shall be maintained and/or added based on the REAP and any exceedances of Numeric Action Levels (NALs) and Numeric Effluent Limitations (NELs). The Contractor shall make any necessary changes to the SWPPP and implement additional BMPs that will result in effluent levels below that of NALs.

7-8.6.3 Storm Water Pollution Prevention Plan (SWPPP). *DELETE in its entirety and SUBSTITUTE with the following:*

7-8.6.3 Water Pollution Control Plan (WPCP).

7-8.6.3.1 General.

Summary

The Contractor shall prepare a water pollution control plan that includes developing and implementing the WPCP, providing a WPC manager, conducting water pollution control training, and monitoring, inspecting and correcting water pollution control practices.

The Contractor may assign a QSP other than the WPC manager to develop the WPCP.

Submittals

Within 7 days after Contract approval:

- a) The Contractor shall submit two (2) copies of his WPCP for review. The Engineer provides comments and specifies the date when the review stopped if revisions are required.
- b) The Contractor shall resubmit a revised WPCP within 7 days of receiving the Engineer's comments. The Agency's review resumes when the complete WPCP has been resubmitted.
- c) When the Engineer authorizes the WPCP, the Contractor shall submit an electronic copy and 3 printed copies of the authorized WPCP.

- d) If the RWQCB requires review of the authorized WPCP, the Engineer submits the authorized WPCP to the RWQCB for its review and comment.
- e) If the Engineer orders changes to the WPCP based on the RWQCB's comments, the Contractor shall amend the WPCP within 3 business days.

The WPCP must comply with the Caltrans' *Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Plan (WPCP) Preparation Manual* and must:

- a) Show the location of disturbed soil areas, water bodies, and water conveyances
- b) Describe the work involved in the installation, maintenance, repair, and removal of temporary water pollution control practices
- c) Show the locations and types of water pollution control practices that will be used for:
 - 1) Stormwater and nonstormwater in areas outside the job site but related to work activities, including:
 - (a) Staging areas
 - (b) Storage yards
 - (c) Access roads
 - 2) Activities or mobile activities related to all NPDES permits
 - 3) Contractor-support facilities
- d) Show the locations and types of temporary water pollution control practices that will be used in the work for each construction phase
- e) Show the locations and types of water pollution control practices that will be installed permanently under the Contract
- f) Include a schedule showing when:
 - 1) Work activities will be performed that could cause the discharge of pollutants into stormwater
 - 2) Water pollution control practices associated with each construction phase will be implemented
 - 3) Soil stabilization and sediment control practices for disturbed soil areas will be implemented
- g) Include a copy of any permits obtained by the Agency, including Fish & Game permits, US Army Corps of Engineers permits, RWQCB 401 certifications, aerially deposited lead variance from the Department of Toxic Substance Control, aerially deposited lead variance notification, and RWQCB waste discharge requirements for aerially deposited lead reuse

The Contractor shall amend the WPCP whenever:

- a) Changes in work activities could affect the discharge of pollutants
- b) Water pollution control practices are added by Change Order work
- c) Water pollution control practices are added at the Contractor's discretion
- d) Changes in the quantity of disturbed soil are substantial

- e) Objectives for reducing or eliminating pollutants in stormwater discharges have not been achieved
- f) Project receives a written notice or order from the RWQCB or any other regulatory agency

The Contractor shall allow the same review time for amendments to the WPCP as for the original WPCP.

7-8.6.3.2 Construction. The Contractor shall manage work activities in a way that reduces the discharge of pollutants to surface waters, groundwater, and separate municipal storm sewer systems.

The Contractor shall monitor and inspect water pollution control practices at the job site.

The Contractor shall notify the Engineer within 6 hours whenever any of the following occurs:

- a) The Contractor identifies discharges into receiving waters or drainage systems that are causing or could cause water pollution
- b) The Contractor receives a written notice or order for the project from the RWQCB or any other regulatory agency

The Contractor shall continue WPCP implementation during any suspension of work activities.

The Contractor is responsible for delays and must pay all costs associated with submitting a SWPPP due to his actions that result in one of the following:

- a) 1 or more acres of soil disturbance on projects without an Erosivity Waiver
- b) More than 5 acres of soil disturbance on projects with an Erosivity Waiver
- c) Failure to comply with the schedule for soil disturbing activities for projects with an Erosivity Waiver if the delays void the Erosivity Waiver

7-8.6.3.3 Payment. Payment for WATER POLLUTION CONTROL PROGRAM (WPCP) shall be included in the various bid items and no additional compensation is allowed and shall include full compensation for furnishing all labor, materials, tools, equipment to perform all the work involved in 7-8.6, including preparing and modifying a WPCP, permitting fees, Agency filing and processing, furnishing, installing, maintaining and removing BMPs, monitoring and reporting, and all incidentals for doing all the work involved as described herein or as otherwise required by the permit process, and shall be included in the contract lump sum price in the bid. No additional compensation shall be allowed therefore.

Payment will be issued by the Agency as follows:

- a) 25% - upon WPCP approval.
- b) 25% - upon installation of project BMPs
- c) 50% - to be paid monthly as a percentage of the total working days expended for monitoring, maintenance, testing, reporting and all other requirements as outlined in these Special Provisions.

7-8.6.4 Dewatering. *MODIFY to ADD the following:*

Submittals

Before the Contractor starts dewatering, he shall submit a dewatering and discharge work plan. The dewatering and discharge work plan must include:

- a) Title sheet and table of contents
- b) Description of dewatering and discharge activities detailing locations, quantity of water, equipment, and discharge point
- c) Estimated schedule for dewatering and discharge start and end dates of intermittent and continuous activities
- d) Discharge alternatives, such as dust control or percolation
- e) Visual monitoring procedures with inspection log
- f) Copy of written approval to discharge into a sanitary sewer system at least 5 business days before starting discharge activities

The Contractor shall submit the following informational submittals:

- a) MSDS at least 5 business days before material is used or stored
- b) Monthly inventory records for material used or stored

The Contractor shall submit written approval from the local health agency, city, county, and sewer district before discharging from a sanitary or septic system directly into a sanitary sewer system.

7-8.6.5 Payment. *DELETE in its entirety and SUBSTITUTE with the following:*

Payment for implementation and maintenance of BMPs and dewatering shall be included in the Contract Unit Price paid for various bid items and no additional compensation is allowed.

ADD:

7-8.7 Drainage Control. The Contractor shall maintain drainage within and through the work areas. Earth dams will not be permitted in paved areas. Temporary dams of sandbags, asphaltic concrete, or other acceptable material will be permitted when necessary. Such dams shall be removed from the site as soon as their use is no longer necessary.

The Contractor shall ensure that storm and drainage water does not pond due to the temporary blockage of existing drainage facilities. To this end, the Contractor shall provide temporary works that allow for the passage of storm and drainage water in a manner equivalent to the existing drainage system.

No separate payment will be made for any work performed or material used in drainage control. Full compensation for such controls shall be considered as included in the price paid for the various items of work involved and no additional compensation will be allowed therefore.

ADD:

7-8.8 Graffiti Control. Throughout all phases of Work, including suspension of Work, and until final acceptance, the Contractor shall keep Work, all equipment, field offices, storage facilities, fences, signs, and other facilities free of graffiti. Within twenty-four (24) hours after notification by the Agency Representative, graffiti shall be water blasted and cleaned to original surface or repainted if previously painted.

No separate payment will be made for any work performed or material used in graffiti control. Full compensation for such cleaning shall be considered as included in the price paid for the various items of work involved and no additional compensation will be allowed therefore.

7-9 PROTECTION AND RESTORATION OF EXISTING IMPROVEMENTS. *ADD the following before the 1st paragraph:*

Material shown on the Plans or designated in the Special Provisions which is to be salvaged or used in the reconstructed work and which has been damaged or destroyed as a result of the Contractor's operations, shall be repaired or replaced by the Contractor at his expense.

ADD:

7-9.1 Preservation of Property. The Contractor shall exercise due care to avoid injury to existing improvements or facilities, utility facilities, adjacent property, and trees and shrubbery that are not to be removed.

All damage done to existing improvements by the Contractor shall be repaired by him to the satisfaction of the Engineer. Where sidewalks, curbs or gutters are to be repaired, the repairs shall be made by removing and replacing the damaged section back to the nearest scoring lines.

All trees and shrubbery that are not to be removed, and pole lines, fences, signs, survey markers and monuments, buildings and structures, conduits, pipelines under or above ground, sewer and waterlines, all highway or street facilities, and any other improvements of facilities within or adjacent to the work shall be protected from injury or damage, and the Contractor shall provide and install suitable safeguards to protect such objects from injury or damage. If such objects are injured or damaged by reason of the Contractor's operation, they shall be replaced or restored at the Contractor's expense to a condition as good as when the Contractor entered upon the work or as good as required by the Plans and Specifications if any such objects are a part of the work being performed.

The fact that any such pipe or other underground facility is not shown on the Plans shall not relieve the Contractor of his responsibility under this article. It shall be the Contractor's responsibility to ascertain the existence of any underground improvement or facilities which may be subject to damage by reason of his operations.

In addition to any requirements imposed by law, the Contractor shall shore up, brace, underpin, and protect as may be necessary, all foundations and other parts of all existing structures adjacent to and adjoining the site of the work which are in any way affected by the excavations or other operations connected with the performance of the Work.

Whenever any notice is required to be given by the Agency or the Contractor to any adjacent or adjoining landowner or other party before commencement of any work, such notice shall be given by the Contractor.

ADD:

7-9.2 Video Recording and Photographing of Pre-existing Conditions. The Contractor shall video record and photograph pre-existing conditions of the project site prior to any construction activities such as, but not limited to:

- a) Property markers
- b) Right of way and easement conditions
- c) Utility markings and USA markings
- d) Existing property damages
- e) Survey conditions
- f) Pavement conditions, markings, and striping
- g) Adjacent property conditions
- h) Sidewalk, median, curb, and gutter conditions
- i) Safety conditions
- j) Unusual conditions or equipment
- k) Existing landscape conditions (including vegetation and irrigation) along the project limit.

The Contractor shall submit recordings/photographs on CD, DVD or USB media to the Engineer no later than (five) 5 Working Days after Notice to Proceed.

Payment for video recording and photographing services shall be included in the various Bid Items and no additional compensation will be allowed therefore.

7-10.4.1.2 Work Site Safety Official. *MODIFY to ADD the following:*

Failure by the Contractor to provide the required Work Site Safety Official shall be grounds for the Agency to direct the cessation of all work activities and operations at no cost to the Agency until the Contractor is in compliance.

ADD:

7-10.4.1.3 Emergencies. Unusual conditions may arise on the Work which will require that immediate and unusual provisions be made to protect the public from danger or loss or damage to life and property, due directly or indirectly to the prosecution of the Work, and it is part of the service required of the Contractor to make such provisions and to furnish such protection.

The Contractor shall use such foresight and shall take such steps and precautions as his operations make necessary to protect from danger or damage, or loss of life or property, which would result from the interruption or contamination of public water supply, irrigation or other public service, or from failure or partly completed work.

Whenever, in the opinion of the Engineer, an emergency exists against which the Contractor has not taken sufficient precaution for the safety of the public or the protection

of utilities or of adjacent structures or property which may be injured by process of construction on account of such neglect; and whenever in the opinion of the Engineer, immediate action shall be considered necessary in order to protect public or private, personal or property interest, or prevent likely loss of human life or damage on account of the operations under the Contract, then and in that event the Agency may provide suitable protection to said interest by causing such work to be done and material to be furnished as, in the opinion of the Agency Representative may seem reasonable and necessary.

The cost and expense of said labor and material, together with the cost and expense of such repairs as may be deemed necessary, shall be borne by the Contractor, and if he shall not pay said cost and expense upon presentation of the bills therefore, duly certified by the Agency Representative, then said cost and expense will be paid by the Agency and shall thereafter be deducted from any amounts due, or which may become due to the Contractor. Failure of the Agency, however, to take such precautionary measure, shall not relieve the Contractor of his full responsibility for public safety.

The foregoing provisions are in addition to and not in limitation of any other rights or remedies available to the Agency.

7-10.4.2.1 General. *DELETE in its entirety 2nd paragraph and SUBSTITUTE with the following:*

The Contractor shall submit to the Engineer, as a condition of obtaining City issued permits and in advance of excavation, a permit from the Division of Occupational Safety and Health pursuant to Chapter 6 (commencing with Section 6500) of Part 1 of Division 5 of the Labor Code along with a detailed plan showing the design of shoring, bracing, sloping or other provisions to be made for worker protection from the hazard of caving ground during the excavation of any trench or trenches five (5) feet or more in depth. The plan shall be prepared by a registered civil or structural engineer. As a part of the plan, a notice shall be included stating that the registered civil or structural engineer certifies that the plan complies with the CAL/OSHA Construction Safety Orders. A copy of the plan and permit shall be submitted to the Engineer.

In accordance with generally accepted construction practices, the Contractor shall be solely and completely responsible for conditions on the job site, including safety of all persons and property during performance of the Work, and the Contractor shall fully comply with all local, county, state and federal laws, rules, regulations, and orders relating to safety of the public and workers.

The Contractor shall hold harmless, indemnify, and defend the Agency, the Engineer, the Agency Representative and each of their officers, employees, and agents from civil or criminal penalties resulting from a failure to comply with applicable safety laws, rules, regulations and orders. To the maximum extent permitted by law, all obligations of the Contractor stated in 7-3.2 shall apply in the event of any such failure to comply with applicable safety laws, rules, regulations or orders.

The duty, if any, of the Agency Representative to conduct construction review or inspection of the Contractor's performance is not intended to include review or inspection of the adequacy of the Contractor's safety measures in, on, or near the construction site.

7-10.5.3 Steel Plate Covers. *MODIFY to ADD the following:*

The Contractor shall protect transverse or longitudinal cuts, voids, trenches, holes, and excavations in the right-of-way that cannot be properly completed within one (1) Working Day by adequately designed barricades and structural steel plates (plates) that will support legal vehicle loads in such a way as to preserve unobstructed traffic flow.

The Contractor shall secure approval, in advance, from Engineer concerning the use of any bridging proposed on the Work.

The Contractor shall adequately shore trenches to support the bridging and traffic loads.

The Contractor shall design plates for HS 20-44 truck loading in accordance with Caltrans Bridge Design Specifications Manual.

For the minimum thickness of plates refer to Table 7-10.5.3(A):

Table 7-10.5.3(A) - Trench Width/Minimum Plate Thickness

| Trench Width | Minimum Plate Thickness |
|--------------|-------------------------|
| 10" | 1/2" |
| 1'-11" | 3/4" |
| 2'-7" | 7/8" |
| 3'-5" | 1" |
| 5'-3" | 1 1/4" |

For spans greater than 5'-3", submit a structural design prepared by a California Registered Civil Engineer to the Engineer.

The surface of the plates shall be skid-resistant with a nominal Coefficient Of Friction (COF) of 0.35 as determined by California Test Method 342.

The plates shall extend a minimum 12" beyond the edges of the trench.

Plates must provide complete coverage to prevent any person, bicycle, motorcycle or motor vehicle from being endangered due to plate movement causing separations or gaps.

Install and secure plates against movement or displacement by using adjustable cleats, shims, welding, or other devices in a manner that will minimize noise.

The Contractor shall install plates as follows:

Mill the pavement to a depth equal to the thickness of the plate and to a width and length equal to the dimensions of the plate.

Alternative installation method may be submitted in accordance with 2-5.3, "Submittals" for the Engineer's approval.

The Contractor is responsible for maintenance of the plates and shoring, or any other approved device used to secure the plates. The Contractor shall immediately mobilize necessary personnel and equipment after being notified by the Agency Representative, the Agency Code Enforcement or Police Department of a repair needed e.g., plate movement, noise, anchors, and asphalt ramps. Failure to respond to the emergency

request within 2 hours will be grounds for Agency to perform necessary repairs that will be invoiced at actual cost including overhead or \$500 per incident, whichever is greater.

When plates are removed, the Contractor shall repair any damage to the pavement with fine graded asphalt concrete mix or slurry seal satisfactory to the Engineer.

Payment for Steel Plate Covers is included in the various bid items of work.

7-11 PATENT FEES AND ROYALTIES. *DELETE in its entirety and SUBSTITUTE with the following:*

The Contractor shall assume all costs arising from the use of patented materials, equipment, devices, or processes used on or incorporated in the Work and shall hold harmless, indemnify, and defend the Agency, the Engineer, the Agency Representative and each of their officers, employees, and agents from all claims, suits or actions of every nature for or on account of the use of any patented materials, equipment devices, or processes. To the maximum extent permitted by law, all obligations of the Contractor stated in 7-3.2 shall apply in the case of any such claim, suit or action.

7-13 LAWS TO BE OBSERVED. *DELETE in its entirety and SUBSTITUTE with the following:*

The Contractor shall keep itself fully informed of all existing and future State and National laws and County and Municipal ordinances and regulations which in any manner affect those engaged or employed in the Work or the materials used in the Work or which in any way affect the conduct of the Work and of all such order and decrees of bodies or tribunals having any jurisdiction or authority in the Plans, Specifications, or Contract for the Work in relation to any such law, ordinance, regulation, order or decree, he shall forthwith report the same to the Agency Representative in writing.

The Contractor shall at all times observe and comply with and shall cause all its agents, employees, and subcontractors to observe and comply with all such existing and future laws, ordinances, regulations, orders, and decrees even though such requirements may not be specifically mentioned in the specifications or shown on the Plans, and shall hold harmless, indemnify, and defend the Agency, the Engineer, the Agency Representative and each of their officers, employees, and agents against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order, or decree, whether by itself, its employees, its agents, or its subcontractors. To the maximum extent permitted by law, all obligations of the Contractor stated in 7-3.2 shall apply in the case of any such claim or liability.

As a material part of this Contract, Contractor's and subcontractors' owners and employees agree to be bound by and adhere to the Federal Department of Transportation (DOT) regulations found in Title 49 CFR 382. All Contractor's and subcontractors' owners and employees who are required to hold commercial licenses and/or who are in safety sensitive positions shall be subject to the provisions of the DOT regulations.

ADD:

7-14.1 Property Rights in Materials. Nothing in the Contract shall be construed as vesting in the Contractor any right of property in the materials used after they have been attached or affixed to the Work or the soil, or after payment has been made for materials delivered to the site of the Work, or stored subject to or under the control of the Agency.

ADD:

7-14.2 Warranty of Title. No materials, supplies or equipment for the Work under this Contract shall be purchased subject to any chattel mortgage or under a conditional sale contract or other agreement by which an interest therein or any part thereof is retained by the seller or supplier. The Contractor warrants clear and good title to all materials, supplies, and equipment installed and incorporated in the Work and agrees upon completion of all Work to deliver the premises together with all improvements and appurtenances constructed or placed thereon by him to the Agency free from any claims, liens, encumbrances, or charges and further agrees that neither he nor any persons, firm, or corporation furnishing any material or labor for any work covered by the Contract shall have any right to a lien upon the premises or any improvement or appurtenance thereon, provided that this shall not preclude the Contractor from installing metering devices or other equipment of utility companies or of municipalities, the title of which is commonly retained by the utility company or the municipality. Nothing contained in this article, however, shall defeat or impair the right of such persons furnishing materials or labor under any bond given by the Contractor for their protection, or any right under any law permitting such persons to look to funds due the Contractor in the hands of the Agency.

The provisions of this subsection shall be physically inserted in all subcontracts and material contracts and notices of its provision shall be given to all persons furnishing materials for the work when no formal contract is entered into for such materials.

ADD:

7-15 CONTRACTOR'S RESPONSIBILITY FOR THE WORK. Until Acceptance of the Work, the Contractor shall have the responsibility, charge and care of the Work and of the materials to be used therein (including materials for which it has received partial payment or materials which have been furnished by the Agency) and shall bear the risk of injury, loss or damage to any part thereof by the action of the elements or from any other cause, whether arising from the execution or from the non-execution of the Work.

The Contractor shall rebuild, repair, restore, and make good all injuries, losses, or damages to any portion of the work or the material occasioned by any cause before its completion and acceptance and shall bear the expense thereof. Where necessary to protect the work or materials from damage, the Contractor shall at his expense, provide suitable drainage and erect such temporary structures as are necessary to protect the work or materials from damage. The suspension of the work from any cause whatever shall not relieve the Contractor of his responsibility for the work and materials as herein specified. If ordered by the Agency Representative, the Contractor shall at his expense properly store materials which have been partially paid for by the Agency or which have been furnished by the Agency. Such storage by the Contractor shall be on behalf of the Agency, the Agency shall at all times be entitled to the possession of such materials, and the Contractor shall promptly return the same to the site of the work when requested. The Contractor shall not dispose of any of the materials so stored, except on written authorization from the Agency.

In an emergency affecting the safety of life or property, including adjoining property, the Contractor, without special instructions or authorizations, is authorized to act at his discretion to prevent such threatened loss or injury, and he shall so act as though instructed to do so by the Agency.

ADD:

7-16 PROJECT RECORD DOCUMENTS.

7-16.1 Maintenance of Documents and Samples. The Contractor shall maintain one record copy of:

- a) Contract Drawings
- b) Specifications
- c) Addenda
- d) Change Orders and Other Modifications to the Contract
- e) Reviewed Shop Drawings, Product Data, and Samples
- f) Field Test Records
- g) Construction Schedules
- h) Manufacturer's Certificates

The Contractor shall maintain documents in clean, dry, legible condition and not used for construction purposes.

The Contractor shall keep Record Documents and samples accessible for inspection by Agency Representative. Applications for partial payment will not be approved if the Record Documents are not kept current. The Agency Representative must so verify prior to submittal of each Application for Payment.

ADD:

7-16.2 Recording. The Contractor shall record changes to the plans and discoveries of buried objects at the Work on Record Documents with red ball-point pen, label each Document "PROJECT RECORD" in large printed letters, record information concurrently with construction progress, not conceal any work until required information is recorded and legibly mark each item on Contract Drawings and Shop Drawings to record actual construction, including:

- a) Measured depths of elements in relation to fixed datum point
- b) Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements
- c) Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of construction
- d) Field changes of dimension and detail
- e) Changes made by Contract modifications
- f) Details not on original Contract Drawings
- g) Previously unknown buried objects

The Contractor shall legibly mark each item to record actual construction, including:

- a) Manufacturer, Trade Name, and Catalog Number of each product actually installed, particularly optional items and substitute items
- b) Changes made by Addenda or modifications

The Contractor shall maintain other documents per requirements of individual specifications sections.

7-16.3 Submittals. At Contract closeout the Contractor shall deliver Record Documents and samples as specified in 7-16.1. Request for final payment will not be approved until all Record Documents have been delivered.

The submittals shall be transmitted with cover letter with signature of Contractor or authorized representative, listing date, project title and number and number and title of each Record document.

SECTION 8 - FACILITIES FOR AGENCY PERSONNEL

DELETE in its entirety, not part of this project.

SECTION 9 - MEASUREMENT AND PAYMENT

REVISE as follows:

9-2 LUMP SUM WORK. *DELETE 2nd paragraph in its entirety.*

ADD:

9-2.1 Detailed Schedule. The Contractor shall furnish the Agency a cost break-down for all contract lump sum items. Cost break-down tables shall be submitted to the Agency Representative for acceptance within fifteen (15) days after award of Contract. Cost break-down tables will be approved, in writing, by the Agency Representative before any partial payment will be made for the applicable items involved.

The Contractor shall determine the quantities required to complete the Work shown on the Plans. The quantities and their values shall be included in the cost break-downs submitted to the Agency Representative for approval. The Contractor shall be responsible for the accuracy of the quantities and values used in the cost break-downs submitted for approval.

The sum of the amounts for the line items of work listed in each cost break-down table for each lump sum item shall be equal to the contract lump sum price bid. Overhead and profit shall be included in each individual line item of work listed in a cost break-down table.

No adjustment in compensation will be made in the contract lump sum prices due to differences between the quantities shown in the cost break-downs furnished by the Contractor and the quantities required to complete the Work as shown on the plans and as specified in the Special Provisions.

Individual line item values in the approved cost break-down tables will be used to determine partial payments during the progress of the Work and as the basis for calculating an adjustment in compensation for the contract lump sum items due to changes in line items of work ordered by the Engineer. When the total of ordered changes to line items of work increases or decreases the lump sum price bid by more than twenty-five percent, the adjustment in compensation for the applicable lump sum item will be determined in the same manner specified for increases and decreases in the total pay quantity of an item of work in Section 3 of the Standard Specifications and the Special Provisions.

9-3 PAYMENT.

9-3.1 General. *ADD the following at the end of the 2nd paragraph:*

The cost of items of work not listed in the "Schedule of Work and Prices" in the Bidders Proposal shall be considered to be included in the cost of the other work that is listed and no additional compensation will be allowed therefore.

When an item of work is designated as (F) or (S-F) in the "Schedule of Work and Prices", the estimated quantity for that item of work shall be the final pay quantity, unless the dimensions of any portion of that item are revised by the Engineer, or the item or any portion of the item is eliminated. If the dimensions of any portion of the item are revised, and the revisions result in an increase or decrease in the estimated quantity

of that item of work, the final pay quantity for the item will be revised in the amount represented by the changes in the dimensions. If a final pay item is eliminated, the estimated quantity for the item will be eliminated. If a portion of a final pay item is eliminated, the final pay quantity will be revised in the amount represented by the eliminated portion of the item of work.

The estimated quantity for each item of work designated as (F) or (S-F) in the "Schedule of Work and Prices" shall be considered as approximate only, and no guarantee is made that the quantity which can be determined by computations, based on the details and dimensions shown on the Plans, will equal the estimated quantity. No allowance will be made in the event that the quantity based on computations does not equal the estimated quantity.

In case of discrepancy between the quantity shown in the "Schedule of Work and Prices" for a final pay item and the quantity or summation of quantities for the same item shown on the Plans, payment will be based on the quantity shown in the "Schedule of Work and Prices."

ADD:

9-3.1.1 Application for Payment. The Contractor shall use the City of Irvine Certified Invoice for Progress Payment Form; furnished to the Contractor.

The Contractor shall type the required information, follow the schedule of work and bid prices in accepted Bidder's proposal for unit price contract, execute certification by signature of an authorized officer, use data on accepted Schedule of Values for lump sum work, provide dollar value in each column for each line item for portion of work performed, list each authorized Change Order number and dollar amount and adjusted Contract Price, and obtain the Agency Representative concurrence on invoiced amounts prior to submittal for payment.

The Contractor shall follow the following submittal procedures: Submit original and one (1) copy of each Application for Payment at times stipulated in 9-3.2; submit under transmittal letter; include submittal date, project title and number and submit updated Progress Schedule with Application for verification of progress. Incomplete application for payment will be rejected.

When Agency Representative requires substantiating information, the Contractor shall submit data justifying line item amounts in question.

The Contractor shall provide one copy of data with cover letter for each copy of submittal, show application number and date, and line item by number and description.

9-3.2 Partial and Final Payment. *DELETE in their entirety 1st and 2nd paragraphs and SUBSTITUTE with the following:*

Payment for services will be made monthly on approved invoices, with payment terms of net thirty (30) days upon receipt of invoice. The Contractor shall submit invoices within fifteen (15) days from the end of each month on the form (Certified Invoice for Progress Payment) provided by the Agency. This estimate shall include the value of the total amount of the work completed by the Contractor during the calendar month previous to that in which the estimate is made.

When the Work has been completed to the satisfaction of the Engineer, the Contractor shall make a final estimate of the total amount of work done thereunder and the amount to be paid therefore under the terms of the Contract and shall certify to the Agency the amount of the final estimate. If the Agency finds the Work has been completed according to the Contract, the Agency will accept the work, will file a notice of completion, and will pay the entire sum so found to be due after deducting therefrom all previous payments and all amounts to be retained under the provisions of the Contract and upon receiving signed unconditional releases upon final payment from all subcontractors and material suppliers. All prior progress estimates and payments shall be subject to correction in the final estimate and payment. The project retention release will not be due and payable until the expiration of the 60 days from the date of filing a notice of completion of the Work by the Agency.

Interest penalties are not required on payment delays due to disagreement between the Agency and Contractor over the payment amount or other issues involving contract compliance.

It is mutually agreed between the parties to the Contract that no certificate given or payment made under the Contract shall be conclusive evidence of performance of the Contract and no payment shall be construed to be an acceptance of any defective work or improper materials.

The Contractor further agrees that the payment and acceptance of the final amount due under the Contract shall release the Agency, the Agency Representative, the Engineer, and their consultants from any and all claims or liability arising out of the Contract.

ADD:

9-3.2.1 Agency's Right to Withhold Certain Amounts and Make Application

Thereof. In addition to the amount which the Agency may retain under the above article on progress payments, the Agency may withhold a sufficient amount or amounts from any payment otherwise due to the Contractor as in the Agency's judgment may be necessary to cover:

- a) Payments which may be past due and payable for just claims against the Contractor or any subcontractors for labor or materials furnished in or about the performance of the Work on the project under this Contract.
- b) Estimated or actual costs for correcting defective work not remedied.
- c) Amounts claimed by the Agency as forfeiture due to delay or other offsets.
- d) Any other amounts the Agency is authorized to withhold under the Contract Documents or under applicable law.

The Agency may apply such withheld amount or amounts to the payment of such claims in its discretion. In so doing, the Agency shall be deemed the agent of the Contractor and any payments so made by the Agency shall be considered as a payment made under the Contract by the Agency to the Contractor, and the Agency shall not be liable to the

Contractor for such payment made in good faith. Such payments may be made without prior judicial determination of the claim or claims. The Agency will render to the Contractor a prior account of such funds disbursed in behalf of the Contractor.

ADD:

9-3.2.2 Substitution of Securities. Upon the Contractor's request, the Agency will make payment of funds withheld from progress payments pursuant to the requirements of Public Contract Code Section 22300 if the Contractor deposits in escrow with a bank acceptable to the Agency, securities eligible for the investment of State funds under Government Code Section 16430 or bank or savings and loan certificates of deposit, upon the following conditions:

- a) The Contractor shall bear the expense of the Agency and the Escrow Agent in connection with the escrow deposit made.
- b) Securities or certificates of deposit to be placed in escrow shall be of a value at least equivalent to the amounts of retention to be paid to the Contractor pursuant to this section.
- c) The Contractor shall enter into an escrow agreement satisfactory to the Agency, such agreement shall include provisions governing inter alia;
 - 1) The amount of securities to be deposited,
 - 2) The providing of powers of attorney or other documents necessary for the transfer of the securities to be deposited,
 - 3) Conversion to cash to provide funds to meet defaults by the Contractor including, but not limited to, termination of the Contractor's control over the Work, stop notices filed pursuant to law, assessment of liquidated damages or other amounts to be kept or retained under the provisions of the Contract,
 - 4) Decrease in value of securities on deposit, and
 - 5) The termination of the escrow upon completion of the Contract.
- d) The Contractor shall obtain the written consent of the surety of such agreement.

9-3.4 Mobilization *DELETE in its entirety and SUBSTITUTE with the following:*

9-3.4.1 General. Mobilization shall consist of preparatory work and operations including, but not limited to, those necessary for the movement of personnel, equipment, materials and incidentals to the project site necessary for work on the project and for all other work and operations which must be performed or costs incurred including bonds, insurance, and financing prior to beginning work on the various contract items on the project site.

Mobilization shall also include the cost, time and labor to move the necessary construction equipment to and from the job site, supervisory time on the job by the Contractor's personnel to keep the construction site in a safe condition and all other related work as required for all non-working days during the course of construction. Contractor is responsible for securing an adequate storage site for equipment and materials.

The Contractor shall have on the work site at all times, as its agent, a competent English speaking superintendent capable of reading and thoroughly understanding the plans, specifications, other related documents, and directions from Agency's Representative.

9-3.4.2 Measurement and Payment. Payment for **Mobilization** shall be included in the various bid items and no additional compensation **is allowed which shall include** obtaining and paying for all permits and business licenses as required from the City of Irvine, State of California and other agencies. The City of Irvine will waive its permit fee. The Contractor shall comply with the requirements specified by each license or permit. No payment for Mobilization will be made until the Contractor's Construction Schedule has been submitted, reviewed and accepted and is current. Progress payments for this item shall be paid in accordance with the percentage completion of the project, and shall include the costs of such mobilization and administration for the entire contract period including construction schedule as specified in these specifications. Payments shall be made upon the basis of the following:

- a) When the monthly partial payment estimate of the amount earned, not including the amount earned for mobilization, is 5 percent or more of the original contract amount, 50 percent of the contract item price for mobilization or 5 percent of the original contract amount, whichever is the lesser, will be included in the estimate for payment.
- b) When the monthly partial payment estimate of the amount earned, not including the amount earned for mobilization, is 10 percent or more of the original contract amount, the total amount earned for mobilization shall be 75 percent of the contract item price for mobilization or 7.5 percent of the original contract amount, whichever is the lesser, and that amount will be included in the estimate for payment.
- c) When the monthly partial payment estimate of the amount earned, not including the amount earned for mobilization, is 20 percent or more of the original contract amount, the total amount earned for mobilization shall be 95 percent of the contract item price for mobilization or 9.5 percent of the original contract amount, whichever is the lesser, and that amount will be included in the estimate for payment.
- d) When the monthly partial payment estimate of the amount earned, not including the amount earned for mobilization, is 50 percent or more of the original contract amount, the total amount earned for mobilization shall be 100 percent of the contract item price for mobilization or 10 percent of the original contract amount, whichever is the lesser, and that amount will be included in the estimate for payment.
- e) Upon completion of all work on the project, payment of any amount bid for mobilization in excess of 10 percent of the original contract amount shall be paid.

9-3.4.3 PAYMENT: *Add the following:*

Payment for “**Construct Orange County Great Park South Lawn Pump Station Enclosure “ (Bid Item No.1)** will be made at the contract unit price per **Lump Sum (LS)** and will be considered full compensation for furnishing all labor, materials, tools and equipment, and incidentals and for doing all the work involved in: constructing steel structure, steel columns on concrete footings, standing seem roof with double leaf roof hatch for equipment access, roof lighting and new paint and other items not mentioned here but required by the project plans and special provisions as shown on the drawing and as specified in the contract documents as approved by the Engineer and no additional compensation will be allowed therefore

ADD:

9-4 RESOLUTION OF CONSTRUCTION CLAIMS. Any claims submitted by the Contractor against the Agency for Work covered by this Contract in the amount of \$375,000 or less shall be subject to the procedures specified in Public Contract Code § 20104, *et seq.*

ADD:

9-5 PROMPT PAYMENT. In addition to requirements specified elsewhere, the following shall also apply: Subsection (f) of Section 20104.50 of the Public Contract Code, Article 1.7 of Part 3 of Division 2.

ARTICLE 1.7

§ 20104.50 Timely progress payments; legislative intent; interest; payment requests:

- a) It is the intent of the Legislature in enacting this section to require all local governments to pay their Contractors on time so that these Contractors can meet their obligations. In requiring prompt payment by all local governments, the Legislature hereby finds and declares that the prompt payment of outstanding receipts is not merely a municipal affair, but is instead a matter of statewide concern.
- b) It is the intent of the Legislature in enacting this article to fully occupy the field of public policy relating to the prompt payment of local governments' outstanding receipts. The Legislature finds and declares that all government officials, including those in local government, must set a standard of prompt payment that any business in the private sector which may contract for services should look towards for guidance.
- c) Any local agency which fails to make any progress payment within 30 days after receipt of an undisputed and properly submitted payment request from a contractor on a construction contract shall pay interest to the contractor equivalent to the legal rate set forth in subdivision (a) of Section 685.010 of the Code of Civil Procedure.
- d) Upon receipt of a payment request, each local agency shall act in accordance with both of the following:
 - 1) Each payment request shall be reviewed by the local agency as soon as practicable after receipt for the purpose of determining that the payment request is a proper payment request.
 - 2) Any payment request determined not to be a proper payment request suitable for payment shall be returned to the Contractor as soon as practicable, but not later than seven days, after receipt. A request returned pursuant to this paragraph shall be accompanied by a document setting forth in writing the reasons why the payment request is not proper.
- e) The number of days available to a local agency to make a payment without incurring interest pursuant to this section shall be reduced by the number of days by which a local agency exceeds the seven-day return requirement set forth in paragraph (2) of subsection (c).
- f) For purposes of this article:

- 1) A “local agency” includes, but is not limited to, a city, including a charter city, a county, and a city and county, and is any public entity subject to this part.
 - 2) A “progress payment” includes all payments due Contractors, except that portion of the final payment designated by the Contract as retention earnings.
 - 3) A payment request shall be considered properly executed if funds are available for payment for the payment request, and payment is not delayed due to an audit inquiry by the financial officer of the local agency.
- g) Each local agency shall require that this article, or a summary thereof, be set forth in the terms of any contract subject to this article.

PART 2 - CONSTRUCTION MATERIALS

SECTION 201 – CONCRETE, MORTAR, AND RELATED MATERIALS

REVISE as follows:

201-1.1.2 Concrete Specified by Class and Alternate Class. *ADD the following to Table 201-1.1.2:*

Steel Column Foundation Concrete shall be 4500 PSI

201-2 REINFORCEMENT FOR CONCRETE

201-2.2.1 Reinforcing Steel.

All reinforcing steel for reinforced concrete construction shall be Grade 60 billet steel conforming to ASTM A-615.

Grade 40, FY = 40KSI for # 4 and smaller

Grade 60, FY = 60 KSI for # 5 and larger

PART 6 – TEMPORARY TRAFFIC CONTROL

REVISE as follows:

SECTION 600 – ACCESS

600-2 VEHICULAR ACCESS. *DELETE in its entirety and SUBSTITUTE with the following:*

Vehicular access to residential driveways shall be maintained to the property line except when necessary construction precludes such access for reasonable periods of time. If backfill has been completed to the extent that safe access may be provided, and the street is opened to local traffic, the Contractor shall immediately clear the street and driveways and provide and maintain access.

Safe, adequate, continuous and unobstructed vehicular access shall be maintained to fire hydrants, residences, commercial and industrial establishments, churches, schools, parking lots, service stations, motels, fire and police stations, bus stops, hospitals, etc., unless otherwise approved by the Engineer.

During non-working hours or when work is not scheduled, all roadway lanes shall be returned to their full traffic use by backfilling and paving open trenches unless otherwise approved by the Engineer. At the end of the workday, the Contractor shall remove all Traffic Control Devices not in use.

The Contractor shall replace vehicle loop detectors damaged by the Contractor's operations, at its own expense within 24 hours of the damage. The Contractor shall replace existing loop detectors, shown on the plans to be replaced, within 24 hours from when they are removed from service.

Should the Contractor fail to replace the vehicle loop detectors within 24 hours from when they are damaged or removed from service, or the installed signal loops are not functional, the Agency, at its option and at the Contractor's sole cost and expense, may install such temporary detection methods as may be necessary. The Agency will deduct cost of such work from any monies due the Contractor. Failure of the Agency, however, to install such temporary detection methods, shall not relieve the Contractor of his full responsibility for public safety per 7-10 of the Standard Specifications and the Special Provisions.

If the Contractor proposes temporary alternate detection methods, video or wireless, the Contractor shall provide submittals of the alternate methods for acceptance by the Engineer in accordance with 2-5.3 of the Standard Specifications and the Special Provisions. The cost for providing all temporary detection methods shall be as included in the various items of Work and no additional compensation will be allowed therefore.

600-3 PEDESTRIAN ACCESS. *DELETE in its entirety and SUBSTITUTE with the following:*

Safe, adequate, continuous and unobstructed pedestrian access shall be maintained to sidewalks, cross walks, residences, commercial and industrial establishments, churches, schools, parking lots, service stations, motels, fire and police stations, hospitals, etc., unless other arrangements satisfactory to the Agency have been made by the Contractor

and accepted by the Agency. Pedestrian access and paths shall meet federal, state and Agency ADA requirements.

ADD:

600-4 CONSTRUCTION PARKING CONTROL. The Contractor shall control vehicular parking to preclude interference with public traffic or parking, access by emergency vehicles, owners operations, or construction operations, and monitor parking or construction personnel private vehicles by maintaining free vehicular access to and through parking areas and prohibit parking on or adjacent to access roads, or in non-designated areas.

ADD:

600-5 SITE ACCESS. When entering or leaving roadways carrying public traffic, contractors' equipment, whether empty or loaded, shall in all cases yield to public traffic.

The Contractor shall comply with the following City of Irvine truck route restrictions:

DESIGNATED TRUCK ROUTES - ORD. NO. 92-09

| <u>Name of Street</u> | <u>Portion Designated</u> |
|---------------------------|--|
| a) Alton Parkway | Sand Canyon Avenue to Irvine Boulevard |
| b) Bake Parkway | Rockfield Boulevard to easterly City limit |
| c) Barranca Parkway | Red Hill Avenue to Jamboree Road |
| d) Campus Drive | Jamboree Road to MacArthur Boulevard |
| e) Irvine Boulevard | Culver Drive to Jeffrey Road |
| f) Irvine Boulevard | Alton Parkway to easterly City limit |
| g) Jamboree Road | Warner Avenue to MacArthur Boulevard |
| h) Laguna Canyon Road | Alton Parkway to State Route 133 |
| i) Laguna Freeway (133) | |
| j) MacArthur Boulevard | Daimler Street. to Campus Drive |
| k) MacArthur Boulevard | Jamboree Road to Ford Road |
| l) Main Street | Jamboree Road to westerly City limit |
| m) Red Hill Avenue | Barranca Parkway to San Diego Fwy. (I-405) |
| n) Rockfield Boulevard | Bake Parkway to easterly City limit |
| o) Sand Canyon Avenue | San Diego Fwy. (I-405) to northerly City limit |
| p) San Diego Fwy. (I-405) | |
| q) Santa Ana Fwy. (I-5) | |

RESTRICTED ROUTES, SEVEN TON (14,000 POUNDS) GROSS WEIGHT - ORD. NOS. 92-09 AND 98-16

| <u>Name of Street</u> | <u>Portion Designated</u> |
|-----------------------|--|
| a) Campus Drive | Jamboree Road to University Drive |
| b) Culver Drive | Santa Ana Fwy. (I-5) to northerly City limit |

- | | |
|-------------------|---|
| c) Jeffrey Road | Irvine Center Drive to Santa Ana Fwy. (I-5) |
| d) Jeronimo Road | Goodyear to 400 feet westerly of Bake Pkwy. |
| e) Toledo Way | Goodyear to 400 feet westerly of Bake Pkwy. |
| f) Trabuco Road | 400 feet easterly of the northbound Santa Ana Freeway off-ramp near Culver Drive and the easterly City limits |
| g) Walnut Avenue | Harvard Avenue to Culver Drive |
| h) Harvard Avenue | Walnut Avenue to Irvine Center Drive |

THREE TON (6,000 POUNDS) GROSS WEIGHT - ORD. NO. 92-09

| <u>Name of Street</u> | <u>Portion Designated</u> |
|------------------------------------|---------------------------------------|
| a) Bonita Canyon Road/Shady Canyon | Newport Coast Drive to Sunnyhill |
| b) Culver Drive | Michelson Drive to Bonita Canyon Road |
| c) University Drive | Ridgeline Drive to Harvard Avenue |

SECTION 601 – WORK AREA TRAFFIC CONTROL

REVISE as follows:

601-1 GENERAL. *DELETE in its entirety and SUBSTITUTE with the following:*

The Contractor shall provide and maintain all construction area traffic controls in accordance with Part 6 of the Standard Specifications, the latest version of the (MUTCD), and Work Area Traffic Control Handbook (WATCH), and these Special Provisions.

Portable delineators (traffic cones are not allowed) which conform to the current California Manual of Uniform Traffic Control Devices (CA MUTCD) shall be spaced as necessary for proper delineation of the travel way. The spacing between delineators shall not exceed 50 feet. The minimum lane transitions shall be a 50 to 1 taper unless otherwise shown on the plans. Double base delineators will be required.

If the portable delineators are damaged, displaced or are not in an upright position, from any cause, said portable delineators shall immediately be replaced or restored to their original location, in an upright position, by the Contractor.

Where construction detours and signing conflict with existing signing, the Contractor shall cover existing signs in a manner approved by the Agency's Representative. The Contractor shall also provide temporary traffic delineation per 602 at the conclusion of each working day, if not sooner, as directed by the Agency's Representative, for any centerline, painted median or lane line which is obliterated by construction.

The Contractor shall provide temporary delineation as directed/accepted. Temporary delineation shall include removal of conflicting markings by accepted means; installation and removal of temporary centerlines or lane lines, detour signing, barricading; and replacement of traffic lines and markings in their proper locations upon termination of the detour. Conflicting existing and temporary striping, as required for traffic control during construction, shall be removed by the Contractor by methods accepted by the

Engineer. Blacking out the pavement will not be allowed. Temporary reflective striping tape may be used, except that it shall not be applied to final asphalt surfaces. Tape shall be removed from temporary surfaces prior to placement of additional asphalt.

The Contractor shall maintain a 24-hour emergency service to remove, install, relocate, and maintain warning devices and shall furnish to the Agency's Representative, names and telephone numbers of three persons responsible for this emergency service. In the event the Contractor does not promptly respond when notified, the Agency may make corrections at Contractor's expense.

Each workday, the Contractor shall ensure traffic control is in place prior to starting construction.

Should the Contractor appear, in the opinion of the Engineer, to be lacking in providing adequate warning devices and protective measures as above provided, the Engineer may direct attention to the existence of a hazard, and the necessary warning and protective measures shall be furnished and installed by the Contractor, at his/her expense. Should the Engineer point out the inadequacy of warning and protective measures, such action on the part of the Engineer shall not relieve the Contractor from responsibility for public safety or abrogate its obligation to furnish and pay for these devices.

The Contractor shall notify local Police and Fire Departments of its intent to begin work at each location at least ten (10) days before work is to begin. The Contractor shall cooperate with local authorities relative to handling traffic through the area. The Contractor shall also coordinate with OCTA to ensure the safe operation of buses and access to bus stops in the construction area.

No work that interferes with public traffic shall be performed except during the hours specified for lane closures 601-6.6.

Existing traffic loop detector replacement shall be required as necessary such that no traffic signal loop is out of operation at the end of the workday. The cost for providing all temporary traffic signal loop detectors shall be included into the various related items of work and no additional compensation will be allowed; this includes traffic signal loop detectors damaged by the Contractor's operations not designated for replacement in the contract plans.

Areas requiring edge cold mill shall be cold milled not more than three (3) Calendar Days prior to AC paving. Areas requiring digouts shall be repaved and open for traffic at the end of the same day.

The Contractor shall maintain access to all driveways at all times.

ADD:

601-4 STREET CLOSURE, DETOURS, BARRICADES. Unless shown on the plans, no street closure shall be allowed.

The Contractor shall construct the proposed improvements to minimize public inconvenience. The Contractor shall provide ADA accessible pedestrian detours around construction areas.

The Contractor shall have all Traffic Control Devices properly installed prior to commencing construction and shall maintain these devices to ensure proper flow and safety of traffic while working in the street.

The contractor shall be responsible for any additional Traffic Control Devices deemed necessary by the Engineer to assure public safety at all times.

ADD:

601-5 STORAGE OF EQUIPMENT. Unless otherwise authorized in writing by the Engineer, construction materials may not be stored in streets, roads, or highways beyond the end of each Working Day. No equipment shall be stored within limits of the acquired temporary construction easements at any time.

Construction equipment shall not be stored at the work site before its actual use on the Work nor for more than two (2) Calendar Days after it is no longer needed on the Work. Time necessary for repair or assembly of equipment may be authorized by the Agency.

Excavated materials, except that which is to be used as backfill in the adjacent trench, may not be stored in public streets, roads, temporary construction easements, or highway unless otherwise permitted. After placing backfill, all excess material shall be removed immediately from the site.

The Contractor shall submit an equipment-staging plan for approval by the Engineer. The plan shall address the use of private property for the staging, unloading, loading, and storing of equipment. The Contractor shall obtain an agreement from private property owners prior to the start of the project. The agreement shall release and hold the Agency, the Engineer, the Agency Representative and their consultants harmless from claims for damages. Failure to file a plan or obtain written approval from private property owners is considered a breach of Contract and subject to all remedies and enforcement procedures specified in the Contract Documents.

ADD:

601-6 TRAFFIC REGULATIONS.

601-6.1 General. Furnish, install and maintain Traffic Control Devices, equipment, materials, and other safeguards to provide safe and effective work areas, and to warn, control, protect and expedite vehicular and pedestrian traffic.

On daily basis, remove temporary traffic delineation, signage and other devices when no longer required. Restore areas to original or to specified conditions.

601-6.2 Related Requirements. Traffic control work and Traffic Control Devices for construction shall conform to the latest edition of:

- a) MUTCD
- b) Work Area Traffic Control Handbook (WATCH manual)
- c) Standard Specifications
- d) O.S.H.A. requirements
- e) California Vehicle Code

601-6.3 Construction Area Signs. The Contractor shall:

- a) Use only signs that conform to the dimension, color, legend, reflectorization and lighting requirements of the current WATCH, MUTCD and the Contract Documents.
- b) All sign panels shall be the product of a commercial sign manufacturer, but need not be new. Used sign panels clean and in good repair, as determined by the Agency Representative, may be used.
- c) Sign panels for portable signs may be metal, cotton drill fabric, flexible industrial nylon fabric or other approved fabric.
- d) Temporary stop signs shall have a minimum clearance of seven (7) ft. from bottom of sign to existing ground or pavement.
- e) Further requirements as discussed in the Contract Documents.

601-6.4 Flaggers. The Contractor shall provide flaggers as deemed necessary by the Engineer to give adequate warning to traffic or to the public of any dangerous conditions to be encountered, and employ only flaggers trained in flagging fundamentals and procedures referred to in the “Flagger Handbook” available on the Internet at the following web site: http://www.dot.ca.gov/hq/construc/flagging/flagging_handbook.pdf.

Payment for flagging is considered as included in the various items of work and no additional compensation will be allowed therefore.

601-6.5 Temporary Closure of Existing Traffic Lanes. Unless the traffic control, working hours and lane requirements are modified in the Special Provisions, the following requirements shall be followed:

- a) When permitted by the Engineer, one (1) lane on each roadway adjacent to the working area may be closed to public traffic. Use of reflective or lighted traffic delineators to direct traffic away from excavations or other obstructions will be considered as a lane closure.
- b) A minimum of one (1) lane of traffic, twelve (12) feet wide, fourteen (14) feet wide if a lane is adjacent to an outside curb, in each direction, shall be maintained through the work area at all times.
- c) A minimum of two (2) lanes of traffic, each being twelve (12) feet wide, fourteen (14) feet wide if a lane is adjacent to an outside curb, in each direction, shall be maintained through the work area at all times when the work area is within a major arterial highway unless otherwise approved.
- d) When work is in progress within three (3) feet of a lane being used by public traffic, Contractor shall close the lane adjacent to the work. Reflective or lighted traffic delineators shall be placed to direct public traffic around the construction area in accordance with the requirements of this section. During non-working hours or when work is not in progress, position and maintain reflective traffic delineators in the 1 to 1-1/2 foot width of the existing traffic lane adjacent to the work.
- e) On roads open to public travel, temporary lane closures are limited between the hours of 9:00 a.m. and 3:00 p.m. Closures of roads on Sundays, holidays, or between the hours of 3:00 p.m. and 9:00 a.m. are prohibited unless otherwise approved by the Engineer.

All Traffic Control Devices used between dusk and 6:00 a.m. shall be lighted or reflectorized. Agency approved arrow board(s) shall be used to direct public traffic on all roads.

Prior to the start of each work day, the Contractor shall perform all necessary work incidental to and commensurate with the proper signing, detouring, barricading, etc., that is required for that particular day's schedule of operations. No construction shall be permitted until such signing and detouring operations have been completed.

601-6.6 Lane Requirements/Working Hours.

Working Hours:

Monday through Friday: 7:00 AM to 3:30 PM

Saturday: No work permitted without City approval

Sunday: No work permitted

Legal holidays: No work permitted

Work requiring lane closures may be in progress during the following hours:

Monday through Friday: 9:00 a.m. to 3:00 p.m.

Saturday: No work permitted without City approval

Sunday: No work permitted

Legal holidays: No work permitted

Lane closures are permitted as approved by the Engineer.

601-6.7 Closure Schedule. The Engineer shall be provided a list of any street lane closures, ramp closures, trail closures, sidewalk closures or detours for review and acceptance at least three (3) weeks advance of the closure.

Contractor shall submit a written schedule of planned closures utilizing the closure schedule request form, furnished by the Engineer. The closure schedule shall show the number of lanes, locations and times of the proposed closures, a precise description of work to be performed. Closure schedules submitted to the Engineer with incomplete or inaccurate information will be rejected and returned for correction and resubmittal. The Contractor will be notified of disapproved closures or closures that require coordination with other parties as a condition of approval.

Upon approval of the closure schedule by the Engineer and at least three (3) Working Days in advance of closing a lane, the Contractor shall notify the Police, Fire, the Agency Representative and all other affected jurisdictional agencies, and comply with their requirements.

Closure schedule amendments, including adding additional closures, shall be submitted by noon to the Engineer, in writing, at least five (5) Working Days in advance of a planned closure. Approval of closure schedule amendments will be at the discretion of the Engineer.

The Engineer, the Police, Fire, and all other affected jurisdictional agencies shall be notified of cancelled closures two (2) Working Days before the date of closure

The Contractor shall notify by email the City of Irvine four (4) Working Days prior to commencing any work within 250 feet of any signalized intersection (measured from the

nearest cross street curb), implementing any road closure, and/or implementing any detour of traffic. Email notifications shall be sent to roadworkcoordination@cityofirvine.org.

Closures that are cancelled due to unsuitable weather may be rescheduled at the discretion of the Engineer.

601-12 FLASHING ARROW SIGNS. Flashing arrow sign shall be mounted on a truck or on a trailer and shall be capable of operating while the vehicle is moving or as directed by the Engineer. Signs mounted on the cab of a truck shall be mounted to provide a minimum of 7 feet between the bottom of the sign and the roadway. Signs mounted on a trailer, or on anything other than the cab of a truck, shall be mounted to provide a minimum of 8 feet between the bottom of the sign and the roadway.

The total weight of trailer mounted flashing arrow sign including the trailer, sign, power source and other components shall not exceed 1,500 pounds and the height of the level trailer bed shall be no higher than 21 inches above the roadway. The trailer shall be equipped with a minimum of 3 leveling jacks.

Electrical energy to operate the sign shall be obtained from the vehicle on which the sign is mounted. The supply of electrical energy shall be capable of operating the sign in the manner specified. The electronic circuitry shall provide between 30 and 45 complete operating cycles of the sign per minute in each of the modes specified.

Alternative types of lamps may be used in flashing arrow signs if visibility is equal to the specified lamps. Each type AX flashing arrow sign shall be a minimum of 2 feet high and 4 feet wide, and shall be furnished with flat black enamel. A minimum of 13 No. 4414AX 12-volt, yellow or amber lamps shall be installed in the panel. The lamp configuration shall be for 3 arrowheads or an arrow shaft with 2 arrowheads, one pointing in each direction on the face of the sign with a minimum of 5 lamps forming each arrowhead. Each lamp shall be provided with a visor.

The lamp shall be activated by a switch on a control panel and shall be controlled by electronic circuitry to provide a minimum of 4 selectable modes of operation as follows:

Pass Left Mode - Sequencing of lighted arrowheads or sequencing the lamps forming the arrow shaft and arrowhead to the left or a flashing left arrow with the lamps in the arrow shaft and arrowhead flashing on and off simultaneously.

Pass Right Mode - Sequencing of lighted arrowheads or sequencing the lamps forming the arrow shaft and arrowhead to the right or a flashing right arrow with the lamps in the arrow shaft and arrowhead flashing on and off simultaneously.

Simultaneous Mode - Either the outside arrowheads pointing in opposite directions are continuously illuminated, except for the center lamp forming each arrowhead, while the arrow shaft lamps flash on and off simultaneously or the outside arrowhead pointing in opposite directions and the arrow shaft lamps all flash simultaneously to indicate passing on either side.

Travel Mode - Travel or caution mode shall flash in a manner not resembling any other mode.

Payment for traffic control shall be included in the various bid items of the project and no additional compensation will be allowed.

PART 7 – STEEL STRUCTURE

SECTION 7-013300 - SUBMITTAL PROCEDURES

1.1 Schedule of Submittals

- A. Within 15 days after receiving a Notice to Proceed, the Contractor must submit a Schedule of Submittals, in the format indicated below, in duplicate, listing all items that must be furnished for review and approval by the Engineer. The schedule must indicate the type of items (such as sample, shop drawings, catalog cut, and so forth) and include the scheduled dates of submittal. In preparing the schedule, adequate time (10 days or more exclusive of time in the mail) must be allowed for review and approval and possible resubmittal. Also, the schedule must be coordinated with the approved construction progress chart. The Contractor must revise and/or update the schedule monthly. Such revised schedules must be submitted to the Engineer for approval.
- B. Schedule of Submittals Format

Project _____

Contract No. _____

Project
Description _____

| Spec. Section | Spec. Description | Paragraph Number | *Submittal Type | Date | | Action Taken | Assigned Number |
|---------------|-------------------|------------------|-----------------|-----------|----------|--------------|-----------------|
| | | | | Submittal | Returned | | |
| | | | | | | | |

*Submittal Type:

C – Certificate

S – Sample

SD – Shop Drawing

CD – Catalog Data

PL – Spare Parts List

MM – Maintenance Manual

1.2 Shop Drawings and Related Data

- A. Prior to submittal, the Contractor must stamp and sign the submittal to indicate that it is in accordance with the contract documents without deviation and has been reviewed and approved by the Contractor. The Contractor must make any corrections required by the Engineer. If the Contractor considers any correction indicated on the drawings to constitute a change to the contract drawings or specifications, notice must be given to the Engineer. Four prints of all approved shop drawings must be given to the Engineer. The approval of the drawings by the Engineer must not be construed as a complete check but indicates only that the submittal appears to comply with the contract documents. Approval of the shop drawings does not relieve the Contractor of responsibility for any error that may exist because the Contractor is responsible for the dimensions and for

satisfactory construction of all work. The submission by the Contractor must be accompanied by a transmittal letter in a format approved by the Engineer.

1.3 Material, Equipment, and Fixture Lists

- A. When required by the special provisions, lists of materials, equipment, and fixtures must be submitted by the Contractor in accordance with the requirements specified for shop drawings. The lists must be supported by sufficient descriptive material, such as catalogs, cuts, diagrams, and other data published by the manufacturer, as well as by evidence of compliance with safety and performance standards, to demonstrate conformance to the specification requirements. Catalog numbers alone are not acceptable. The data must include the name and address of the nearest service and maintenance organization that regularly stocks repair parts. No consideration will be given to partial lists submitted from time to time. Approval of materials and equipment is tentative, subject to submission of complete shop drawings indicating compliance with the contract documents.

1.4 Certificates of Compliance

- A. Any certificates required for demonstrating proof of compliance of materials with specification requirements, including statements of application, and extended guarantees, must be signed and submitted in quadruplicate to the Engineer at least 10 days before delivery. The Contractor must review all certificates before submissions are made to the Engineer, to ensure compliance with the contract specification requirements and to ensure that the affidavit is properly signed. Each certificate must be signed by an official authorized to certify on behalf of the manufacturing company and must contain the name and address of the Contractor, the project name and location, and the quantity and date or dates of shipment or delivery to which the certificates apply. Copies of laboratory test reports submitted with certificates must contain the name and address of the testing laboratory and the dates of tests to which the report applies. Certification must not be construed as relieving the Contractor from furnishing satisfactory material if, after tests are performed on selected samples, the material is found not to meet the specific requirements.

1.5 Review of Submittals

- A. When submittals are reviewed by others, each submittal must be returned to the Engineer stamped and signed or marked in one of the following ways:
 - 1. A Action: The Contractor is advised that "A Action" means that fabrication, manufacture, or construction may proceed, provided the work complies with the contract documents.
 - 2. B Action: The Contractor is advised that "B Action" means that fabrication, manufacture, or construction may proceed, provided the work complies with the notations and the contract documents.
 - 3. C Action: The Contractor is advised that "C Action" means that no work may be fabricated, manufactured, or constructed and that the Contractor must make a new submittal. Any submission marked "C Action" is not permitted on the site.
- B. The "A Action" or "B Action" submittals must be returned to the Engineer. The Contractor is responsible for obtaining prints of them and for distributing them to the field and to subcontractors.

- C. In the case of shop drawings in the form of manufacturers' descriptive literature, catalog cuts, and brochures stamped "A Action" or "B Action," returned to the Engineer, the Contractor is responsible for distributing them to the field and to the subcontractors. If the shop drawings are stamped "C Action," the Engineer will provide copies to the Contractor, who must submit new shop drawings to the Engineer.
- D. In the case of samples stamped "A Action" or "B Action," the Engineer will provide one of the samples to the Contractor. In the case of samples stamped "C Action," all of the submitted samples must be returned.

1.6 Spare Parts Data

- A. Spare parts data must be submitted in quadruplicate.

1.7 Schedule of Values

- A. The Contractor must submit a construction cost breakdown using the attached Schedule of Values. When applicable, a separate cost breakdown form must be submitted for each separate building. However, the total cost of site work for each facility must be included in the cost estimate breakdown for each building. The number of items provided on the Systems Construction Cost Estimate Breakdown form are the minimum required. Additional subdivision of these items may be used by the Contractor.
- B. Submit the construction cost breakdown after contract award to the Engineer.
- C. Do not delete items from the Schedule of Values form. However, expand the schedule "Description of Work" as necessary to allow evaluation of work or to make progress payments.
- D. If the contract price changes, the Schedule of Values must be revised to reflect the change(s) and forwarded to the Engineer.
- E. A current Schedule of Values must accompany all Contractor Requests for Payment.
- F. See following exhibit for Schedule of Values.

| Schedule of Values | | | | | | |
|---|-----------------|-----------|--|-------------|--------|-------|
| CIP 381703 | Project Manager | | Bid No. | | Date | |
| | Omar Abutaleb | | | | | |
| Work Description: South Lawn Pump Station Project | | | Facility Location: Operations Support Facility City of Irvine, CA | | | |
| Work Description | Labor | Super/Man | Material | Rent/Equip. | Profit | Total |
| | \$ | \$ | \$ | \$ | \$ | \$ |
| Mobilization | | | | | | |
| Structural Steel-Installed | | | | | | |
| Roof Hatch - Installed | | | | | | |
| Roofing & Trims | | | | | | |
| Electrical Lighting | | | | | | |
| Painting | | | | | | |
| New light fixtures, power | | | | | | |
| Bonding | | | | | | |
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SECTION 7-055000 - METAL FABRICATIONS

Part 1- General

1.1 SUMMARY

A. Miscellaneous framing and supports:

1.2 REFERENCES

A. American Institute of Steel Construction (AISC):

1. Specifications for the Design, Fabrication and Erection of Structural Steel for Building

B. American National Standards Institute (ANSI):

1. ANSI A14.3, "Ladders, Fixed, Safety Requirements."

C. American Society for Testing and Materials (ASTM):

1. ASTM A36, "Structural Steel."
2. ASTM A53, "Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless."
3. ASTM A123, "Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products."
4. ASTM A153, "Zinc Coating (Hot-Dip) on Iron and Steel Hardware."
5. ASTM A307, "Carbon Steel Bolts and Studs, 60,000 psi Tensile Strength."
6. ASTM A500, "Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes."
7. ASTM A568, "Specification for General Requirements for Steel Sheet, Carbon, and High-Strength, Low Alloy Hot-Rolled and Cold Rolled."
8. ASTM A627, "Specification for Homogeneous Tool-Resisting Steel Bars for Security Applications."
9. ASTM A780, "Practice for Repair of Damaged and Uncoated Areas of Hot-Dipped Galvanized Coatings."
10. ASTM B221, "Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tube."

D. American Welding Society (AWS):

1. AWS D1.1 - Structural Welding Code.

E. Steel Structures Painting Council Specification (SSPC):

1. Steel Structures Painting Manual.

1.3 SUBMITTALS

A. Section 013300 - Submittal Procedures: Procedures for submittals.

1. Product Data:
 - a. Submit complete descriptive data for all stock items.
2. Shop Drawings:

- a. Prepare Shop Drawings under seal of professional structural engineer registered in California for products requiring structural engineering.
- b. Include profiles, sizes, connection attachments, reinforcing, anchorage, size and type of fasteners and accessories, erection drawings, elevations, welded connections using standard AWS welding symbol with net weld lengths.
- c. Take field measurements prior to preparation of shop drawings and fabrication when possible. Allow for trimming and fitting whenever taking of field measurements before fabrication might delay construction.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Steel plates, angles, and other structural shapes shall conform to ASTM A36.
- B. Steel pipe shall conform to ASTM A53, Grade B, Schedule 40.
- C. Galvanized steel pipe and tube shall conform to ASTM A53.
- D. Steel Tubing shall conform to ASTM A500.
- E. Sheet Steel, Galvanized: ASTM A446.
- F. Sheet and Strip Steel, Hot Rolled: ASTM A568.
- G. Welding Materials: AWS D1.1; type required for materials being welded.
- H. Anchors
 - 1. Threaded Type Concrete Inserts: Galvanized malleable iron or cast steel capable of receiving 3/4 inch diameter machine bolts.
 - 2. Slotted Type Concrete Inserts: Welded box type fabricated with minimum 1/8 inch thick galvanized pressed steel plate with slot to receive 3/4 inch diameter square head bolt and knockout cover.
 - 3. Expansion Shield for Masonry Anchorage: FS FF-2-325.
 - 4. Toggle Bolts: FS FF-B-588.
- I. Fasteners
 - 1. Bolts, Nuts and Washers for Exterior Locations: ASTM A307, galvanized in accordance with ASTM A153.
 - 2. Bolts, Nuts and Washers for Interior Locations: ASTM A307, Grade A, regular hexagon head.
 - 3. Bolts, Round Head: ANSI B-18.5
 - 4. Wood Screws, Flat Head Carbon Steel: ANSI B-18.6.1.
 - 5. Plain Washers, Helical Spring Type Carbon Steel: FS FF-W-84.

2.2 FABRICATION

- A. Fabricate steel items according to approved shop drawings and to applicable portions of AISC Specifications. Conceal welds where possible; grind exposed welds smooth and flush with adjacent finished surface. Ease exposed edges to small uniform radius.

- B. Pre-assemble products in shop to greatest extent possible. Disassemble units to extent necessary for shipping and handling. Clearly mark units for re-assemble and installation.
- C. For exposed to view fabrications, use materials which are smooth and free of surface blemishes including pitting, seams marks, roller marks, roller trade names and roughness. Remove blemishes by grinding or by welding and grinding, prior to cleaning, treating and application of surface finishes including zinc coating.
- D. Fabricate items with joints tightly fitted and secured.
- E. Fit and shop assemble in largest practical sections for delivery to Project site.
- F. Exposed Mechanical Fastenings: Flush countersunk screws or bolts; unobtrusively located; consistent with design of structure, except where specifically noted otherwise.
- G. Make exposed joints butt tight, flush and hairline.
- H. Fabricate anchorage and related components of same material and finish as metal fabrication, unless indicated otherwise.

2.3 ROUGH HARDWARE

- A. Furnish bent or otherwise custom fabricated bolts, plates, anchors, hangers, dowels, and other miscellaneous steel and iron shapes as required for framing and supporting woodwork, and for anchoring or securing woodwork to concrete or other structures. Straight bolts and other stock rough hardware items are specified in Division 6 sections.
- B. Fabricate items to sizes, shapes, and dimensions required. Furnish malleable-iron washers for heads and nuts which bear on wood structural connections; elsewhere, furnish steel washers.

2.4 FINISHES, GENERAL

- A. Comply with NAAMM "Metal Finishes Manual" for recommendations relative to application and designations of finishes.
- B. Finish metal fabrications after assembly.

2.5 STEEL AND IRON FINISHES

- A. Galvanizing: For those items indicated for galvanizing, apply zinc-coating by the hot-dip process compliance with the following requirements:
 1. ASTM A153 for galvanizing iron and steel hardware.
 2. ASTM A123 for galvanizing both fabricated and unfabricated iron and steel products made of uncoated rolled, pressed, and forged shapes, plates, bars, and strip 0.0299 inch thick and heavier.
- B. Preparation for Shop Priming: Prepare uncoated ferrous metal surfaces to comply with minimum requirements indicated below for SSPC surface preparation specifications and environmental exposure conditions of installed metal fabrications:
- C. Apply shop primer to uncoated surfaces of metal fabrications, except those with galvanized finish or to be embedded in concrete, sprayed-on fireproofing, or masonry, unless otherwise indicated. Comply with requirements of SSPC-PA1 "Paint Application Specification No. 1" for shop painting.

2.6 SHOP PAINTING AND PROTECTIVE COATING

- A. Conform to Steel Structures Painting Council Specification 15-68T, Type 1, including preparation for painting.
- B. Hot-Dip galvanizing and zinc coatings applied on products fabricated from rolled, pressed, and forged steel shapes, plates, bars and strips shall comply with ASTM Specification A123. Galvanized surfaces for which a shop coat of paint is specified shall be chemically treated to provide a bond for the paint. Except for bolts and nuts, all galvanizing shall be done after fabrication.
- C. Clean surfaces of rust, scale, grease and foreign matter in accordance with SSPC SP-1 solvent cleaning, prior to finishing. Prepare surfaces for painting in accordance with SSPC-SP2 Hand Tool Cleaning, SSPC-SP3 Power Tool Cleaning or SSPC SP-7 Brush Off Blast Cleaning.
- D. Do not prime surfaces in direct contact bond with concrete or where field welding is required.
- E. Prime paint items scheduled with one coat.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Section 017300 - Execution: Verification of existing conditions before starting work.
- B. Verification of Conditions: Verify that field measurements, surfaces, substrates and conditions are as required, and ready to receive Work.
- C. Report in writing to the Engineer prevailing conditions that will adversely affect satisfactory execution of the Work of this Section. Do not proceed with Work until unsatisfactory conditions have been corrected and approved by the Engineer.
- D. By beginning Work, Contractor accepts conditions and assumes responsibility for correcting unsuitable conditions encountered at no additional cost to the City.

3.2 PREPARATION

- A. Coordinate and furnish anchorages, setting drawings, diagrams, templates, instructions, and directions for installation of anchorages, including concrete inserts, sleeves, anchor bolts, and miscellaneous items having integral anchors that are to be embedded in concrete or masonry construction. Coordinate delivery of such items to project site.

3.3 INSTALLATION

- A. Field Welding: Comply with AWS Code for procedures of manual shielded metal-arc welding, appearance and quality of welds made, methods used in correcting welding work, and the following:
 - 1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
 - 2. Obtain fusion without undercut or overlap.
 - 3. Remove welding flux immediately.

4. At exposed connections, finish exposed welds and surfaces smooth and blended so that no roughness shows after finishing and contour of welded surface matches those adjacent.
- 3.4 ADJUSTING AND CLEANING
- A. Touch-Up Painting: Immediately after erection, clean field welds, bolted connections, and abraded areas of shop paint, and paint exposed areas with same material as used for shop painting to comply with SSPC-PA 1 requirements for touch-up of field painted surfaces.
 1. Apply by brush or spray to provide a minimum dry film thickness of 2.0 mils.
 - B. For galvanized surfaces clean welds, bolted connections and abraded areas and apply galvanizing repair paint to comply with ASTM A780.

SECTION 7-074113 - METAL ROOF PANELS

PART 1- GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes

1. Factory formed metal roof panels: Standing-seam, hidden fastener, non-insulated.
2. Finish must conform to the "Metal Construction Association Certified Premium Painted™ Standard.

B. Related Sections

1. Division 05 Section "Metal Fabrications"
2. Division 07 Section "Membrane Roofing"

1.4 PERFORMANCE REQUIREMENTS

A. General: Provide metal roof panel assemblies that comply with performance requirements specified as determined by testing manufacturers' standard assemblies similar to those indicated for this Project, by a qualified testing and inspecting agency.

B. Wind-Uplift Resistance: Capable of resisting design negative uplift pressures based upon maximum wind speeds of 110MPH. Provide clips, fasteners, and clip spacing of type indicated and with capability to sustain, without failure, a load equal to 2 times the design negative uplift pressure.

C. Wind-Uplift Resistance: Capable of producing sheet metal roofing assemblies that comply with UL 580 for Class 90 wind-uplift resistance. Other performance test shall include ASTM EI 592 Static Air Pressure Test for Roof Coverings.

1.5 SUBMITTALS

A. Product Data: Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each type of metal roof panel and accessory, including each type of underlayment product indicated:

1. Concealed fastener, standing seam metal roof panels and accessories
2. Underlayment

B. Shop Drawings: Show layouts of sheet metal roofing, including plans, elevations, and keyed references to termination points. All fastening patterns shall be clearly designated to meet the specified wind speed requirements.

1. Include details for forming, joining, and securing sheet metal roofing, including pattern of seams, termination points, expansion

joints, roof penetrations, edge conditions, special conditions, connections to adjoining work, and accessory items.

- C. Coordination Drawings: Roof plans drawn to scale and coordinating penetrations. Show the following:
 - 1. Roof-mounted item including equipment supports, pipe supports and penetrations
 - 2. Purlins
 - 3. Roof-Mounted items including equipment supports, pipe supports and penetrations, snow guards, and items mounted on roof curbs.
- D. Samples: For each exposed finish.
- E. Field quality control inspection reports, to be submitted for warranty program level, if applicable.
- F. Product test reports. Based on evaluation of comprehensive tests performed by a qualified testing agency, for the following:
 - 1. Metal Roof Panels: Include reports for UL 790/ASTM E 108, UL 580, ASTM E 283, ASTM E 331, ASTM E 330, Field Tested, ASTM E 1592, UL 2218, ASTM E 84 Flame Spread Rating, Paint Performance Tests, ICBO AC166 Penetration, AAMA 2605, Florida Building Code Approval, MCA Roofing Certification.
 - 2. Insulation and Vapor Retarders: Include reports for thermal resistance, fire-test-response characteristics, water-vapor transmission, and water absorption.

1.6 QUALITY ASSURANCE

- A. Installer Qualifications: Installer of sheet metal roofing for a minimum of 10 years.
- B. Roll-Formed Sheet Metal Roofing Fabricator Qualifications: Minimum of 10 years factory forming experience.
- C. Testing Agency Qualifications: Qualified according to ASTM E 329 for testing indicated, as documented according to ASTM E 548.
- D. Source Limitations: Obtain each type of metal roof panels through one source from a single manufacturer.
- E. Sheet Metal Roofing Standard: Comply with SMACNA's "Architectural Sheet Metal Manual" and NRCA Waterproofing Manual and manufacturer's installation guidelines.
- F. Fire-Resistance Ratings: Where indicated, provide metal roof panels identical to those of assemblies tested for fire resistance that comply with ASTM E 108 in accordance with UL790.
- G. Pre-installation Conference: Conduct conference at project location with building owner, architect, installing contractor, general contractor and sheet metal roofing manufacturer a minimum of 10 days prior to start of work. All details shall be reviewed including; underlayment's, substrates, fastening patterns, scheduling, trim and flashing components, accessories such as fasteners and sealants.

1.7 DELIVERY, STORAGE & HANDLING

- A. Do not deliver materials of this section to project site until suitable facilities for storage and protection are available.
- B. Protect materials from damage during transit and at project site. Store under cover, but sloped to provide positive drainage. Do not expose materials with strippable protective film to direct sunlight or extreme heat.
- C. Do not allow storage of other materials or allow staging of other work on installed metal panel system.
- D. Upon receipt of delivery of metal panel system, and prior to signing the delivery ticket, the installer is to examine each shipment for damage and for completion of the consignment.

1.8 PROJECT CONDITIONS

- A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit assembly of metal roof panels to be performed according to manufacturers' written instructions and warranty requirements.
- B. Field Measurements: Verify locations of roof framing and roof opening dimensions by field measurements before metal roof panel fabrication and indicate measurements on Shop Drawings.

1.9 SCHEDULING

- A. Coordinate installation of roof curbs, equipment supports, and roof penetrations, which are specified in Division 7 Section "Roof Hatch."
- B. Coordinate metal panel roof assemblies with rain drainage work, flashing, trim, and construction of decks, purlins and rafters, parapets, walls, and other adjoining work to provide a leak-proof, secure, and non-corrosive installation.

1.10 WARRANTY

- A. Special Warranty on Finishes: Manufacturer's standard form in which manufacturer agrees to repair finish or replace sheet metal roofing that shows evidence of deterioration of factory applied finishes within specified warranty period.
 - 1. Fluor polymer Finish Warranty Period: 30 years from date of Substantial Completion.
- B. Special Installer's Warranty: Specified form in which Roofing Installer agrees to repair or replace components of custom-fabricated sheet metal roofing that fail in materials or workmanship within 5 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Manufacturer's Qualifications:
 - All Panels are to be factory formed and packaged per job requirements.
- B. Manufacturer shall have a minimum often (10) years experience in the factory fabrication of metal wall panels.

C. Specification is based upon the products of ATAS International, Inc. No other manufacturer shall be accepted as an alternate product without prior written approval. These substitution requests must meet specifications and must be submitted a minimum of ten (10) days prior to date of bid.

D. Manufacturer must be certified to ISO 9001:2008 with design.

2.2 CONCEALED-FASTENER, STANDING SEAM METAL ROOF PANELS

A. General: Provide factory-formed metal roof panels designed to be field assembled by lapping and interconnecting raised side edges of adjacent panels with joint type indicated and mechanically attaching panels to supports using concealed clips in side laps. Include clips, cleats, pressure plates, and accessories required for weathertight installation. Unless more stringent requirements are indicated, comply with ASTM E 1514.

B. Vertical-Rib, Seamed-Joint, Standing-Seam Metal Roof Panels: Formed with integral ribs at panel edges and flat pan between ribs; designed for sequential installation by mechanically attaching panels to supports using concealed clips located under one side of panels and lapping and interconnecting side edges of adjacent panels.

C. Material: 24 gauge metallic coated Steel

a. Texture: Smooth

b. Pan Coverage: 14-1/2"

c. Seam Height: 2"

d. KYNAR 5000® PDVF or HYLAR 5000® Finish

e. Classic Bronze (01)

2.3 UNDERLAYMENT

A. Self-Adhering, High-Temperature Sheet: 45 mil homogeneous rubberized asphalt waterproofing compound, glass fiber reinforced designed specifically for use under sheet metal roofing. Basis for design ATAS ATA-Shield as supplied by ATAS International, Inc. Thermal Stability: Resistant to 240 deg F; ASTM D 1970. Low Temperature Flexibility: Passes after testing at minus 20 deg F; ASTM D 1970. With Asphalt free felt: Conforming to ASTM D 226, polyolefin based, 100 percent asphalt free, high strength reinforced roofing underlayment. Basis for design ATAS ATA-Guard as furnished by ATAS International, Inc.

B. 1/4" Membrane Roofing-See Specifications Section 078500

2.4 MISCELLANEOUS MATERIAL

A. Fasteners - Self-tapping screws, self-locking rivets and bolts, and other suitable fasteners designed to withstand design loads. Manufacturer shall provide or authorize all fasteners utilized with the sheet metal roofing system.

1. Exposed Fasteners: Heads matching color of sheet metal roofing by means of plastic caps or factory-applied coating.

2. Fasteners for Flashing and Trim: Blind fasteners or screws spaced to resist wind uplift loads.

B. Sealing Tape: Pressure-sensitive, 100 percent solid polyisobutylene compound sealing tape with release-paper backing. Provide permanently elastic, non-sag, non-toxic, non-staining tape.

C. Elastomeric Joint Sealant: ASTM C 920, of base polymer, type, grade,

class, and use classifications required to produce joints in sheet metal roofing that will remain watertight

- D. Expansion-Joint Sealant: For hooked-type expansion joints, which must be free to move, provide non-setting, non-hardening, non-migrating, heavy-bodied polyisobutylene sealant.
- E. Bituminous Coating: Cold-applied asphalt mastic, SSPC-Paint 12, compounded for 15 mil dry film thickness per coat.

2.5 ACCESSORIES

- A. Sheet Metal Roofing Accessories: Provide components required for a complete sheet metal roofing assembly including trim, copings, fasciae, corner units, ridge closures, clips, flashings, sealants, gaskets, fillers, closure strips, and similar items. Match material and finish of sheet metal roofing, unless otherwise indicated. All trim and flashing components shall be supplied in a minimum of 12'-0" lengths and shall conform to manufacturer's standard part dimensions and details.
 - 1. 16 ga. Galv. Steel clip base w/22 ga. Galvanized steel stem designed to withstand negative-load requirements.
 - 2. Closures: Closed-cell, expanded, cellular, rubber or cross inked, polyolefm-foam or closed-cell laminated polyethylene; minimum 1-inch thick, flexible closure strips; cut or premolded to match sheet metal roofing profile. Provide closure strips where indicated or necessary to ensure weathertight construction.
 - 3. Sealants as recommended by manufacturer.
 - 4. Fasteners as recommended by manufacturer.
- B. Flashing and Trim: Formed from matching materials as sheet metal roof panel in gauges noted. Provide flashing and trim in heavier gauge materials as required to seal against weather and to provide finished appearance. Locations include, but are not limited to, eaves, rakes, comers, bases, framed openings, ridges, fasciae, and fillers. Finish flashing and trim with same finish system as adjacent sheet metal roofing.

2.6 FABRICATION

- A. General: Fabricate sheet metal roofing and components to comply with details shown, manufacturers installation details and recommendations in SMACNA's "Architectural Sheet Metal Manual" and NRCA Waterproofing Manual that apply to the design, dimensions (pan width and seam height), geometry, metal thickness, and other characteristics of installation indicated. Fabricate sheet metal roofing and accessories at the manufacturer's location to the greatest extent possible.
- B. General: Fabricate sheet metal roofing panels to comply with details shown and sheet metal roofing manufacturer's written instructions.
- C. Fabricate sheet metal roofing to allow for expansion in running work sufficient to prevent leakage, damage, and deterioration of the Work. Form exposed sheet metal work to fit substrates without excessive oil canning, buckling, and tool marks, true to line and levels indicated, and with exposed edges folded back to form hems.
 - 1. Fold and cleat eaves as required by manufacturer to insure weathertightness and wind uplift resistance.
 - 2. Form and fabricate sheets, seams, strips, cleats, valleys, ridges, edge

treatments, integral flashings, and other components of metal roofing to profiles, patterns, and drainage arrangements shown and as required for leak proof construction and wind uplift resistance.

- D. Metal Protection: Where dissimilar metals will contact each other, protect against galvanic action by painting contact surfaces with bituminous coating, by applying rubberized-asphalt underlayment to each contact surface, or by other permanent separation as recommended by manufacturers of dissimilar metals or by fabricator.
- E. Sheet Metal Accessories: Custom fabricate flashings and trim to comply with recommendations in SMACNA's "Architectural Sheet Metal Manual" that apply to design, dimensions, metal, and other characteristics of item indicated. Obtain field measurements for accurate fit before manufacturer fabrication.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances, metal roof panel supports, and other conditions affecting performance of work.
 - 1. Examine primary and secondary roof framing to verify that rafters, purlins, angles, channels, and other structural panel support members and anchorages have been installed within alignment tolerances required by metal roof panel manufacturer
 - 2. Examine solid roof sheathing to verify that sheathing joints are supported by framing or blocking and that installation is within flatness tolerances required by metal roof panel manufacturer.
 - 3. For the record, prepare written report for the General Contractor, endorsed by Installer, listing conditions detrimental to performance of work.
- B. Examine roughing-in for components and systems penetrating metal roof panels to verify actual locations of penetrations relative to seam locations of metal roof panels before metal roof panel installation.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Lay out and examine substrate before installation of sheet metal roofing. Space fasteners as required to resist design uplift, but not more than 24 inches o.c.
- B. Install flashings and other sheet metal to comply with requirements specified in Division 07 Section "Sheet Metal Flashing and Trim."

3.3 UNDERLAYMENT INSTALLATION

- A. Polyethylene Sheet Underlayment; ATA-GUARD™. Install polyethylene sheet on roof sheathing under metal roof panels. Use adhesive for anchorage to minimize use of mechanical fasteners under metal roof panels. Apply at locations indicated on Drawings, in shingle fashion to shed water, with lapped and taped joints of not less than 2 inches. With Self-Adhering Sheet Underlayment; ATA-SHIELD™: Install self-adhering sheet underlayment, wrinkle free, on roof sheathing under sheet metal roofing. Comply with temperature restrictions of underlayment manufacturer for

installation; use primer rather than nails for installing underlayment at low temperatures. Apply at locations noted on Drawings in shingle fashion to shed water, with end laps of not less than 6 inches staggered 24 inches between courses. Overlap side edges not less than 3.5 inches. Extend underlayment a minimum of 1.5 inches of fascia board. Roll laps with roller. Cover underlayment within 14 days.

3.4 INSTALLATION, GENERAL

- A. General: Anchor sheet metal roofing and other components of the Work securely in place, with provisions for thermal and structural movement. Install fasteners, protective coatings, separators, sealants, and other miscellaneous items as required for a complete roofing system and as recommended by fabricator for sheet metal roofing.
 - 1. Field cutting of sheet metal roofing by torch is not permitted.
 - 2. Rigidly fasten ridge end of sheet metal roofing and allow for positive panel attachment as per manufacturer's recommendations. All flashing details shall accommodate thermal movement.
 - 3. Provide metal closures at peaks, ridge, gable and hip caps.
 - 4. Flash and seal sheet metal roofing with weather closures at eaves, rakes, and at perimeter of all openings. Fasten with self-tapping screws.
 - 5. Locate roofing splices over, but not attached to, structural supports. Stagger roof splices and end laps to avoid a four-panel lap splice condition.
 - 6. Lap metal flashing over sheet metal roofing to allow moisture to run over and off the material.
- B. Fasteners: Use fasteners of size and length as required for compatibility with substrate.
- C. Metal Protection: Where dissimilar metals will contact each other or corrosive substrates, protect against galvanic action by painting contact surfaces with bituminous coating, by applying rubberized-asphalt underlayment to each contact surface, or by other permanent separation as recommended by fabricator of sheet metal roofing or manufacturers of dissimilar metals.
 - 1. Separate sheet metal roofing from bituminous coating where roofing will contact wood, ferrous metal, or cementations construction. Interlock and overlap shingles and stagger end joints from shingles above and below according to shingle manufacturer's written instructions.
- D. Conceal fasteners and expansion provisions where possible in exposed work and locate to minimize possibility of leakage. Cover and seal fasteners and anchors as required for a tight installation.

3.5 ACCESSORY INSTALLATION

- A. General: Install accessories with positive anchorage to building and weather tight mounting and provide for thermal expansion. Coordinate installation with flashings and other components.
 - 1. Install components required for a complete sheet metal roofing assembly including trim, copings, ridge closures, seam covers, flashings, sealants, gaskets, fillers, closure strips, and similar items.
 - 2. Comply with performance requirements, manufacturer's written

installation instructions, and SMACNA's "Architectural Sheet Metal Manual" and NRCA Waterproofing Manual. Provide concealed fasteners where possible, and set units true to line and level as indicated. Install work with laps, joints, and seams that will be permanently watertight and weather resistant.

B. Coordinate with installation of:

1. Cold Formed Metal Framing, as noted in Section 05
2. Sheet Metal Flashing and Trim, as noted in Section 07

C. Pipe Flashing: Form flashing around pipe penetration and metal roof panels. Fasten and seal to metal roof panels as recommended by manufacturer.

3.6 CLEANING AND PROTECTION

A. Remove temporary protective coverings and strippable films, if any, as sheet metal roofing is installed. On completion of sheet metal roofing installation, clean finished surfaces, including removing unused fasteners, metal filings, pop rivet stems, and pieces of flashing. Maintain in a clean

3.7 FIELD QUALITY CONTROL

- A. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect completed metal roof panel installation, including accessories. Report results in writing.
- B. Remove and replace applications of metal roof panels where inspections indicate that they do not comply with specified requirements.
- C. Additional inspections, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.

SECTION 7-075000 - MEMBRANE ROOFING

PART 1 GENERAL

1.01 SUMMARY

- A. Section Includes: Fiberglass-mat faced gypsum roof boards.

1.02 REFERENCES

- A. ASTM International (ASTM):

1. ASTM C472 Standard Test Methods for Physical Testing of Gypsum, Gypsum Plasters and Gypsum Concrete.
2. ASTM C473 Standard Test Methods for Physical Testing of Gypsum Panel Products.
3. ASTM C518 Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus.
4. ASTM C840 Standard Specification for Application and Finishing of Gypsum Board.
5. ASTM C1177 Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing.
6. ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials
7. ASTM E96 Standard Test Methods for Water Vapor Transmission of Materials.
8. ASTM E108 Standard Test Methods for Fire Tests of Roof Coverings
9. ASTM E661 Standard Test Method for Performance of Wood and Wood-Based Floor and Roof Sheathing Under Concentrated Static and Impact Loads.

1.03 SUBMITTALS

- A. Product Data: Manufacturer's specifications and installation instructions for each product specified.

1.04 QUALITY ASSURANCE

- A. Regulatory Requirements: Provide products that comply with the following limits for surface burning characteristics when tested per ASTM E84:
 1. Flame spread: 15, maximum.
 2. Smoke developed: 0.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Georgia-Pacific Gypsum LLC:
 1. Fiberglass Mat Faced Gypsum Roof Board:
 - a. DensDeck.

2.02 MATERIALS

- A. Fiberglass Mat Faced Gypsum Roof Board:
 - 1. Thickness: 1/4 inch.
 - 2. Width: 4 feet.
 - 3. Length: [4 feet] [8 feet].
 - 4. Weight: 1.2 lb/sq. ft.
 - 5. Surfacing: Fiberglass mat.
 - 6. Flexural Strength, Parallel (ASTM C473): 40 lb, minimum.
 - 7. Flute Span (ASTM E661): 2-5/8 inches.
 - 8. Permeance (ASTM E96): greater than 50 perms.
 - 9. R-Value (ASTM C518): 0.28.
 - 10. Water Absorption (ASTM C1177): Less than 10 percent of weight.
 - 11. Compressive Strength (Applicable Sections of ASTM C472): 900 pounds per square inch.
 - 12. Surface Water Absorption (ASTM C473): Not more than 2.5 grams.
 - 13. Acceptable Products:
 - a. DensDeck, Georgia-Pacific Gypsum
 - b. Or equal

PART 3 EXECUTION

3.01 INSTALLATION

- A. Adhered or Mechanically Attached: As recommended by roof system and/or adhesive manufacturer or as required by FM or UL guidelines for wind uplift resistance.
 - 1. Manufacturer's Recommendations:
 - a. Current "Product Catalog", Georgia-Pacific Gypsum.
 - b. Or approved equal

3.02 PROTECTION

- A. Protect gypsum board installations from damage and deterioration until the date of Substantial Completion.

SECTION 7-076200 - SHEET METAL FLASHING AND TRIM

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Flashings and counter flashings.
2. Sheet metal accessories.

B. Related Documents: The Contract Documents, as defined in Section 010100 - Summary of Work, apply to the Work of this Section. Additional requirements and information necessary to complete the Work of this Section may be found in other Documents.

1.2 REFERENCES

A. American Society for Testing and Materials (ASTM):

1. ASTM B209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.

B. Federal Specifications (FS):

2. FS TT-C-494 - Coating Compound, Bituminous, Solvent Type, Acid Resistant.

1.3 SUBMITTALS

A. Section 013000 - Submittal Procedures: Procedures for submittals.

1. Shop Drawings: Indicate material profile, jointing pattern, jointing details, fastening methods, flashings, terminations, and installation details.

1.4 QUALITY ASSURANCE

A. Qualifications:

1. Fabricator: Company experienced in manufacturing Products specified in the Work of this Section.
2. Installer: Company experienced in performing the Work of this Section.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Section 016100 - Product Requirements: Transport, handle, store, and protect Products.

B. Stack material to prevent twisting, bending, and abrasion, and to provide ventilation. Slope metal sheets to ensure drainage.

C. Prevent contact with materials which may cause discoloration or staining.

1.6 WARRANTY

A. Special Warranty on Finishes: Manufacturer's standard form in which manufacturer agrees to repair finish or replace sheet metal flashing and trim that shows evidence of deterioration of factory-applied finishes within specified warranty period.

1. Exposed Panel Finish: Deterioration includes, but is not limited to, the following:
 - a. Color fading more than 5 Hunting units when tested according to ASTM D 2244.
 - b. Chalking in excess of No.8 rating when tested according to ASTM D4214.

- c. Cracking, checking, peeling, or failure of paint to adhere to bare metal.
- 2. Finish Warranty Period: 10 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 SHEET METALS

- A. General: Protect mechanical and other finishes on exposed surfaces from damage by applying a strippable, temporary protective film before shipping.
- B. Metallic-Coated Steel Sheet: Restructure flatness steel sheet, metallic coated by the hot-dip process and pre-painted by the coil-coating process to comply with ASTM A 755/A 755M.
 - 1. Zinc-Coated (Galvanized) Steel Sheet: ASTM A 653/A 653M, G90 coating designation; structural quality.
 - 2. Aluminum-Zinc Alloy-Coated Steel Sheet: ASTM A 792/A 792M, Class AZ50 coating designation, Grade 40; structural quality.
 - 3. Surface: Smooth, flat.
 - 4. Exposed Coil-Coated Finish:
 - a. Kynar 500 (PVOF) by weight in color coat. Prepare, pretreat, to exposed metal surfaces to comply with coating
 - 5. Color: As selected by Architect from manufacturer's full range.
 - 6. Concealed Finish: Pre-treat with manufacturer's standard white or light-colored acrylic or polyester backer finish, consisting of prime coat and wash coat with a minimum total dry film thickness of 0.5 mil.

2.2 MISCELLANEOUS MATERIALS

- A. General: Provide materials and types of fasteners, solder, welding rods, protective coatings, separators, sealants, and other miscellaneous items as required for complete sheet metal flashing and trim installation and recommended by manufacturer of primary sheet metal or manufactured item unless otherwise indicated.
- B. Fasteners: Wood screws, annular threaded nails, self-taping screws, self-locking rivets and bolts, and other suitable fasteners designed to withstand design load and recommended by manufacturer of primary sheet metal or manufactured item.
 - 1. General: Blind fasteners or self-drilling screws, gasketed, with hex-washer head.
 - a. Exposed Fasteners: Heads matching color of sheet metal using plastic caps or factory-applied coating.
 - b. Blind Fasteners: High-strength aluminum or stainless-steel rivets suitable for metal being fastened.
 - c. Spikes and Ferrules: Same material as gutter; with spike. with ferrule matching internal gutter width.
 - 2. Fasteners for Zinc-Coated (Galvanized) or Aluminum-Zinc Alloy-Coated Steel Sheet: Hotdip galvanized steel according to ASTM A 153/A 153M or ASTM F 2329 or Series 300 stainless steel.
- C. Solder:
 - 1. For Zinc-Coated (Galvanized) Steel: ASTM B 32, Grade Sn50, 50 percent tin and 50 percent lead or Grade Sn60, 60 percent tin and 40

percent lead .

- D. Sealant Tape: Pressure sensitive, 100 percent solids, gray polyisobutylene compound sealant tape with release~paper backing. Provide permanently elastic, nonsag, nontoxic, nonstaining tape 1/2 inch wide and 1/8 inch thick.
- E. Elastomeric Sealant: ASTM C 920, elastomeric polyurethane or silicone polymer sealant; low modulus; of type, grade, class, and use classifications required to seal joints in sheet metal flashing and trim and remain watertight.
- F. Butyl Sealant: ASTM C 1311, single~component, solvent-release butyl rubber sealant; polyisobutylene plasticized; heavy bodied for hooked-type expansion joints with limited movement.
- G. Bituminous Coating: Cold~applied asphalt emulsion complying with ASTM D 1187.

2.3 MANUFACTURED SHEET METAL FLASHING TRIM

- A. Reglets: Units of Type, material, and profile indicated, formed to provide secure interlocking of separate reglet and counterflashing pieces, and compatible with flashing indicated with factory mitered and welded corners and junctions or [with interlocking counterflashing on exterior face, of same metal as reglet]
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Fry Regie! Corporation.
 - b. Heckmann Building Products Inc.
 - c. Hickman, W. P. Company.
 - d. National Sheet Metal Systems, Inc.
 - e. Or Approved Equal.
 - 2. Material: Galvanized steel, 0.022 inch thick.
 - 3. Surface-Mounted Type: Provide with slotted holes for fastening to substrate, with neoprene or other suitable weatherproofing washers, and with channel for sealant at top edge.

2.4 FABRICATION, GENERAL

- A. General: Custom fabricate sheet metal flashing and trim to comply with recommendations in SMACNA's "Architectural Sheet Metal Manual" that apply to design, dimensions, geometry, metal thickness, and other characteristics of item indicated. Fabricate items at the shop to greatest extent possible.
 - 1. Fabricate sheet metal flashing and trim in thickness or weight needed to comply with performance requirements, but not less than that specified for each application and metal.
 - 2. Obtain field measurements for accurate fit before shop fabrication.
 - 3. Form sheet metal flashing and trim without excessive oil canning, buckling, and tool marks and true to line and levels indicated, with exposed edges folded back to form hems.
 - 4. Conceal fasteners and expansion. Provisions where possible. Exposed fasteners are not allowed on faces exposed to view.
- B. Fabrication Tolerances: Fabricate sheet metal flashing and trim that is capable of installation to a tolerance of 1/4 inch in 20 feet on slope and location lines as indicated and within 1/8-inch offset of adjoining faces and of alignment of matching profiles.
- C. Sealed Joints: Form non-expansion but movable joints in metal to accommodate elastomeric sealant.
- D. Expansion Provisions: Where lapped expansion provisions cannot be used, form expansion joints of intermeshing hooked flanges, not less than 1 inch

deep, filled with butyl sealant concealed within joints.

- E. Fabricate cleats and attachment devices from same material as accessory being anchored or from compatible, noncorrosive metal.
- F. Fabricate cleats and attachment devices of sizes as recommended by SMACNA's "Architectural Sheet Metal Manual" for application, but not less than thickness of metal being secured.
- G. Seams: Fabricate nonmoving seams with flat-lock seams. Form seams and seal with elastomeric sealant unless otherwise recommended by sealant manufacturer for intended use. Rivet joints where necessary for strength.
- H. Do not use graphite pencils to mark metal surfaces.

2.5 FABRICATION

- A. Form sections true to shape, accurate in size, square, and free from distortion or defects.
- B. Fabricate cleats of same material as sheet, interlocking with sheet.
- C. Form pieces in longest possible lengths.
- D. Hem exposed edges on underside 1/2; miter and seam corners.
- E. Form material with flat lock seams, except where otherwise indicated. At moving joints, use sealed lapped, bayonet-type or interlocking hooked seams.
- F. Tin edges of copper sheet to be soldered. Solder shop formed metal joints. After soldering, remove flux. Wipe and wash solder joints clean. Weather seal joints.

2.6 FACTORY FINISHING

- A. PVDF (polyvinylidene fluoride) coating: Multiple coat, thermally cured, fluoropolymer system conforming to AAMA 605.2.
- B. Primer Coat: Finish concealed side of metal sheets with primer compatible with finish system, as recommended by finish system manufacturer.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verification of Conditions: Verify that field measurements, surfaces, substrates and conditions are as required, and ready to receive Work.
 - 1. Verify roofing termination and base flashings are in place, sealed, and secure.
- B. Report in writing to the City prevailing conditions that will adversely affect satisfactory execution of the Work of this Section. Do not proceed with Work until unsatisfactory conditions have been corrected and approved by the Engineer.
- C. By beginning Work, Contractor accepts conditions and assumes responsibility for correcting unsuitable conditions encountered at no additional cost to the City.

3.2 PREPARATION

- A. Install starter and edge strips, and cleats before starting installation.
- B. Install surface mounted reglets true to lines and levels. Seal top of reglets with sealant.
- C. Paint concealed metal surfaces with protective backing paint to a minimum dry film thickness of 15 mil.

3.3 INSTALLATION

- A. Secure flashings in place using concealed fasteners.
- B. Apply plastic cement compound between metal flashings and felt flashings.
- C. Fit flashings tight in place. Make corners square, surfaces true and straight in planes, and lines accurate to profiles.
- D. Seal metal joints watertight.

3.4 CLEANING AND PROTECTION

- A. Clean exposed metal surfaces of substances that interfere with uniform oxidation and weathering.
- B. Clean and neutralize flux materials. Clean off excess solder.
- C. Clean off excess sealants.
- D. Remove temporary protective coverings and strippable films as sheet metal flashing and trim are installed unless otherwise indicated in manufacturer's written installation instructions. On completion of installation, remove unused materials and clean finished surfaces. Maintain in a clean condition during construction.
- E. Replace sheet metal flashing and trim that have been damaged or that have deteriorated beyond successful repair by finish touchup of similar minor repair procedures.

SECTION 7-077233 - ROOF HATCHES

PART 1 - GENERAL

1.1 SUMMARY

- A. Work Included: Provide factory-fabricated roof hatches for ladder access.

1.2 SUBMITTALS

- A. Product Data: Submit manufacturer's product data.
- B. Shop Drawings: Submit shop drawings including profiles, accessories, location, adjacent construction interface, and dimensions.
- C. Warranty: Submit executed copy of manufacturer's standard warranty.

1.3 QUALITY ASSURANCE

- A. Manufacturer: A minimum of 5 years experience manufacturing similar products.
- B. Installer: A minimum of 2 years experience installing similar products.
- C. Manufacturer's Quality System: Registered to ISO 9001:2008 Quality Standards including in-house engineering for product design activities.

1.4 DELIVERY, STORAGE AND HANDLING

- A. Deliver products in manufacturer's original packaging. Store materials in a dry, protected, well-vented area. Inspect product upon receipt and report damaged material immediately to delivering carrier and note such damage on the carrier's freight bill of lading.

1.5 WARRANTY

- A. Manufacturer's Warranty: Provide manufacturer's standard warranty. Materials shall be free of defects in material and workmanship for a period of five years from the date of purchase. Should a part fail to function in normal use within this period, manufacturer shall furnish a new part at no charge.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. BASIS-OF-DESIGN MANUFACTURER: TYPE D ROOF HATCH BY THE BILCO COMPANY, P.O. BOX 1203, NEW HAVEN, CT 06505, 1-800-366-6530, FAX: 1-203-933-8478, WEB: WWW.BILCO.COM.

2.3 ROOF HATCH

- A. Furnish and install where indicated on plans metal roof hatch Type D, size width (12 FT) x length (12 FT). Length denotes hinge side. The roof hatch shall be double leaf. The roof hatch shall be pre-assembled from the manufacturer
- B. Performance characteristics:

1. Covers shall be reinforced to support a minimum live load of 40 psf (195kg/m²) with a maximum deflection of 1/150th of the span or 20 psf (97 kg/m²) wind uplift.
 2. Operation of the covers shall be smooth and easy with controlled operation throughout the entire arc of opening and closing.
 3. Operation of the covers shall not be affected by temperature.
 4. Entire hatch shall be weather tight with fully welded corner joints on covers and curb
- C. Covers: Shall be 11 gauge (2.3mm) aluminum with a 3" (76mm) beaded flange with formed reinforcing members. Covers shall have a heavy extruded EPDM rubber gasket that is bonded to the cover interior to assure a continuous seal when compressed to the top surface of the curb.
- D. Cover insulation: Shall be fiberglass of 1" (25mm) thickness, fully covered and protected by metal liner 18 gauge (1mm) aluminum.
- E. Curb: Shall be 12" (305mm) in height and of 11 gauge (2.3mm) aluminum. The curb shall be formed with a 3-1/2" (89mm) flange with 7/16" (11mm) holes provided for securing to the roof deck. The curb shall be equipped with an integral metal capflashing of the same gauge and material as the curb, fully welded at the corners, that features the Bil-Clip[®] flashing system, including stamped tabs, 6" (153mm) on center, to be bent inward to hold single ply roofing membrane securely in place.
- F. Curb insulation: Shall be rigid, high-density fiberboard of 1" (25mm) thickness on outside of curb.
- G. Lifting mechanisms: Manufacturer shall provide compression spring operators enclosed in telescopic tubes to provide, smooth, easy, and controlled cover operation throughout the entire arc of opening and closing. The upper tube shall be the outer tube to prevent accumulation of moisture, grit, and debris inside the lower tube assembly. The lower tube shall interlock with a flanged support shoe: welded to the curb assembly.
- H. Hardware
1. Heavy pintle hinges shall be provided
 2. Covers shall be equipped with an enclosed two point spring latch with interior and exterior turn handles
 3. Roof hatch shall be equipped with interior and exterior padlock hasps.
 4. The latch strike shall be a stamped component bolted to the curb assembly.
 5. Covers shall automatically lock in the open position with a rigid hold open arm equipped with a 1" (25mm) diameter red vinyl grip handle to permit easy release for closing.
 6. Compression spring tubes shall be an anti-corrosive composite material and all other hardware shall be zinc plated and chromate sealed. [For installation in highly corrosive environments or when prolonged exposure to hot water or steam is anticipated, specify Type 316 stainless steel hardware].
 7. Cover hardware shall be bolted into heavy gauge channel reinforcing welded to the underside of the cover and concealed within the insulation space.

- I. Finishes: Factory finish shall be powder coated. Color to be selected from manufacturers standards colors.

PART 3 - EXECUTION

1. 3.1 EXAMINATION

- A. Examine substrates and openings for compliance with requirements for installation tolerances and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Install products in strict accordance with manufacturer's instructions and approved submittals. Locate unit's level, plumb, and in proper alignment with adjacent work.

1. Test units for proper function and adjust until proper operation is achieved.
2. Repair finishes damaged during installation.
3. Restore finishes so no evidence remains of corrective work.

3.3 ADJUSTING AND CLEANING

- A. Clean exposed surfaces using methods acceptable to the manufacturer which will not damage finish.

SECTION 7-099100 - PAINTING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

Surface preparation and field application of paints and finishes for exterior surfaces.

Schedule of Items to be painted.

Exterior painting and finishing schedule.

B. Related Documents: The Contract Documents, as defined in Section 011000 - Summary of Work, apply to the Work of this Section. Additional requirements and information necessary to complete the Work of this Section may be found in other Documents.

C. Related Sections:

Section 055000 - Metal fabrications:

1.2 REFERENCES

A. American Society for Testing and Materials (ASTM):

1. ASTM E 84 - Test Method for Surface Burning Characteristics of Building Materials.

1.3 SUBMITTALS

A. Section 013000 - Submittal Procedures: Procedures for submittals.

1. Product Data: Submit product data for each type of paint specified.
 - a. Technical data sheets indicating manufacturer's catalog number, paint type description, and VOC content.
 - b. Painting Schedule listing surfaces to be painted with cross reference to the specific painting and finishing system and application. Identify each paint sample by manufacturer's catalog number and general classification.
2. Samples: Submit color brush-out sample for each paint color and sheen specified.
 - a. Three samples on 8 1/2 inch x 11 inch card stock for color and sheen verification.
 - b. Identify each sample by paint manufacturer, paint type, color, and sheen.
3. Assurance/Control Submittals:
 - a. Test Reports: Submit manufacturer's Material Safety Data Sheets (MSDS) for each paint type proposed.

1.4 QUALITY ASSURANCE

A. Regulatory Requirements:

1. Surface Burning Characteristics in Accordance with ASTM E-84 for Class I or A finish:
 - a. Flame Spread (Non-Combustible Surfaces): Less than 25.
 - b. Smoke Density (Non-Combustible Surfaces): Less than 450.
2. Provide paint and coating materials that conform to Federal, State, and Local restrictions for Volatile Organic Compounds (VOC) content.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Section 016100 – Delivery, Storage and Handling: Transport, handle, store, and protect products.
- B. Deliver paint materials in sealed original labeled containers, bearing manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and/or reducing.
- C. Store paint materials at minimum ambient temperature of 45 degrees F and a maximum of 90 degrees F, in ventilated area, and as required by manufacturer's published instructions.
- D. Prevent fire hazards and spontaneous combustion.

1.6 PROJECT CONDITIONS OR SITE CONDITIONS

A. Environmental Requirements:

1. Apply paint finishes only when moisture content of surfaces is within manufacturer's acceptable ranges for type of finish being applied.
2. Surface temperatures or surrounding air temperature to be above 40 degrees F before applying alkyd finishes; above 45 degrees F for interior latex, and 50 degrees F for exterior latex work. Minimum for varnish and transparent finishes is 65 degrees F.
3. Do not apply paint in areas where dust is being generated.
4. Provide lighting level in areas being painted of 80 foot candles measured mid-height at substrate surface.

1.7 MAINTENENCE

A. Section 017000 – Project Closeout: Procedures for closeout submittals.

B Extra Materials: To be furnished by the Contractor

1. Provide one gallon of each color, type and sheen to the City.
2. Label each container with color, type, texture, locations, in addition to the manufacturer's label.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Subject to compliance with project requirements, manufacturers offering specified items which may be incorporated in the work include the following:
 1. Dunn Edwards Paint
 2. Benjamin Moore and Company.
 3. Comex Group (Color Wheel/Frazee/Kwal/Parker).
 4. Duron Paints and Wallcoverings.

5. Devoe (ICI).
6. Glidden (ICI).
7. Pittsburgh Paints.
8. Sherwin-Williams Company.
9. Or approved equal.

2.2 MATERIAL

A. Paints

1. Manufacturer's "Best Grade" for each type specified.
2. Ready-mixed; pigments fully ground maintaining a soft paste consistency, capable of readily and uniformly dispersing to a complete homogeneous mixture.
3. Providing good flowing and brushing properties and be capable of drying or curing free of streaks or sags.
4. VOC limits (g/L) for exterior and interior paint applications:
 - a. Exterior - Steel-Shop Primed
 1. Top Coat – Non-Flat: 150
 2. Top Coat - Gloss: 250
 - b. Exterior- Steel - Galvanized
 1. Primer Coat: 200
 2. Top Coat - Non-Flat: 150
 3. Top Coat - Gloss: 250

B. Primers and Undercoaters: Manufactured by same manufacturer as finish coat materials.

C. Paint Accessory Materials: Linseed oil, shellac, turpentine and other materials not specifically indicated herein but required to achieve the finishes specified of high quality and approved manufacturer.

2.3 EXTERIOR PAINT SYSTEMS

A. Dunn Edwards:

1. Ferrous Metal: Semi-Gloss, Water Base, Alkyd Primer/Acrylic Latex.
 - a. Primer: Bloc-Rust BRPR00 Rust Preventive Primer MDF 2.0 mils.
 - b. Each Finish Coat: Aristoshield Water Base, Alkyd Semi-Gloss MDF 1.5 mils
2. Galvanized Metal: Semi-Gloss, Water Base, Alkyd Primer/Acrylic Latex.
 - a. Primer: Ultrashield ULGM00 Galvanized Metal Primer MDF 2.0 mils.
 - b. Each Finish Coat: Aristoshield Water Base, Alkyd Semi-Gloss MDF 1.5 mils

B. Benjamin Moore

1. Ferrous Metal: Semi-Gloss, Water Base, Alkyd Primer/Acrylic Latex.
 - a. Primer: M04 Acrylic Metal Primer; MDF 2.0 mils.
 - b. Each Finish Coat: M29 DTM Acrylic Semi-Gloss; MDF 2.0 mils.
2. Galvanized Metal: Semi-Gloss, Water Base, Alkyd Primer/Acrylic Latex.
 - a. Primer: M04 Acrylic Metal Primer; MDF 2.0 mils.
 - b. Each Finish Coat: M29 DTM Acrylic Semi-Gloss; MDF 2.0 mils.

C. Comex Group (Color Wheel/Frazee/Kwal/Parker)

1. Ferrous Metal: Semi-Gloss, Water Base, Alky Primer/Acrylic Latex.

- a. Primer: Ultra-Tech C309 Universal water-Based Metal Primer, MDF 1.96 mils.
 - b. Each Finish Coat: Ultra-Tech C218 (Southeast)/C229 (Southwest)/C206 (Midwest) Exterior 100% Acrylic Semi-Gloss Enamel, MDF 1.44 mils.
 - 2. Galvanized Metal: Semi-Gloss, Water Base, Alkyd Primer/Acrylic Latex.
 - a. Primer: Ultra-Tech C309 Universal water-Based Metal Primer, MDF 1.96 mils.
 - b. Each Finish Coat: Ultra-Tech C218 (Southeast)/C229 (Southwest)/C206 (Midwest) Exterior 100% Acrylic Semi-Gloss Enamel, MDF 1.44 mils.
- D. Duron:
 - 1. Ferrous Metal: Semi-Gloss, Water Base, Alkyd Primer/Acrylic Latex.
 - a. Primer: Dura Clad Universal Acrylic Metal Primer, 33-105; MDF 2.4 mils. (MPI xx, Approved)
 - b. Each Finish Coat: Dura Clad DTM Acrylic Coating Gloss 95-30X, MDF 3.0 mils. (MPI 110-G6)
 - 2. Galvanized Metal: Semi-Gloss, Water Base, Alkyd Primer/Acrylic Latex.
 - a. Primer: Dura Clad Acrylic Galvanized Metal Primer, 33-100; MDF 1.4 mils. (MPI 134, Approved)
 - b. Each Finish Coat: Dura Clad DTM Acrylic Coating Gloss 95-30X, MDF 3.0 mils. (MPI 110-G6)
- E. Devoe (ICI):
 - 1. Ferrous Metal: Semi-Gloss, Water Base, Alkyd Primer/Acrylic Latex.
 - a. Primer: Mirrolac W/B DTM Primer DP85XX.
 - b. Each Finish Coat: Mirrolac W/B Semi-Gloss Enamel DP83XX.
 - 2. Galvanized Metal: Semi-Gloss, Water Base, Alkyd Primer/Acrylic Latex.
 - a. Primer: Mirrolac W/B DTM Primer, DP85XX.
 - b. Each Finish Coat: Mirrolac W/B Semi-Gloss Enamel DP83XX.
 - 3. Exterior Latex Semi-gloss: Devoe Deluxe Professional Semi-gloss 2406
- F. Frazee:
 - 1. Ferrous Metal: Semi-Gloss, Water Base, Alkyd Primer/Acrylic Latex.
 - a. Primer: 661F774Metal Prime; MDF 1.7 mils.
 - b. Each Finish Coat: 128 Satin Glide Semi Gloss Acrylic, 03-Series; MDF 1.4 mils.
 - 2. Galvanized Metal: Semi-Gloss, Water Base, Alkyd Primer/Acrylic Latex.
 - a. Primer: 661F774 Metal Prime, 33-100; MDF 1.4 mils.
 - b. Each Finish Coat: 128 Satin Glide Semi Gloss Acrylic, 03-Series; MDF 1.4 mils.
- G. Pittsburgh:
 - 1. Ferrous Metal: Semi-Gloss, Water Base, Alkyd Primer/Acrylic Latex.
 - a. Primer: 90-709 DTM Interior/Exterior Primer; MDF 3.0 mils.
 - b. Each Finish Coat: 90-474 Acrylic Enamel Satin; MDF 3.0 mils.
 - 2. Galvanized Metal: Semi-Gloss, Water Base, Alkyd Primer/Acrylic Latex.
 - a. Primer: 90-709 DTM Interior/Exterior Primer; MDF 3.0 mils.
 - b. Each Finish Coat: 90-474 Acrylic Enamel Satin; MDF 3.0 mils.
- H. Sherwin-Williams:

1. Ferrous Metal: Semi-Gloss, Low VOC, Alkyd Primer/Acrylic Latex.
 - a. Primer: Pro-Cryl Universal Water-Based Primer, B66-310, MDF 3.0 mils.
 - b. Each Finish Coat: DTM Acrylic B66 Series; MDF 3.0 mils.
2. Galvanized Metal: Semi-Gloss, Water Base, Alkyd Primer/Acrylic Latex.
 - a. Primer: Pro-Cryl Universal Water Based Primer, B66-310, MDF 3.0 mils.
 - b. Each Finish Coat: DTM Acrylic B66 Series; MDF 3.0 mils.

I. Or approved equal.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verification of Conditions: Verify that field measurements, surfaces, substrates and conditions are as required, and ready to receive Work.
- B. Report in writing to the City prevailing conditions that will adversely affect satisfactory execution of the Work of this Section. Do not proceed with Work until unsatisfactory conditions have been corrected and approved by the Engineer.
- C. By beginning Work, Contractor accepts conditions and assumes responsibility for correcting unsuitable conditions encountered at no additional cost to the City.

3.2 PREPARATION

- A. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, and conditions otherwise detrimental to formation of a durable paint film.
- B. Perform preparation and cleaning procedures in accordance with paint manufacturer's published instructions for each particular substrate condition.
 1. Provide barrier coats over incompatible primers or remove and reprime as required.
 2. Remove hardware, hardware accessories, machined surfaces, plates, lighting fixtures, and similar items in place and not to be painted or provide surface applied protection prior to surface preparation and painting operations. Reinstall all removed items after completion of paint work.
 3. Clean surfaces to be painted before applying paint of surface treatment. Remove oil and grease prior to mechanical cleaning.
- C. Ferrous Metals: Clean ferrous surfaces that are not galvanized or shop-coated, of oil, grease, dirt, loose mill scale and other foreign substances by solvent or mechanical cleaning.
 1. Touch-up shop-applied prime coats, where damaged or bare. Clean and touch-up with same type shop primer.
- D. Galvanized Surfaces: Clean free of oil and surface contaminants with non-petroleum based solvent. Apply coat of etching primer if required by paint manufacturer.

3.3 APPLICATION

- A. Apply paint products in accordance with manufacturer's published instructions using application procedures approved for the particular application and substrate

to the specified Minimum Dry Film Thickness (MDF). Apply each coat to uniform finish.

- B. Apply each coat slightly darker than preceding coat unless otherwise approved by the Engineer. Sand lightly between coats to achieve specified finish.
- C. Do not apply finishes on surfaces that are not dry.
- D. Number of coats and film thickness required is same regardless of application method. Do not apply succeeding coats until the previous coat has cured as recommended by the manufacturer.
- E. Apply additional coats when undercoats, stains, or other conditions show through final coat until paint film is of uniform finish, color, and appearance. Surfaces, including edges, corners, crevices, welds, and exposed fasteners to receive minimum dry film thickness equivalent to that of flat surfaces.
- F. Minimum Coating Thickness: Apply materials at not less than manufacturer's recommended spreading rate. Provide minimum dry film thickness (MDF) of the entire coating system as indicated in Painting and Finishing Schedule at end of this Section.
- G. Prime Coats: Before application of finish coats, apply a prime coat of material as recommended by manufacturer to material scheduled to be painted or finished that has not been shop primed. Recoat primed and sealed surfaces where evidence of suction spots or unsealed areas in first coat appears, to assure a finish coat with no burn through or other defects due to insufficient sealing.
- H. Pigmented (Opaque) Finishes: Completely cover to provide an opaque, smooth surface of uniform finish, color, appearance, and coverage. Cloudiness, spotting, laps, brush marks, runs, sags, or other surface imperfections will not be acceptable.
- I. Completed Work: Match the City's approved field samples for color and sheen.

3.4 FIELD QUALITY CONTROL

- A. Inspect painting and coating application for scheduled material, color, sheen, specified thickness (MDF), and coverage.

3.5 Cleaning

- A. As work proceeds and upon completion, promptly remove paint where spilled, splashed, or spattered.
- B. During progress of work keep premises free from any unnecessary accumulation of tools, equipment, surplus materials, and debris.
- C. Collect waste, cloths, and material which may constitute a fire hazard, place in closed metal containers and remove daily from site.
- D. Upon completion of work leave premises neat and clean.

3.6 PROTECTION

- A. Protect other surfaces from paint and damage. Repair damage as a result of inadequate or unsuitable protection.

3.7 COLOR SCHEDULE – See Drawings

3.8 SCHEDULE OF ITEMS TO BE PAINTED

- A. Painted finishes shall be provided for, but not limited to, the following items.

- 1. Exterior: (Entire project is considered as exterior) - All exterior surfaces including, but not limited to:
- 2. Metal gates and frames.
- 3. Metal opening frames and trim.
- 4. Metal flashing (if exposed from ground level) Structural Steel Post and Beams

- B. Do not paint the following items:

- 1. Pre-finished items:
 - a. Pre-finished items, such as metal roofing.
 - b. Finish hardware.

3.9 PAINTING AND FINISHING SCHEDULE

- 1. Ferrous Metals
 - a. Touch up Prime Coat.
 - b. Two tinted coats of Alkyd Enamel Semi-Gloss.
- 2. Exterior Paint Systems:
 - a. Galvanized Metal:
 - 1) Touch up Prime Coat.
 - 2) Two tinted coats Exterior Alkyd Enamel Semi-Gloss Enamel.
 - b. Ferrous Metals:
 - 1) Touch up Prime Coat.
 - 2) Two tinted coats Exterior Alkyd Enamel Semi-Gloss Enamel.

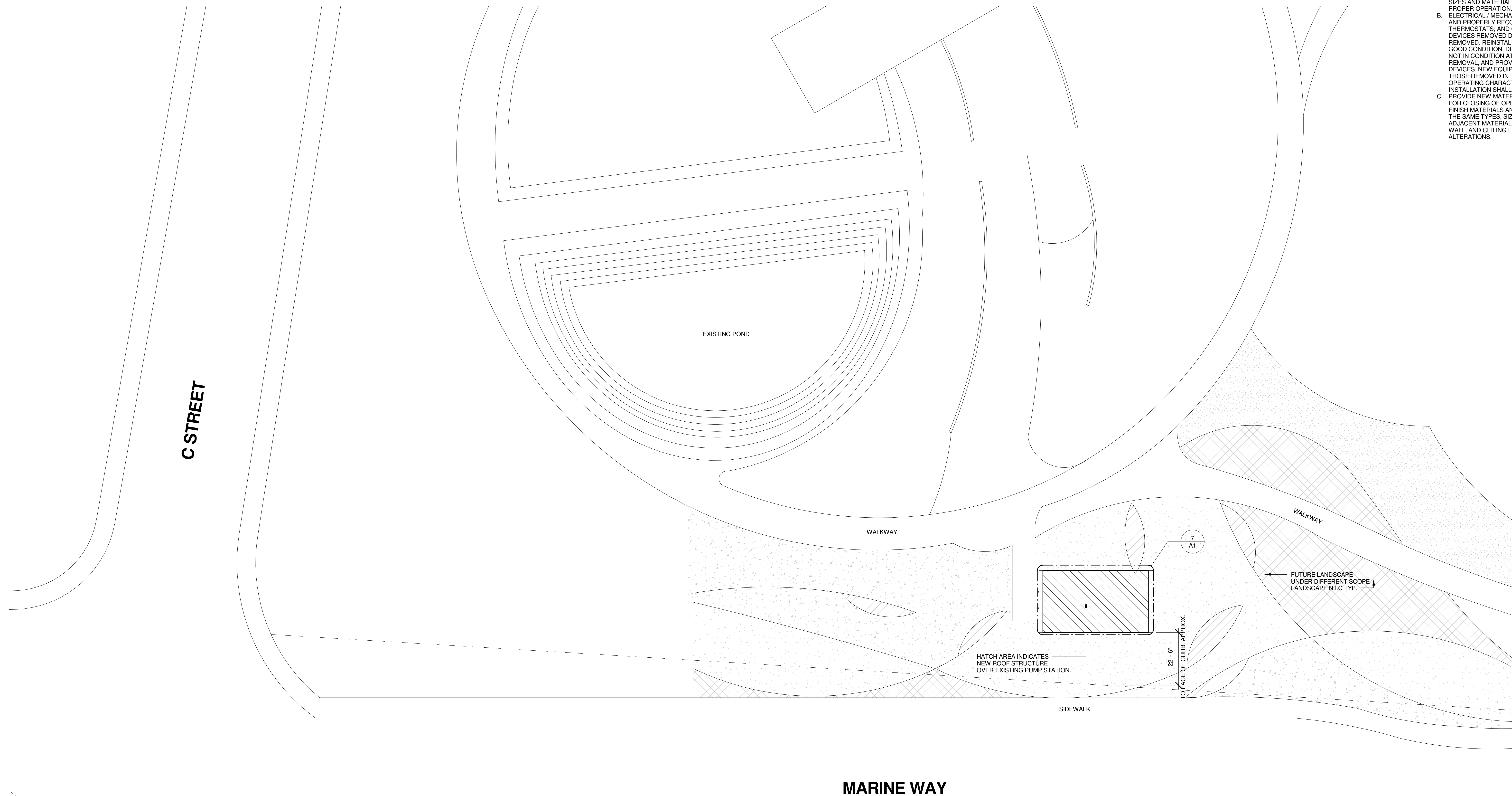
**APPENDIX A
PROJECT PLANS**

DEMOLITION NOTES

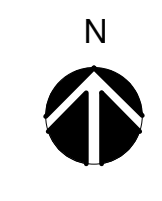
1. CAP ALL EXISTING UTILITIES & PREPARE FOR NEW WORK AS REQUIRED.
2. PROVIDE ALL LABOR, MATERIAL, AND EQUIPMENT NECESSARY TO COMPLETE DEMOLITION WORK AS INDICATED ON DRAWINGS AND SPECIFICATIONS AND AS REQUIRED TO ACCOMMODATE NEW CONSTRUCTION.
3. PATCH, REPAIR, AND RESTORE ALL AREAS DAMAGED BY THE CONSTRUCTION WORK AND DEMOLITION TO MATCH CONDITION OF ADJACENT UNDISTURBED SURFACES.
4. PROVIDE ALL LABOR, MATERIAL, AND EQUIPMENT NECESSARY TO COMPLETE DEMOLITION WORK AS INDICATED ON DWGS AND SPECIFICATIONS AND AS REQUIRED TO ACCOMMODATE NEW CONSTRUCTION.
5. REMOVE FROM THE SITE ALL MATERIAL RESULTING FROM THE DEMOLITION WORK IN SUCH A MANNER AS TO AVOID CREATING A NUISANCE. DISPOSE OF ALL MATERIALS FROM THE SITE ON A DAILY BASIS AT NO ADDITIONAL COST TO THE OWNER.
6. DISPOSE OF ALL MATERIAL RESULTING FROM THE DEMOLITION WORK IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS, INCLUDING THOSE GOVERNING NOISE, DUST, AND DIRT CONTROL; DISPOSAL OF HAZARDOUS MATERIALS; AND REQUIREMENTS OF THE LOCAL AIR QUALITY MANAGEMENT DISTRICT.

RENOVATION NOTES

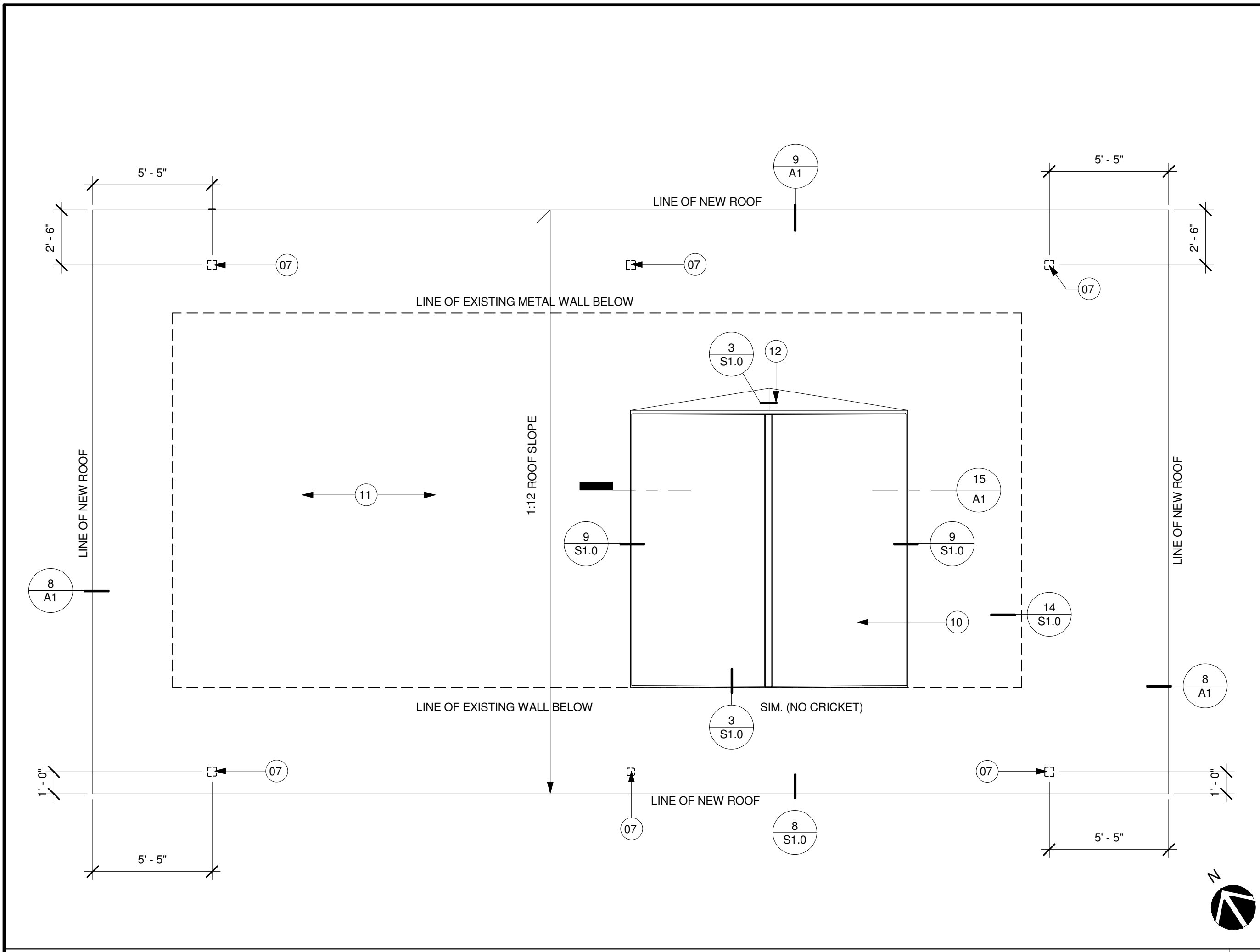
- A. MAINTAIN AND EXTEND EXISTING PLUMBING SUPPLY, DRAIN, AND VENT PIPING TO ACCOMMODATE NEW FIXTURE LAYOUT. PROVIDE PIPE OF SIZES AND MATERIALS TO COMPLY WITH CODE AS REQUIRED FOR PROPER OPERATION. CAP AND REMOVE ALL ABANDONED PIPING.
- B. ELECTRICAL, MECHANICAL EQUIPMENT AND DEVICES. REINSTALL AND PROPERLY RECONNECT EXISTING DUCTWORK, SWITCHES, THERMOSTATS, AND OTHER EXISTING ELEC./MECH. EQUIPMENT AND DEVICES REMOVED DURING THE WORK BUT NOT INDICATED TO BE REMOVED. REINSTALL ONLY EQUIPMENT AND DEVICES THAT ARE IN GOOD CONDITION. DISCARD EQUIPMENT AND DEVICES THAT ARE NOT IN CONDITION AT LEAST AS GOOD AS EXISTED BEFORE REMOVAL, AND PROVIDE NEW EQUIVALENT EQUIPMENT AND DEVICES. NEW EQUIPMENT AND DEVICES SHALL EXACTLY MATCH THOSE REMOVED IN TYPE, SIZE, FINISH, CONFIGURATION, AND OPERATING CHARACTERISTICS, UNLESS NOTED OTHERWISE. ALL INSTALLATION SHALL MEET CURRENT BUILDING CODE.
- C. PROVIDE NEW MATERIALS TO MATCH EXISTING UNDISTURBED WORK FOR CLOSING OF OPENINGS, REPAIRS, AND RENOVATION. NEW FINISH MATERIALS AND SUBSTRATES TO MATCH EXISTING SHALL BE THE SAME TYPES, SIZES, QUALITIES, AND COLORS AS EXISTING ADJACENT MATERIAL. REPAIR ALL DAMAGED OR DEFACED FLOOR, WALL, AND CEILING FINISHES ASSOCIATED WITH THESE ALTERATIONS.



NOTE: PROTECTION OF EXISTING WALKWAYS, SIDEWALKS, AND LANDSCAPE SHALL BE PROVIDED BY THE CONTRACTOR AND LOSS OR DAMAGE SHALL BE REPAID OR REPLACED WITHOUT EXPENSE TO THE OWNER. THE GENERAL CONTRACTOR AND ALL SUB-CONTRACTORS SHALL GUARANTEE ALL LABOR AND MATERIAL OR APPLIANCES AGAINST ORIGINAL OR DEVELOPED DEFECTS CAUSED BY FAULTY WORKMANSHIP, MATERIALS, OR APPLIANCES FOR ONE (1) YEAR AFTER ISSURANCE OF NOTICE OF COMPLETION.

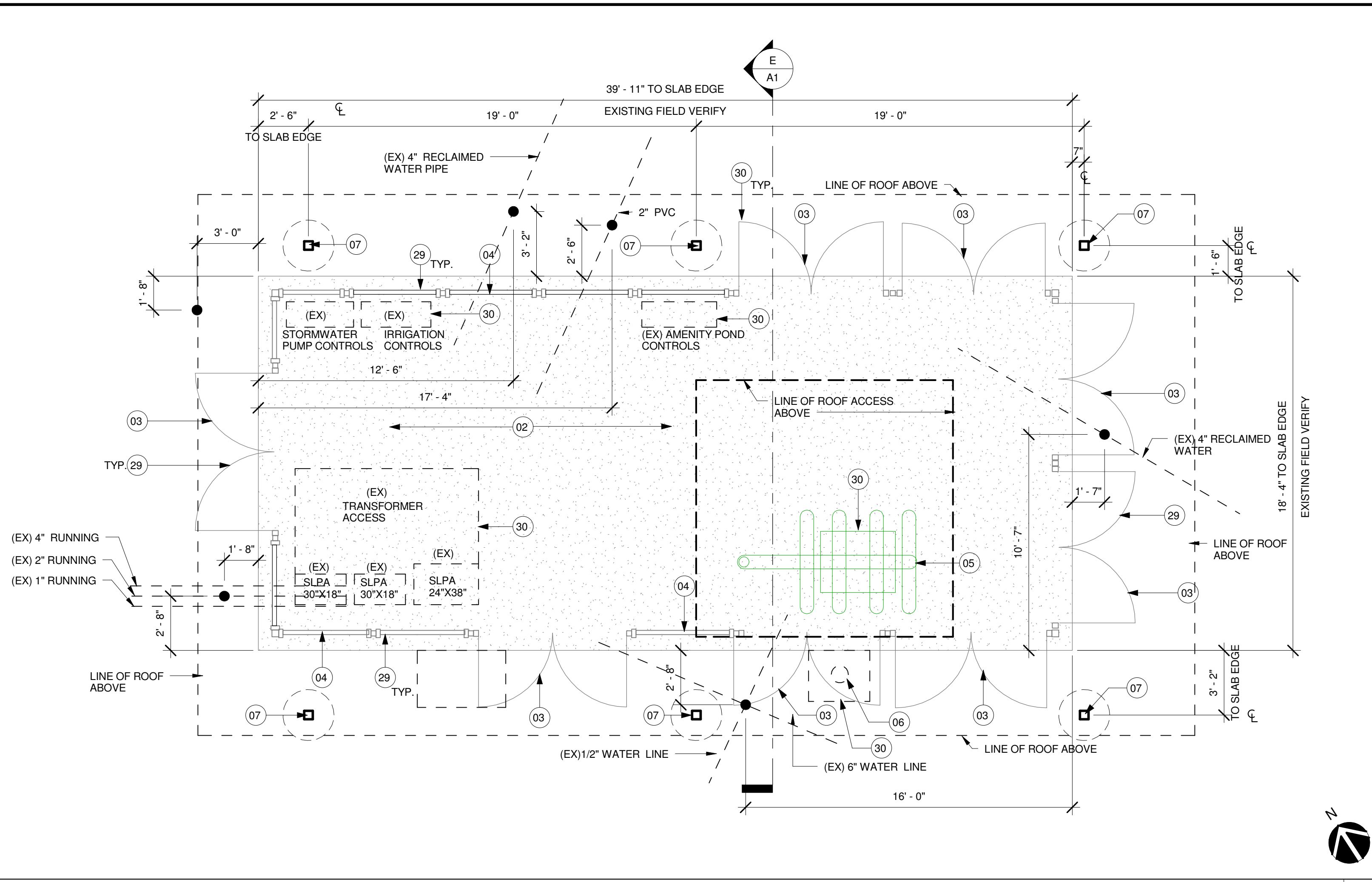


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| DESIGNER: MA | DRAWN: ZJ | CHECKED: JS | DATE: 5-31-17 | SCALE: AS NOTED | NO. | DATE |
| DEVELOPER: | SOILS ENGINEER: | REPORT # | ARCHITECT: | LICENSE NO. / EXP. DATE | REVISIONS | DATE |
| | | | | | | |
| <p>SOUTH LAWN PUMP STATION ENCLOSURE</p> <p>CITY OF IRVINE COMMUNITY DEVELOPMENT DEPARTMENT</p> | | | | | | |
| PLAN CHECK: | | | | | | |
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ROOF PLAN

SCALE: 1/4" = 1'-0" **28**



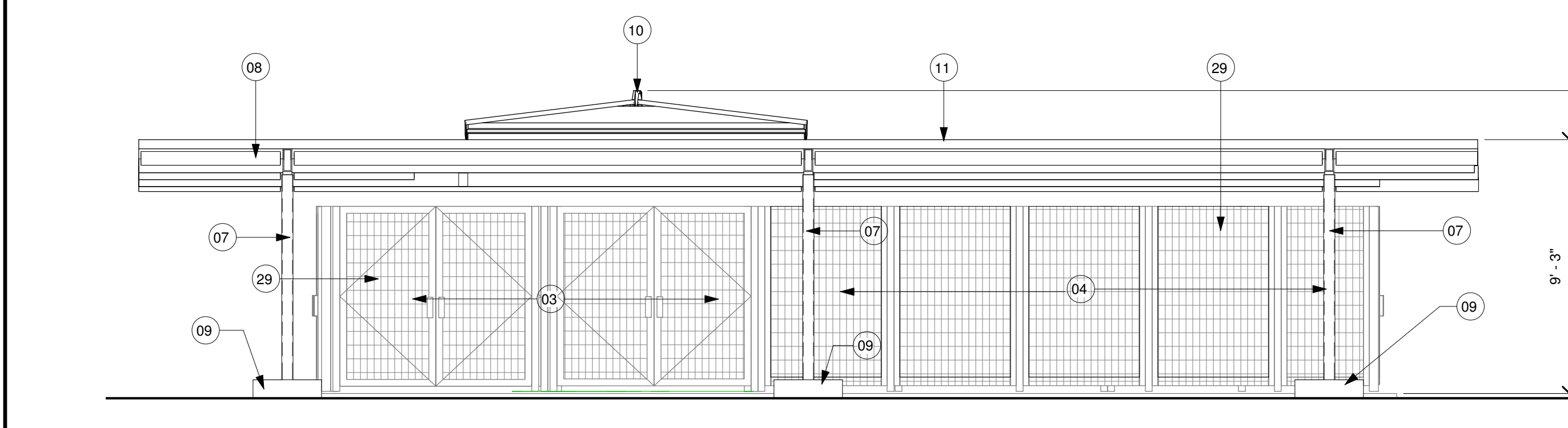
FLOOR PLAN

SCALE: 1/4" = 1'-0" **7**

- RENOVATION KEYNOTES**
- 02 EXISTING CONCRETE SLAB TO REMAIN. PROTECT IN PLACE.
 - 03 EXISTING METAL GATES TO BE PRIMED AND PAINTED DUNN EDWARDS DEC 756 WEATHERED BROWN. PROTECT IN PLACE.
 - 04 EXISTING METAL MESH WALLS TO BE PRIMED AND PAINTED DUNN EDWARDS DEC 756 WEATHERED BROWN. PROTECT IN PLACE.
 - 05 EXISTING PUMP EQUIPMENT TO REMAIN. PROTECT IN PLACE.
 - 06 EXISTING DRAIN TO REMAIN. PROTECT IN PLACE.
 - 07 NEW 4" HSS POST, POST SHALL BE GALVANIZED EPOXY PRIMED AND PAINTED DUNN EDWARDS DEC 756 WEATHERED BROWN.
 - 08 NEW METAL FRAMING SHALL BE GALVANIZED, PRIMED AND PAINTED DUNN EDWARDS DEC 756 WEATHERED BROWN.
 - 09 NEW CONCRETE FOOTING TO BE FORMED 8" ABOVE FINISH GRADE.
 - 10 NEW 12 X 12 EQUIPMENT ROOF ACCESS HATCH PER BILCO TYPE "D" MANUFACTURE SPECS.
 - 11 NEW 2" FIELD - LOK STANDING SEAM ROOF PANEL TO BE POWDER COATED 01 CLASSIC BRONZE PER ATAS INTERNATIONAL MANUFACTURE SPECIFICATIONS OR APPROVED EQUAL.
 - 12 NEW BUILT-UP SHEET METAL CRICKET TO MATCH ROOFING.
 - 29 REMOVE EXISTING BLACK SCREEN AND PREPARE AREA FOR NEW WORK.
 - 30 CONTRACTOR TO PROTECT ALL EXISTING EQUIPMENT AND UTILITIES DURING CONSTRUCTION. ANY DAMAGE TO EQUIPMENT WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
 - 31 NEW SURFACE MOUNTED LED LIGHT FIXTURE. SEE ELECTRICAL DRAWINGS FOR MORE INFORMATION.
- GENERAL NOTES**
1. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS, DIMENSIONS AND ELEVATIONS BEFORE PROCEEDING WITH THE WORK.
 2. DO NOT SCALE DRAWINGS.
 3. ALL WORK CONSTRUCTION AND MATERIALS SHALL COMPLY WITH ALL PROVISIONS OF THE BUILDING CODE AND WITH OTHER RULES, REGULATIONS AND ORDINANCES GOVERNING THE PLACE OF BUILDING. BUILDING CODE REQUIREMENTS TAKE PRECEDENCE OVER THE DRAWINGS, AND SHALL BE THE RESPONSIBILITY OF ANYONE SUPPLYING LABOR OR MATERIALS OR BOTH TO BRING TO THE ARCHITECT'S ATTENTION ANY DISCREPANCIES OR CONFLICTS BETWEEN THE REQUIREMENTS OF THE CODE AND THE DRAWINGS.
 4. DISCREPANCIES IN THE DRAWINGS OR BETWEEN THE DRAWINGS AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE ARCHITECT. CORRECTED DRAWINGS OR INSTRUCTIONS SHALL BE ISSUED BY THE ARCHITECT PRIOR TO INSTALLATION OF ANY WORK.
 5. THE WORK ASSOCIATED WITH THIS FACILITY SHALL ENSURE THAT IT IS ACCESSIBLE TO AND USABLE BY PERSONS WITH DISABILITIES. IN ACCORDANCE WITH C.C.R. TITLE 24 AND AS REQUIRED BY THE C.C.R. 2013 EDITION IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHETHER SHOWN HEREON OR NOT AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR ALL EXPENSE OF REPAIR OR REPLACEMENT IN CONJUNCTION WITH DAMAGE FROM NOT LOCATING SAID UTILITY.
 6. GENERAL CONTRACTOR TO BE RESPONSIBLE FOR ALL DEMOLITION IN PREPARATION FOR NEW WORK.
 7. PATCH, RESTORE, AND REFINISH ALL AREAS DAMAGED BY THE CONSTRUCTION WORK AND DEMOLITION.
 8. REPAIR ALL TRANSITIONAL AREAS BETWEEN EXISTING AND NEW WORK DUE TO DEMOLITION.
 9. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL GOVERNING BLDG. CODES AND CITY ORDINANCES.

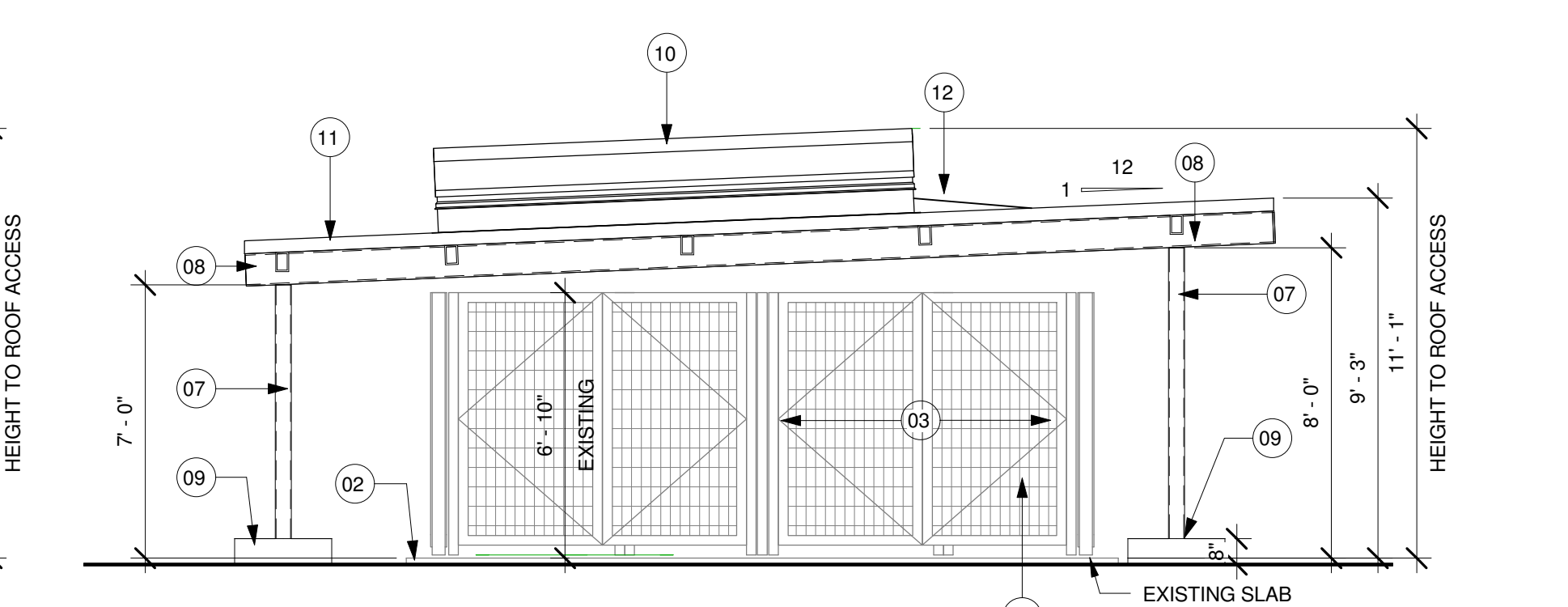
FINISH MATERIAL NOTES

1. UNLESS SPECIFICALLY INDICATED OTHERWISE, PRODUCTS SCHEDULED INDICATE QUALITY STANDARD REQUIRED, BUT ARE NOT INTENDED TO LIMIT COMPETITION. LISTED COLORS AND FINISHES ESTABLISH COLOR AND FINISH REQUIRED, EXCEPT FOR PRODUCTS NOTED AS "OWNER'S STANDARD." APPROVED EQUAL PRODUCTS MAY BE SUBMITTED FOR OWNER REPRESENTATIVE'S REVIEW AND APPROVAL.
2. COLORS AND FINISHES SHALL MATCH SAMPLES AVAILABLE FOR VIEW BY CONTRACTOR AT OWNER REPRESENTATIVE'S PROJECT SITE OFFICE. ARCHITECT IS SOLE JUDGE OF COLOR AND FINISH MATCH.
3. WHERE "MATCH EXISTING" IS INDICATED, PROVIDE NEW MATERIAL AS NECESSARY TO PATCH OR EXTEND EXISTING MATERIAL. UNLESS AN EXCEPTION IS SPECIFICALLY NOTED, NEW MATERIAL SHALL MATCH EXISTING IN TYPE, MATERIAL, SIZE, THICKNESS, COLOR, AND PATTERN.
4. WHERE CONTRACT DOCUMENTS REQUIRE COLOR MATCH, BUT EXISTING COLOR NAME IS UNKNOWN, MATCH COLORS AS NEARLY AS PRACTICABLE BY FIELD COMPARISON. ARCHITECT IS SOLE JUDGE OF COLOR MATCH ACCURACY. MISMATCHED COLORS WHERE MATCH IS REQUIRED WILL BE REJECTED.



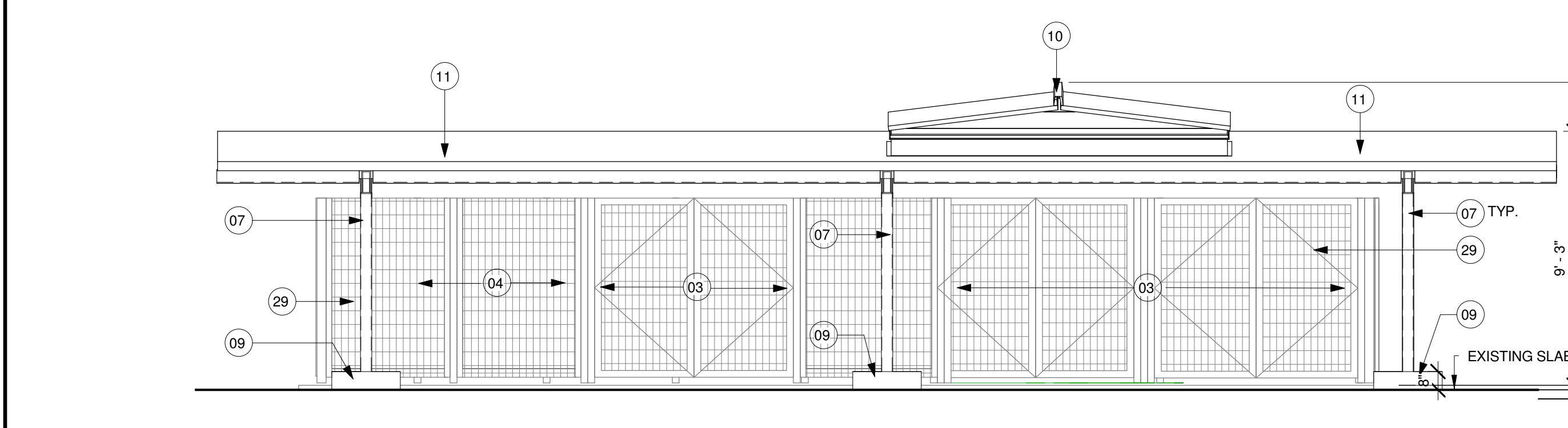
A NORTH ELEVATION

SCALE: 1/4" = 1'-0"



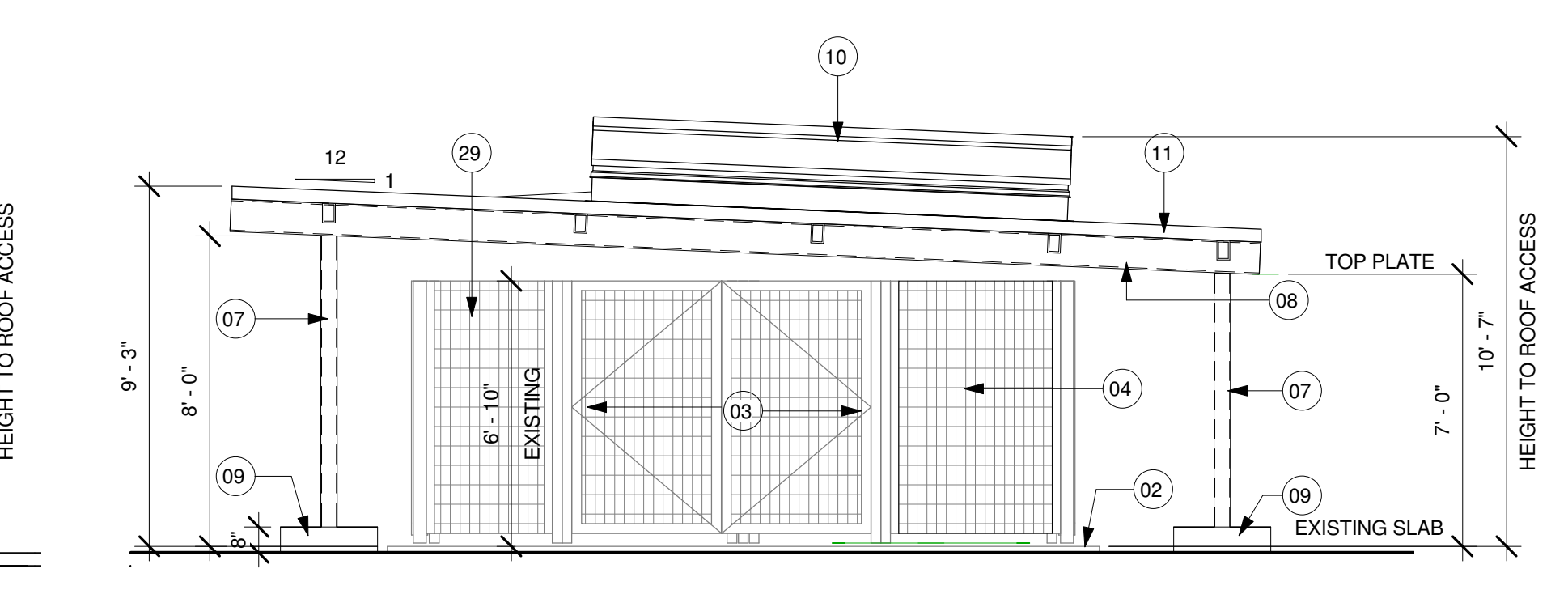
B EAST ELEVATION

SCALE: 1/4" = 1'-0"



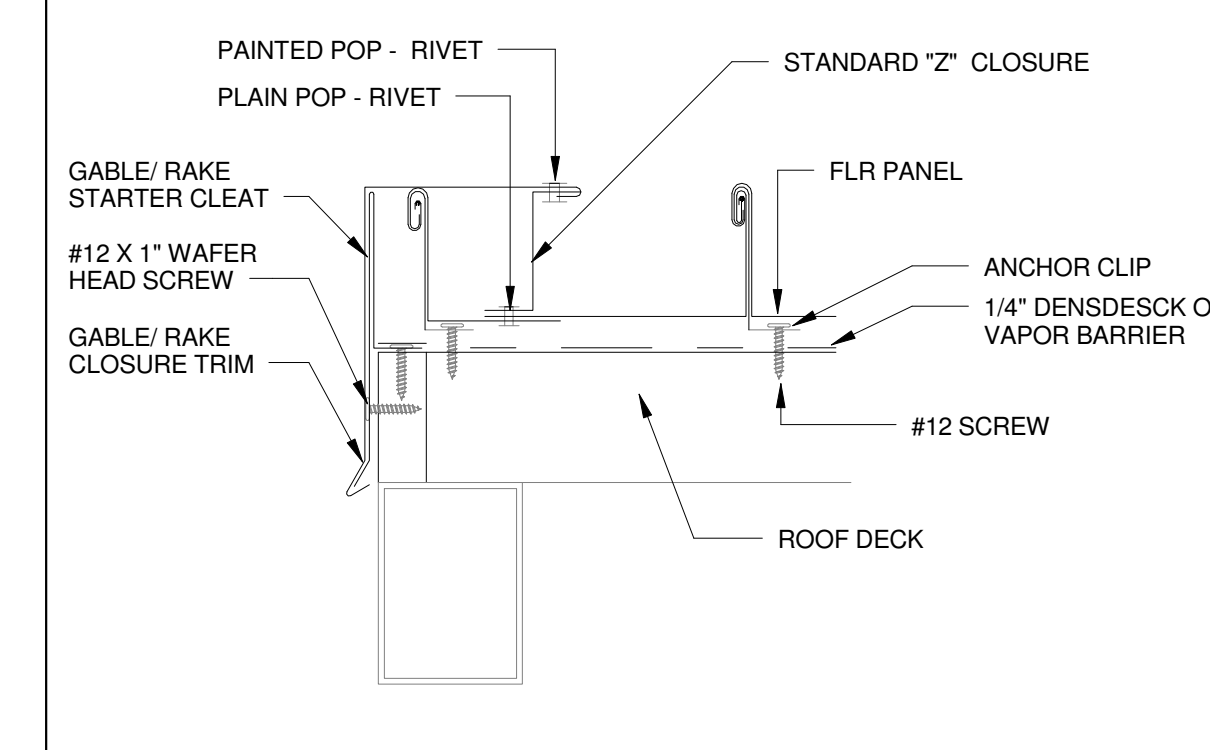
C SOUTH ELEVATION

SCALE: 1/4" = 1'-0"



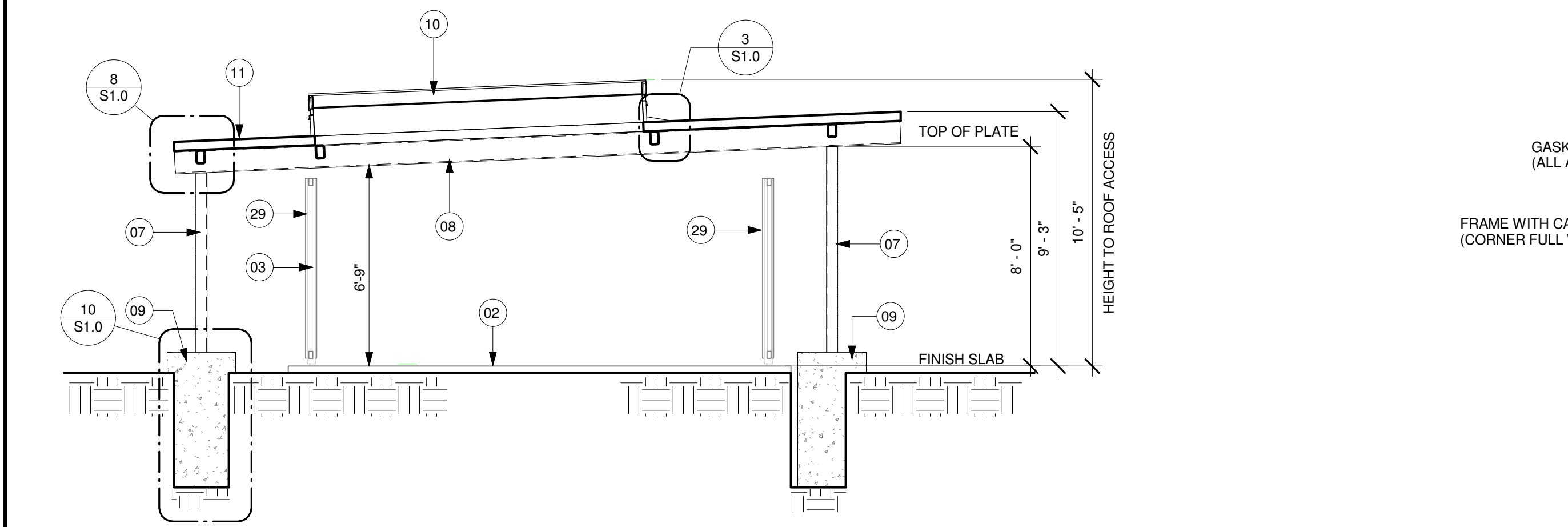
D WEST ELEVATION

SCALE: 1/4" = 1'-0"



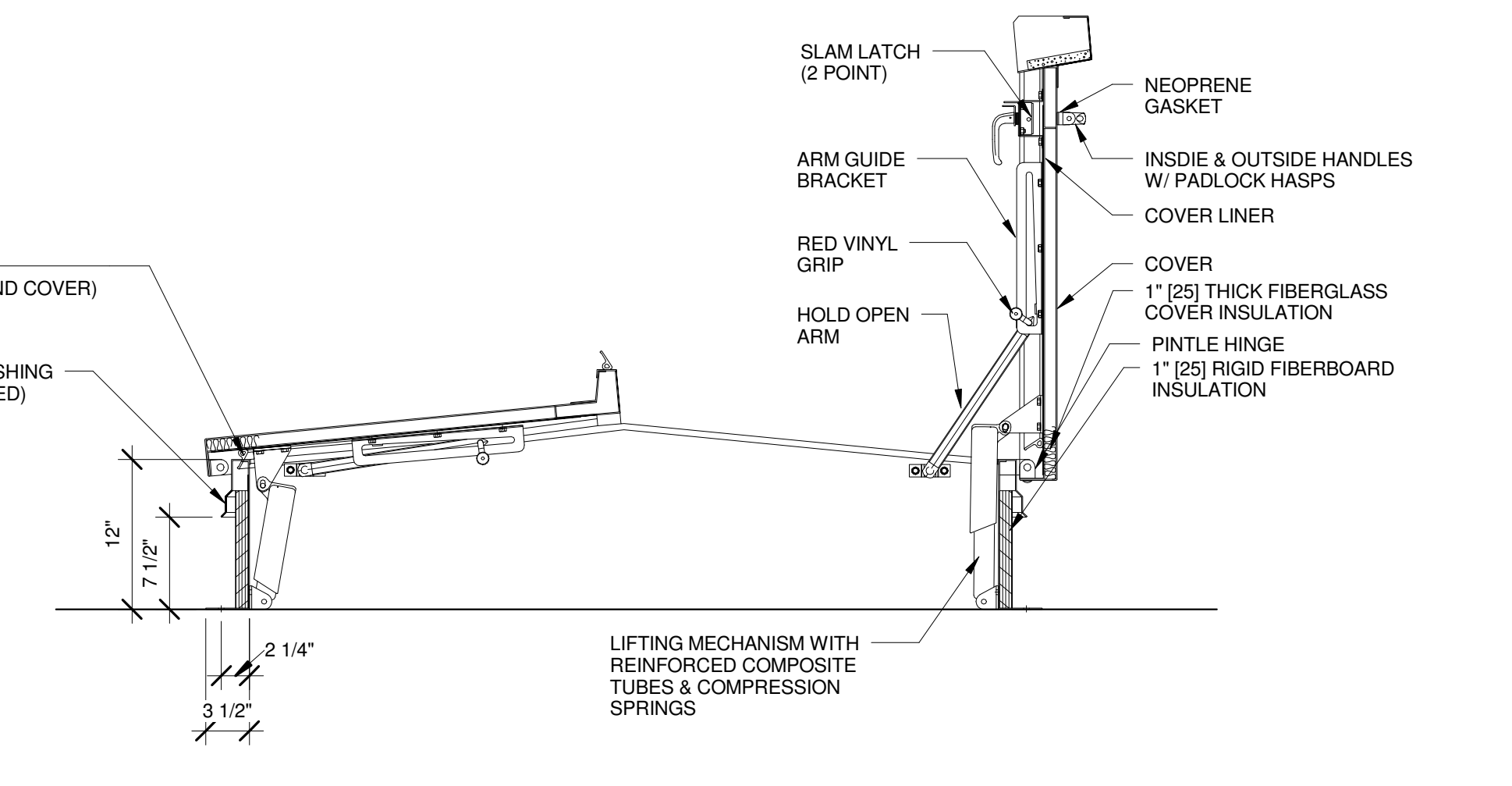
ROOF RAKE DETAIL 1

SCALE: 3" = 1'-0" **8**



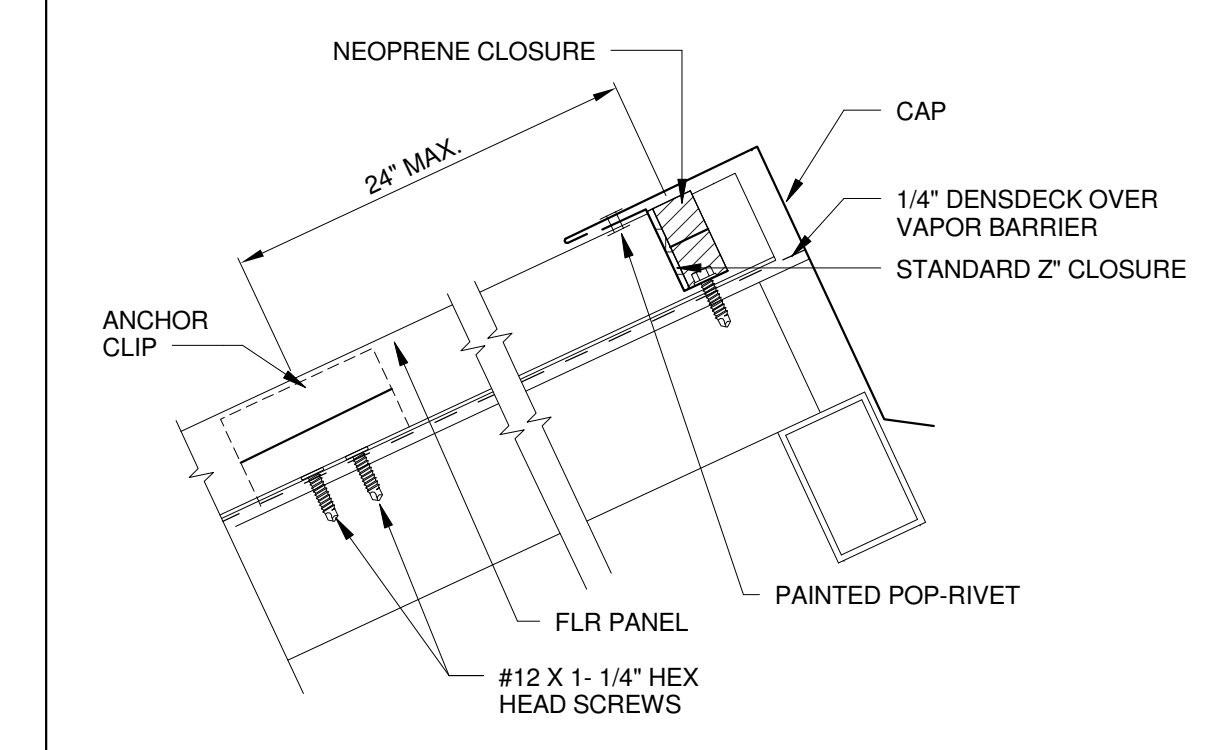
E SECTION BB

SCALE: 1/4" = 1'-0"



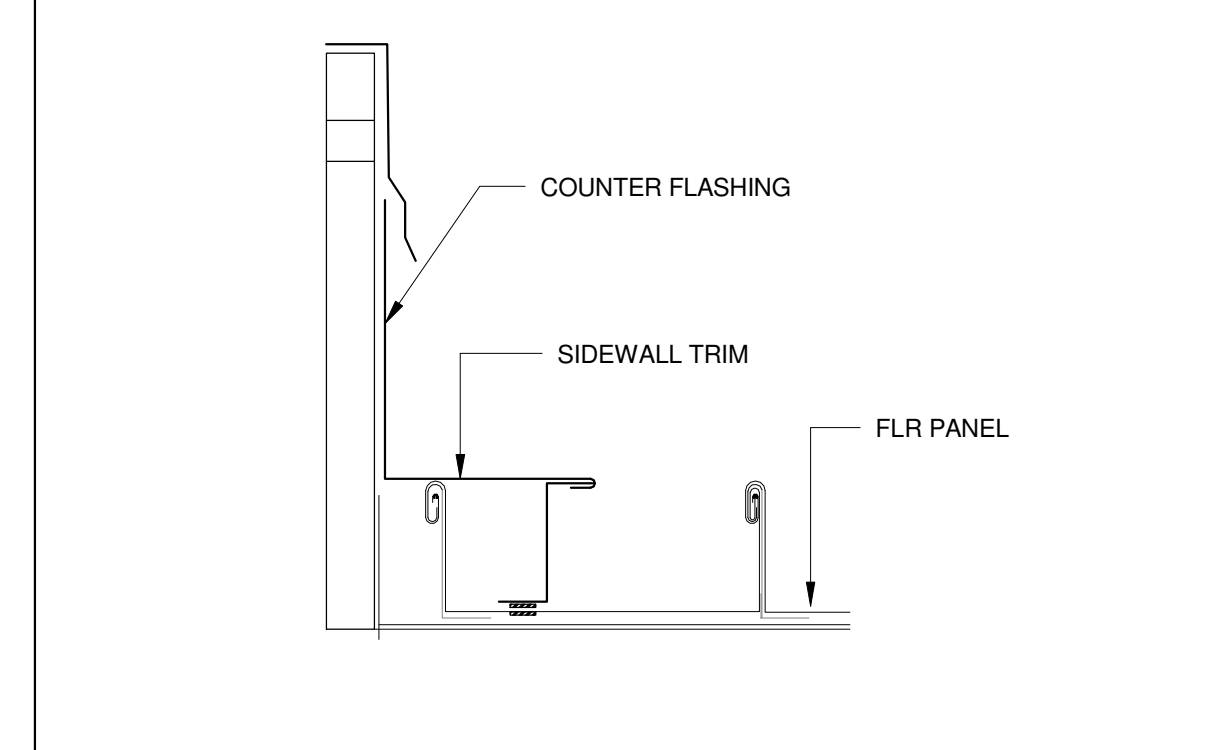
15 ROOF HATCH DETAIL

SCALE: 1" = 1'-0"



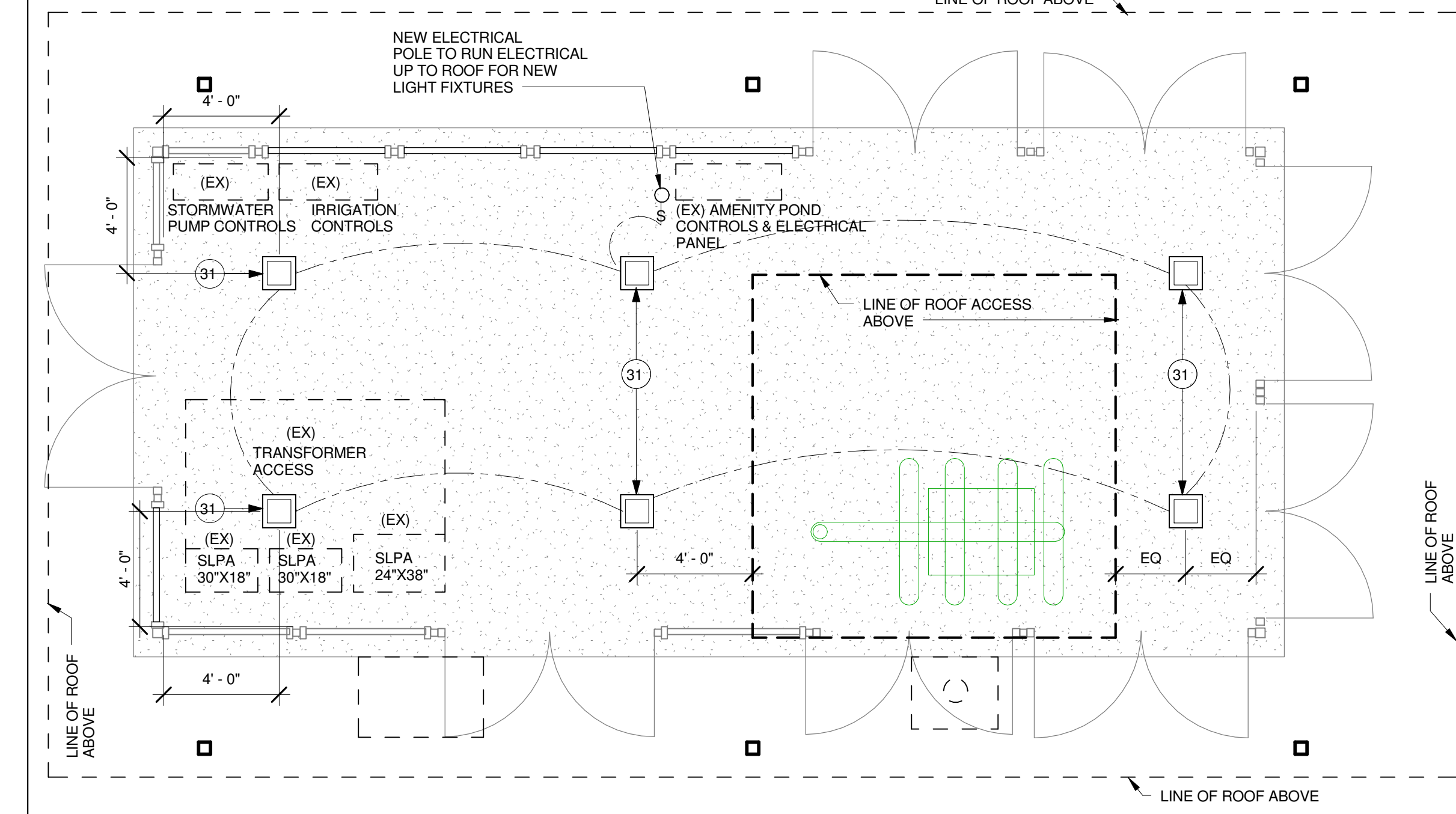
EAVE @ HIGH EDGE

SCALE: 3" = 1'-0" **9**



ROOF @ ROOF HATCH

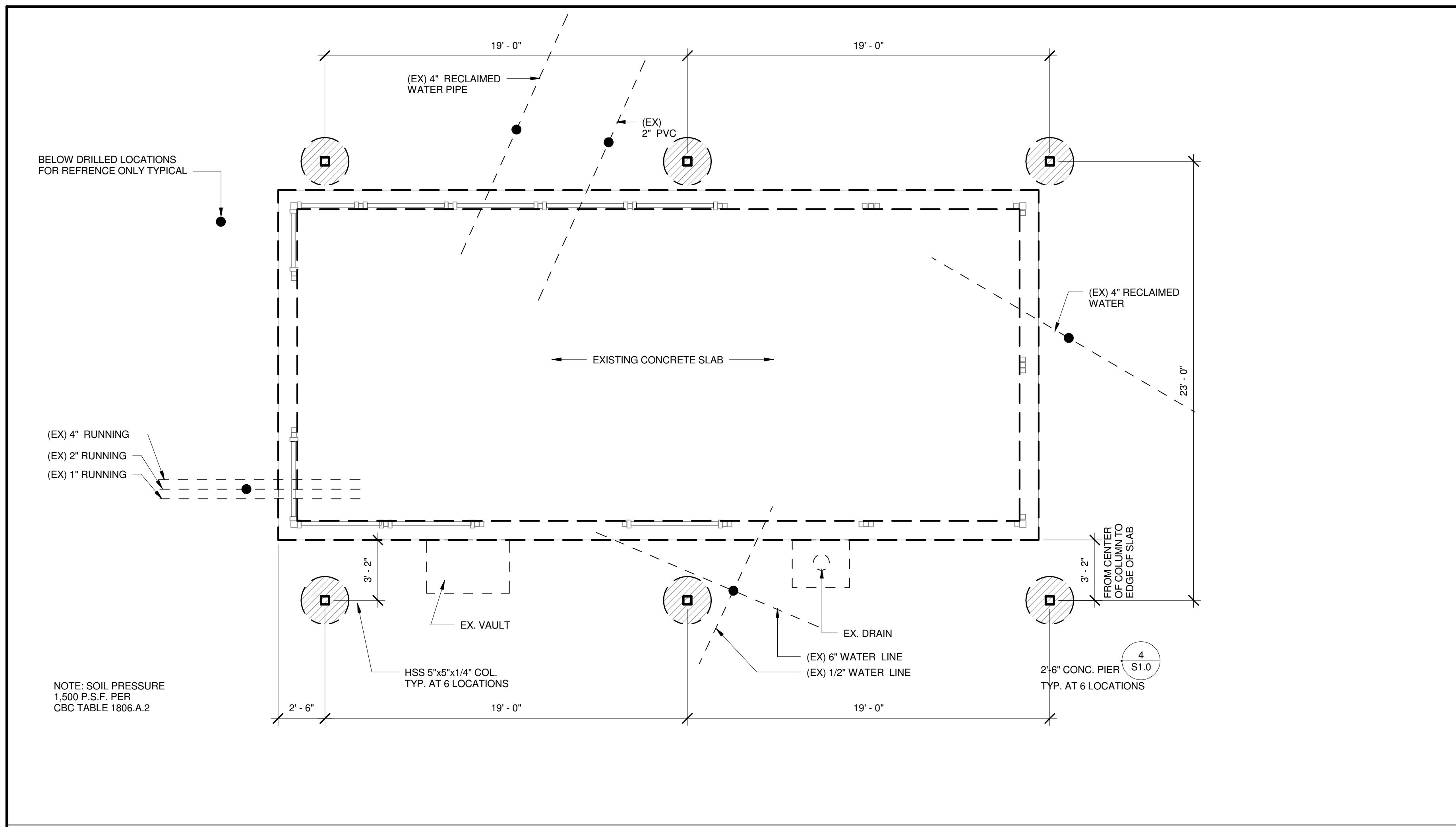
SCALE: 3" = 1'-0" **4**



ELECTRICAL PLAN

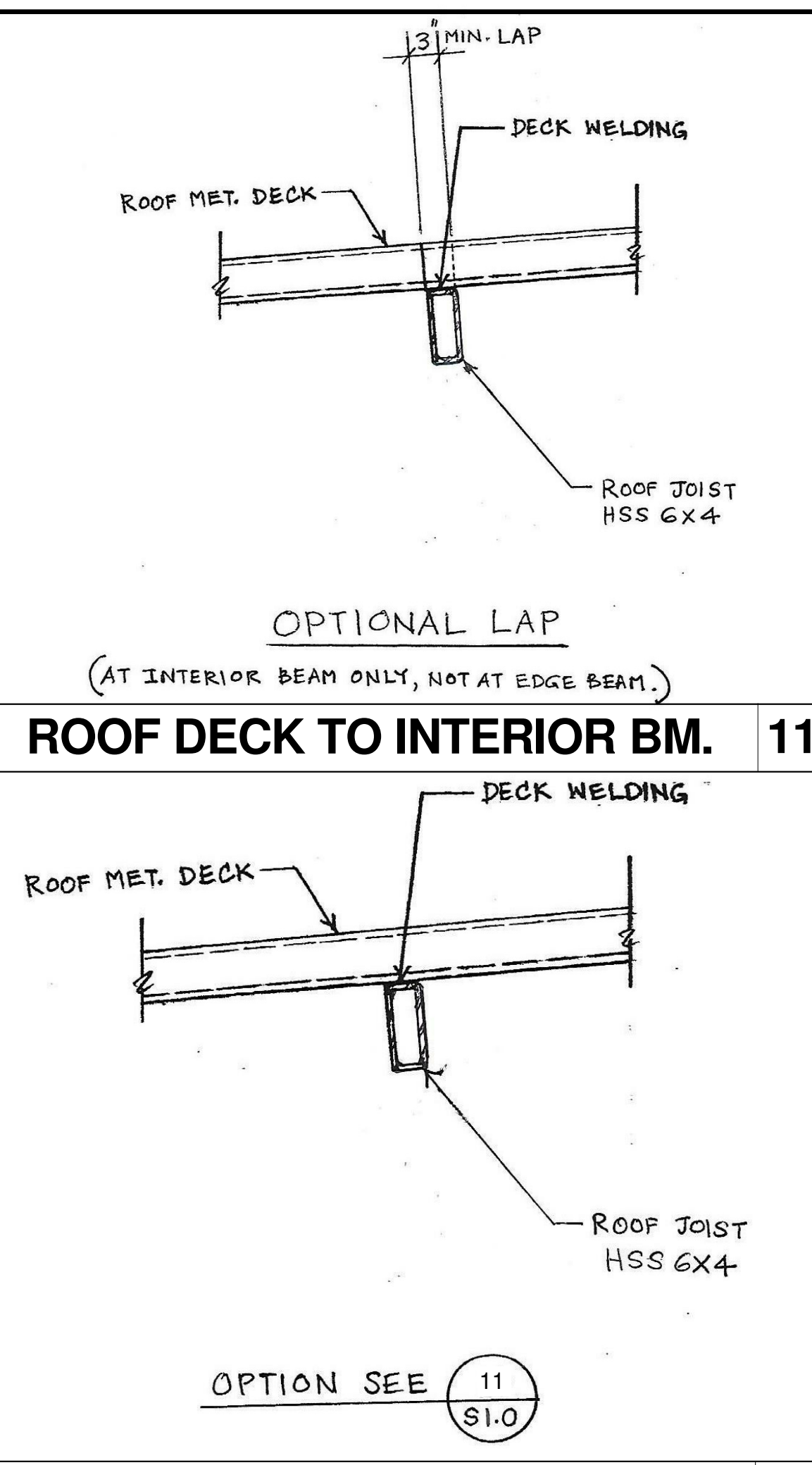
SCALE: 1/4" = 1'-0" **5**

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| REVISIONS | | | | | | |
| <p>DEVELOPER: MAJZ</p> <p>SOILS ENGINEER: MAJZ</p> <p>ARCHITECT: MAJZ</p> <p>PLANS PREPARED BY: MAJZ</p> <p>REPORT #</p> <p>LICENSE NO. / EXP. DATE</p> <p>STATE OF CALIFORNIA</p> <p>Edward Lok Ng C-16840 REN 11/30/17</p> | | | | | | |
| SOUTH LAWN PUMP STATION ENCLOSURE | | | | | | |
| CITY OF IRVINE | | | | | | |
| COMMUNITY DEVELOPMENT DEPARTMENT | | | | | | |
| PLAN CHECK: | | | | | | |
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FOUNDATION PLAN

SCALE: 1/4" = 1'-0" **1**



ROOF DECK TO INTERIOR BM. 11

SCALE: N.T.S. **11**

GENERAL CONDITIONS

- CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO COMMENCING WORK, REPORTING ANY DISCREPANCIES TO THE ENGINEER.
- WRITTEN DIMENSIONS SHALL HAVE PRECEDENCE OVER SCALED DIMENSION ON THE DRAWINGS.
- THE DRAWINGS ARE THE PROPERTY OF THE DESIGNER.
- ALL WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE LATEST EDITION OF THE LOS ANGELES COUNTY LOCAL CODES AND ORDINANCES.
- WORKER'S COMPENSATION INSURANCE: CONTRACTOR AND SUB-CONTRACTOR SHALL PURCHASE AND MAINTAIN COMPLETE COVERAGE TO PROTECT THE CLAIMS UNDER WORKERS COMPENSATION ACTS, AND SHOW PROOF THEREOF.
- UTILITY SERVICES: CONTRACTOR AND SUB-CONTRACTORS SHALL CONFIRM LOCATION OF UTILITIES AND NOTIFY ALL PERSONS WORKING ON SITE OF EXISTING UTILITIES. CONTRACTOR SHALL LOCATE AND IDENTIFY ACTIVE UTILITY SERVICES AND TEMPORARILY DE-ACTIVATE THEM WHEN THEY CONSTITUTE A HAZARD. LOCATION OF GAS, ELECTRIC AND WATER METERS TO CONFORM WITH UTILITY COMPANY REQUIREMENT.
- PROTECT EXISTING CONSTRUCTION FINISHES, ADJACENT PROPERTY, PLANTING AND TREES. PROTECT THE WORK FROM RAIN AND OTHER NATURAL ELEMENTS. REPAIR, REFRESH, OR REPLACE ANY ITEMS DAMAGED DURING CONSTRUCTION.
- CONTRACTOR CAN PROVIDE "OR APPROVED EQUAL" MANUFACTURER FOR ALL NAMED MANUFACTURERS.
- CONTRACTOR SHALL PROVIDE TEMPORARY TOILET IN ACCORDANCE WITH LOCAL ORDINANCES IF NO EXISTING TOILET AVAILABLE ON SITE.
- CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE DESIGNER HARMLESS WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE DESIGNER.

STRUCTURAL STEEL

- STRUCTURAL STEEL AND MISCELLANEOUS IRON SHALL CONFORM TO ASTM A500 UNLESS NOTED OTHERWISE.
- STEEL PIPE COLUMNS AND OTHER STEEL PIPE STRUCTURAL MEMBERS SHALL CONFORM TO ASTM A53, GRADE B.
- STRUCTURAL STEEL TUBING SHALL CONFORM TO ASTM A500, GRADE GRADE B, F_y = 46 KSI
- ALL BOLTS SHALL CONFORM TO ASTM A307, UNLESS NOTED OTHERWISE. WHERE HIGH STRENGTH (H.S.) BOLTS CONFORMING TO ASTM A325 ARE SPECIFIED, INSTALLATION SHALL BE INSPECTED BY A REGISTERED DEPUTY INSPECTOR APPROVED BY THE BUILDING DEPARTMENT.
- LIGHT GAUGE STRUCTURAL STEEL MEMBERS SHALL CONFORM TO A.S.T.M. STANDARDS A-446, GRADE A (GALVANIZED) OR A.S.T.M. A-570, GRADE C (HOT ROLLED) OR A.S.T.M. A-570, GRADE E (HOT ROLLED) OR A.S.T.M. A-607, GRADE 50.
- FABRICATION AND ERECTION SHALL CONFORM TO A.I.S.C. SPECIFICATIONS.

REINFORCING STEEL

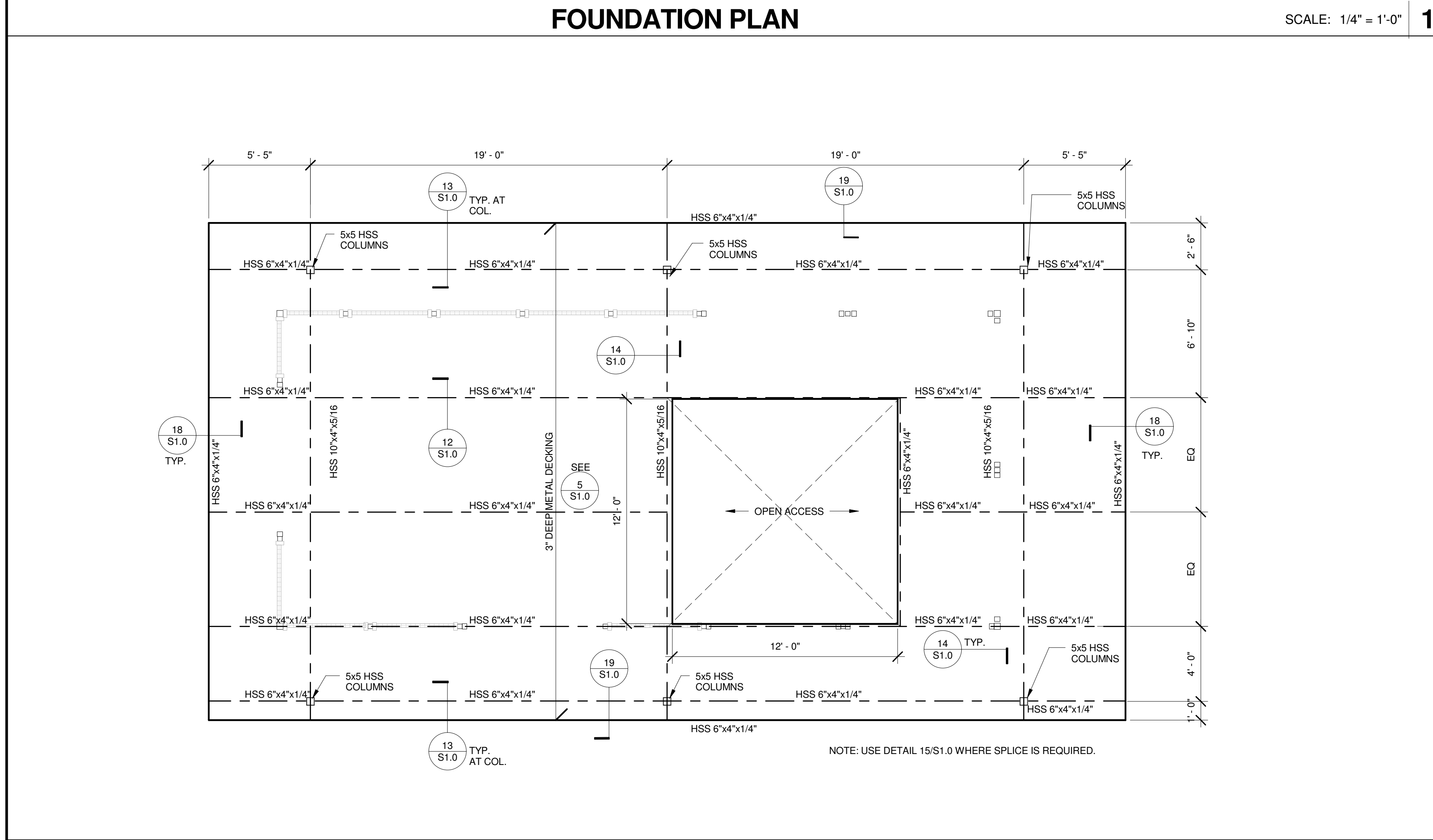
- REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 40 FOR SIZES #3 AND #4 AND GRADE 60 FOR SIZES #5 AND LARGER.
- WELDED FABRIC (MESH) SHALL CONFORM TO THE LATEST REVISED ASTM A185. SMOOTH WIRE FABRIC SHALL CONFORM TO ASTM A85 YIELD STRENGTH 60 KSI.
- ALL BARS IN MASONRY SHALL BE LAPPED A MINIMUM OF 40 BAR DIAMETERS (2'-0" MIN.) AT ALL SPLICES UNLESS NOTED OTHERWISE.
- ALL BARS IN CONCRETE SHALL BE LAPPED A MINIMUM OF 36 BAR DIAMETERS (2'-0" MIN.) AT ALL SPLICES UNLESS NOTED OTHERWISE.
- SPLICES OF HORIZONTAL REBAR IN WALLS AND FOOTINGS SHALL BE STAGGERED 4'-0" MINIMUM. ALL BENDING OF REINFORCING STEEL SHALL CONFORM TO THE LATEST EDITION OF CALIFORNIA BUILDING CODE.
- SPLICES OF HORIZONTAL REBAR IN WALLS AND FOOTINGS SHALL BE STAGGERED 4'-0" MINIMUM.
- DOWELS FOR WALLS AND COLUMNS SHALL BE THE SAME SIZE AND SPACING AS THE WALL/COLUMN REINFORCING UNLESS NOTED OTHERWISE.

CONCRETE

- CONCRETE SHALL BE 4,500 PSI AT 28 DAYS, UNLESS NOTED SPECIAL INSPECTION BY DEPUTY INSPECTOR IS REQUIRED FOR CONCRETE OVER 3,000 PSI.
- CONCRETE: 1 PART CEMENT, 2 1/2 PARTS SAND, AND 3 1/2 PARTS 3/4" DIA. ROCK. TOTAL WATER SHALL NOT EXCEED 7 GALLONS PER SACK OF CEMENT.
- GROUT: 1 PART CEMENT, 3 PART SAND, 2 PARTS 3/8" DIA. MAXIMUM PEA GRAVEL OR APPROVED EQUAL.
- CEMENT SHALL BE TYPE "V" PER ASTM C-150.
- THE FOLLOWING MINIMUM CLEAR DISTANCE BETWEEN REINFORCING STEEL AND FACE OF CONCRETE SHALL BE MAINTAINED UNLESS NOTED OTHERWISE:
 - SLAB ON GRADE..... 4" CENTER OF SLAB
 - CONCRETE BELOW GRADE, FORMED..... 2"
 - CONCRETE BELOW GRADE, UNFORMED (POUR AGAINST EARTH)..... 3"
 - CONCRETE EXPOSED TO WEATHER..... 1-1/2"

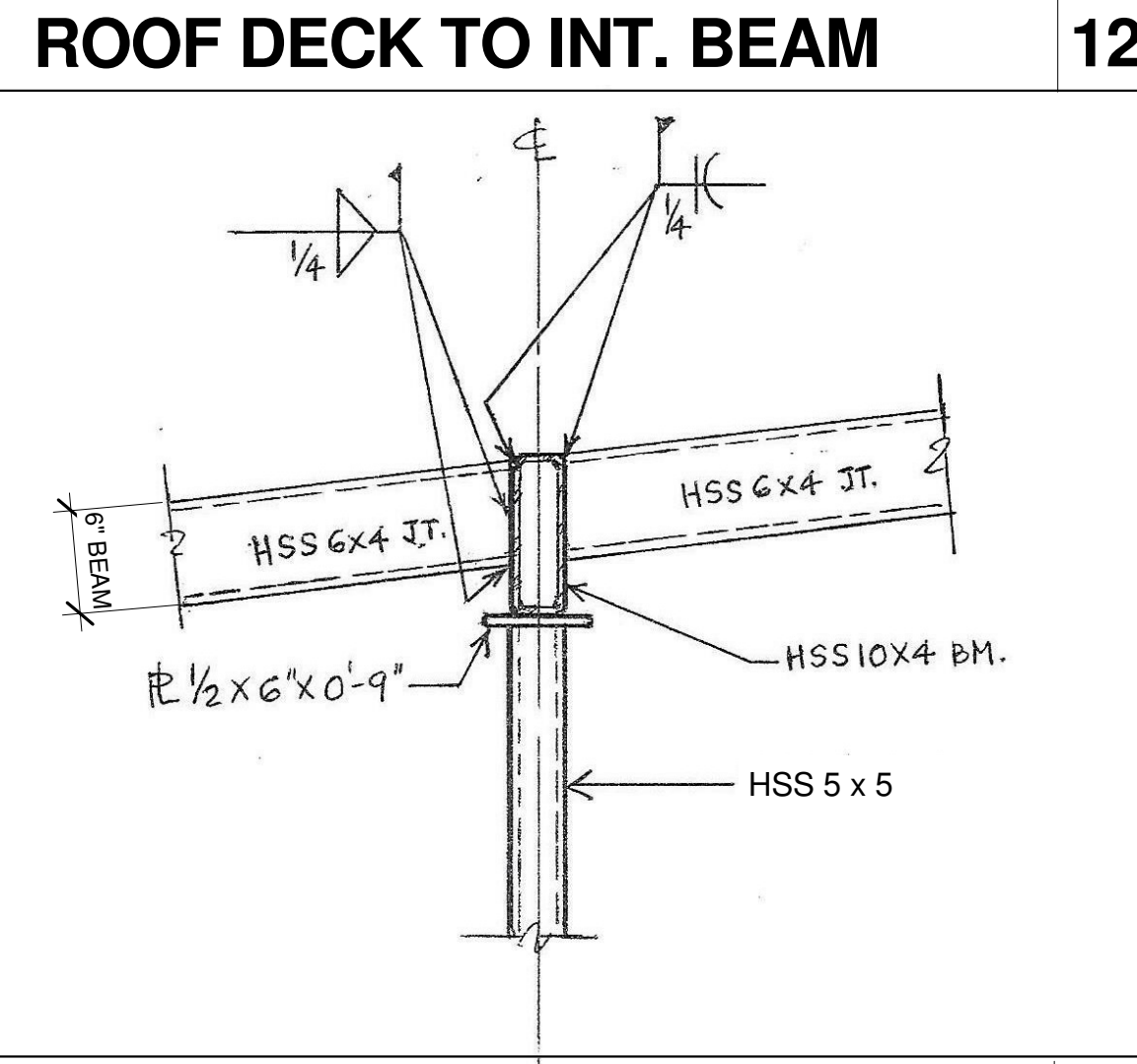
WELDING

- ALL WELDING SHALL BE DONE USING THE SHIELDED ELECTRIC ARC PROCESS BY CERTIFIED WELDERS, USING E70XX ELECTRODES.
- WELDING OF STEEL REINFORCING BARS SHALL BE DONE WITH LOW HYDROGEN ELECTRODES, A233, CLASS E70XX SERIES. ALL REINFORCEMENT TO BE WELDED SHALL CONFORM TO A.S.T.M. A706 UNLESS APPROVED OTHERWISE.
- WELDS IDENTIFIED AS REQUIRING CONTINUOUS OR PERIODIC SPECIAL INSPECTION NEED NOT HAVE SPECIAL INSPECTION WHEN WELDING IS DONE IN AN APPROVED FABRICATOR'S SHOP.
- FIELD WELDING SHALL HAVE A SPECIAL INSPECTION BY A REGISTERED DEPUTY INSPECTOR.



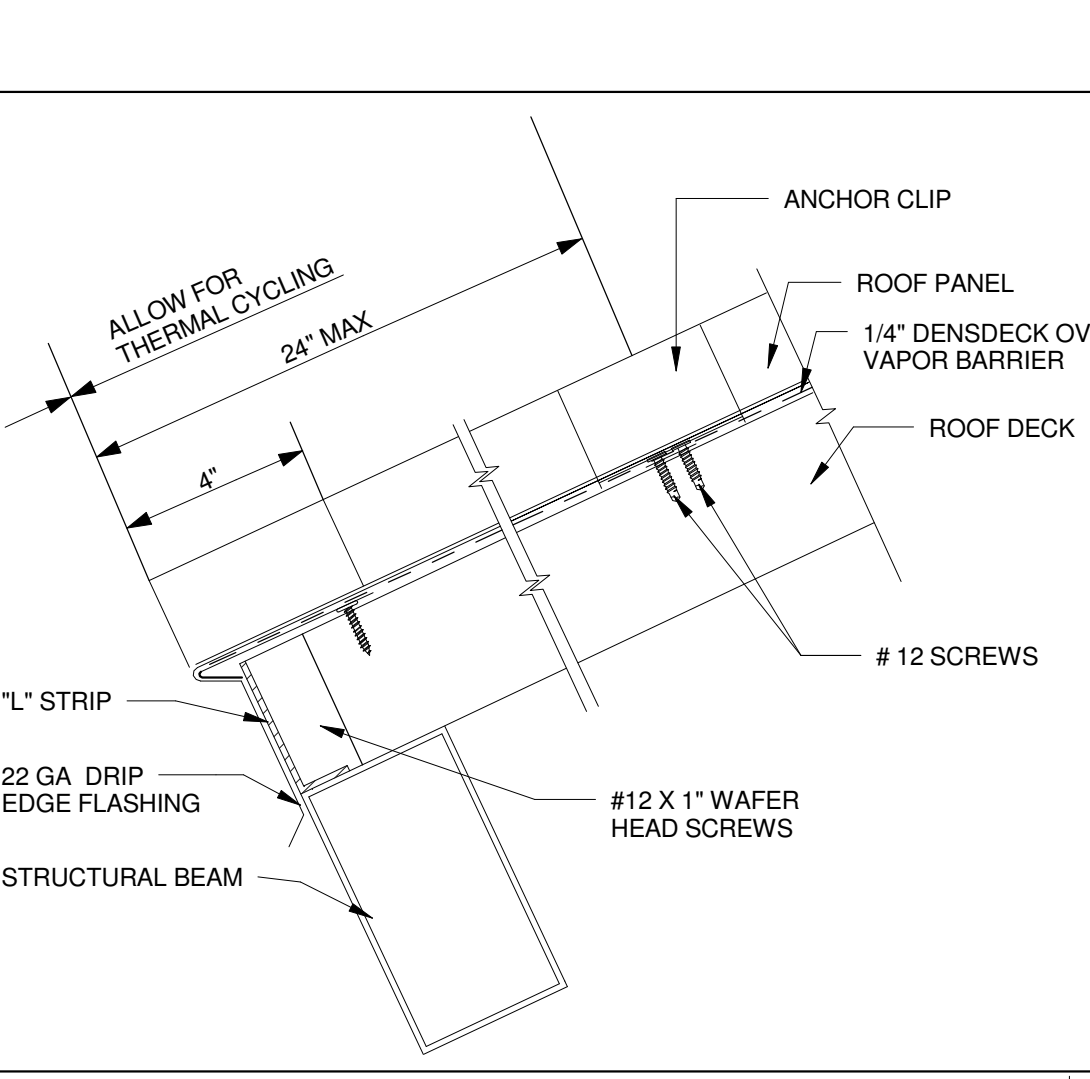
ROOF FRAMING PLAN

SCALE: 1/4" = 1'-0" **2**



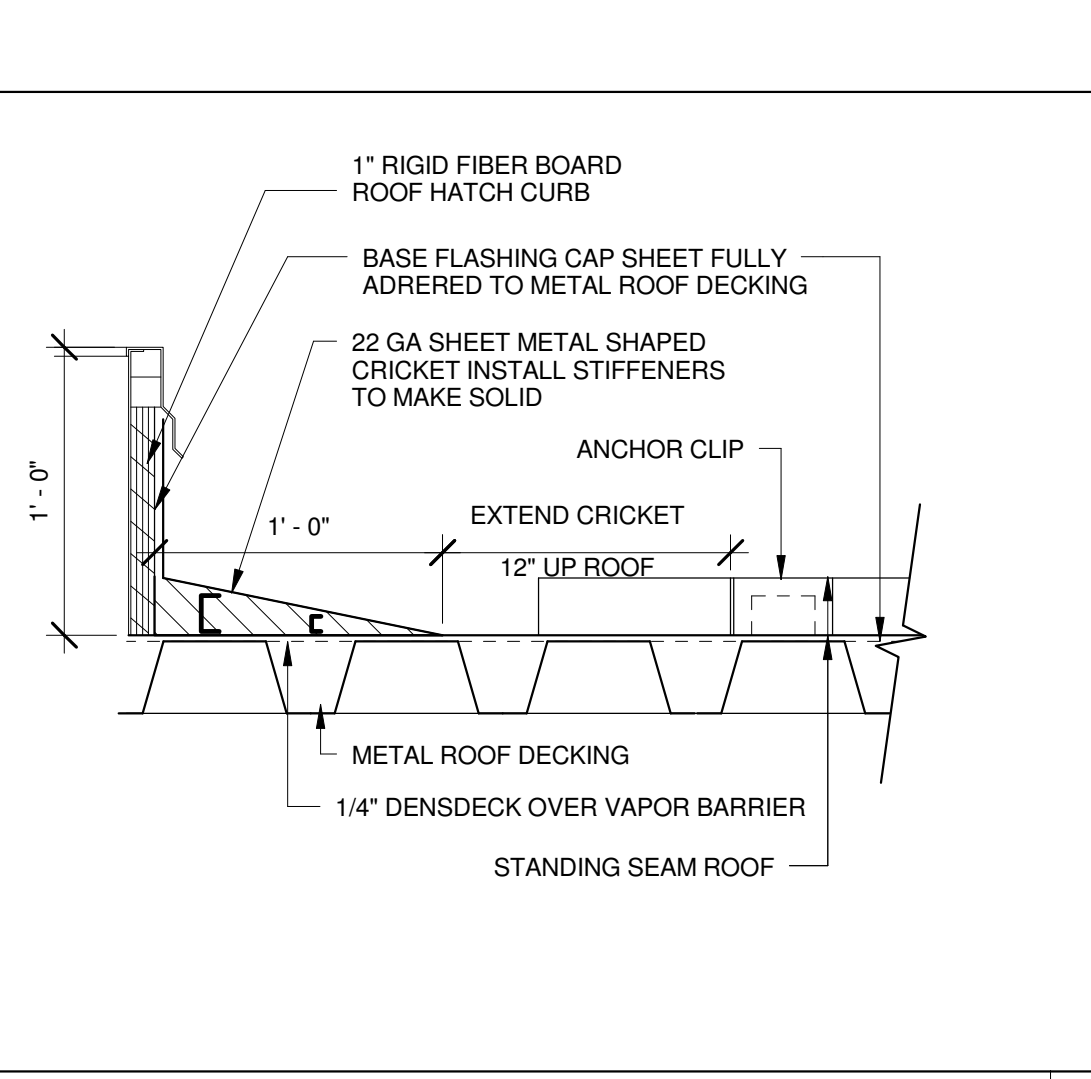
COL. TO BEAM

SCALE: N.T.S. **13**



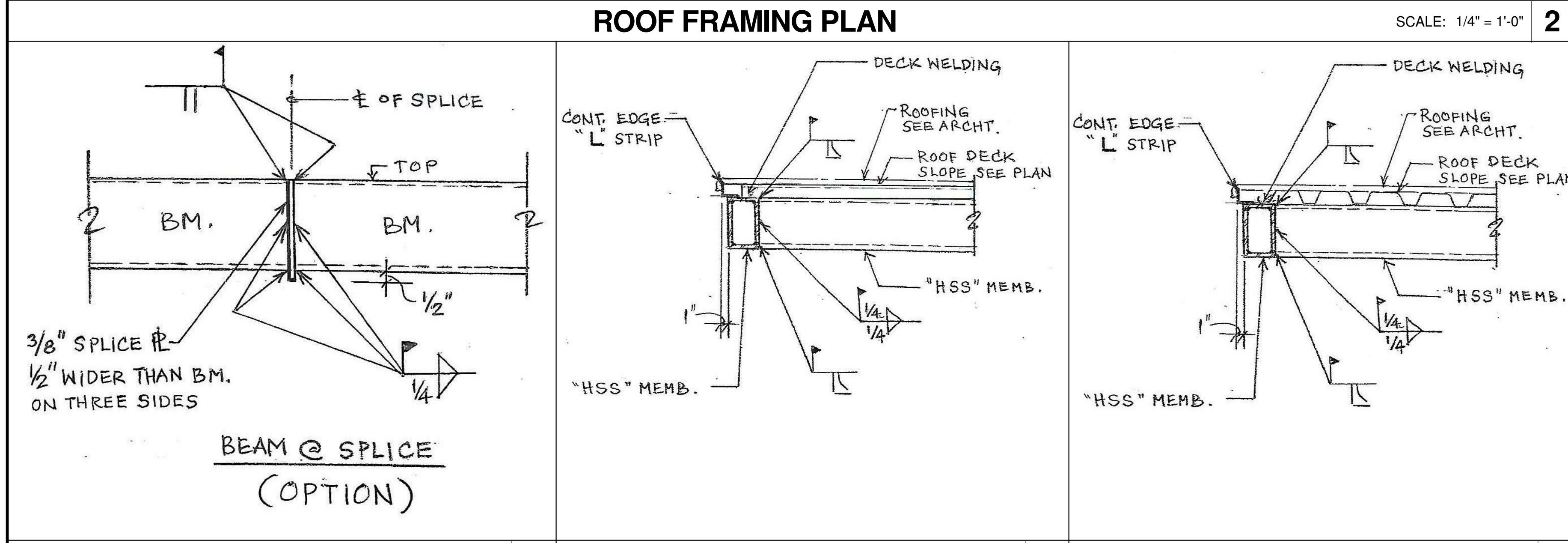
EAVE @ LOW EDGE

SCALE: 3" = 1'-0" **8**



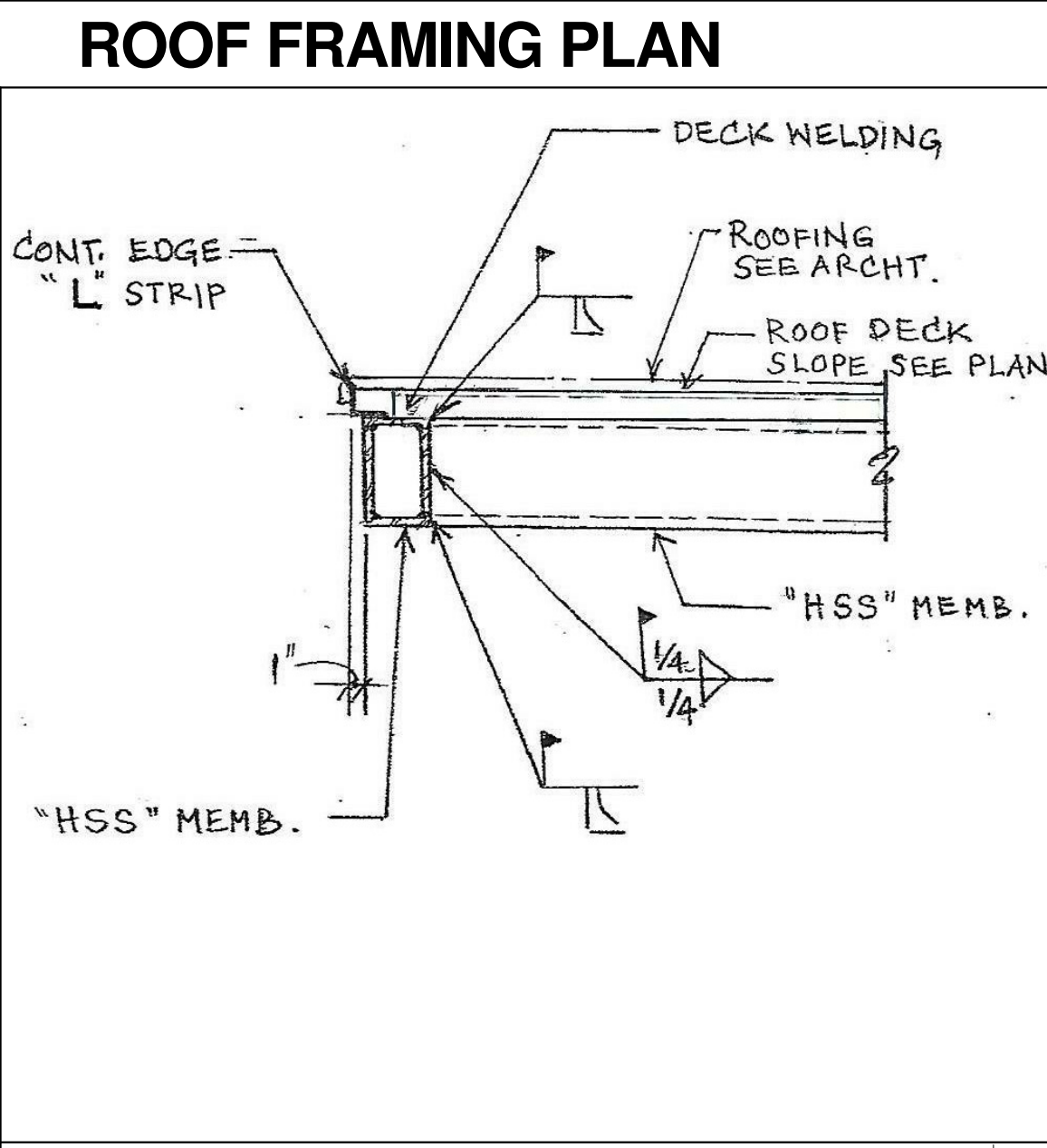
ROOF CRICKET

SCALE: 1 1/2" = 1'-0" **3**



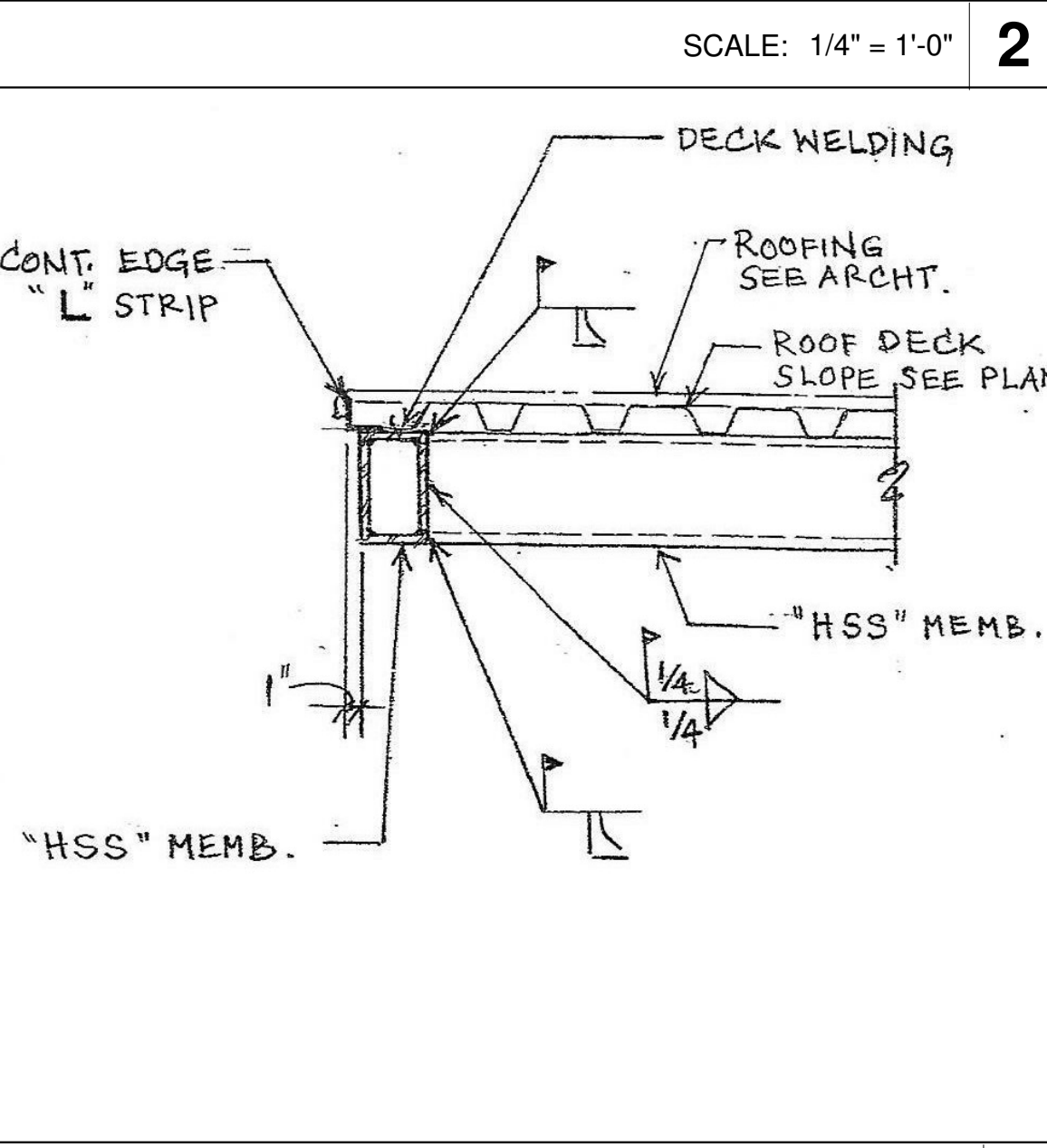
BEAM AT SPLICE

SCALE: N.T.S. **20**



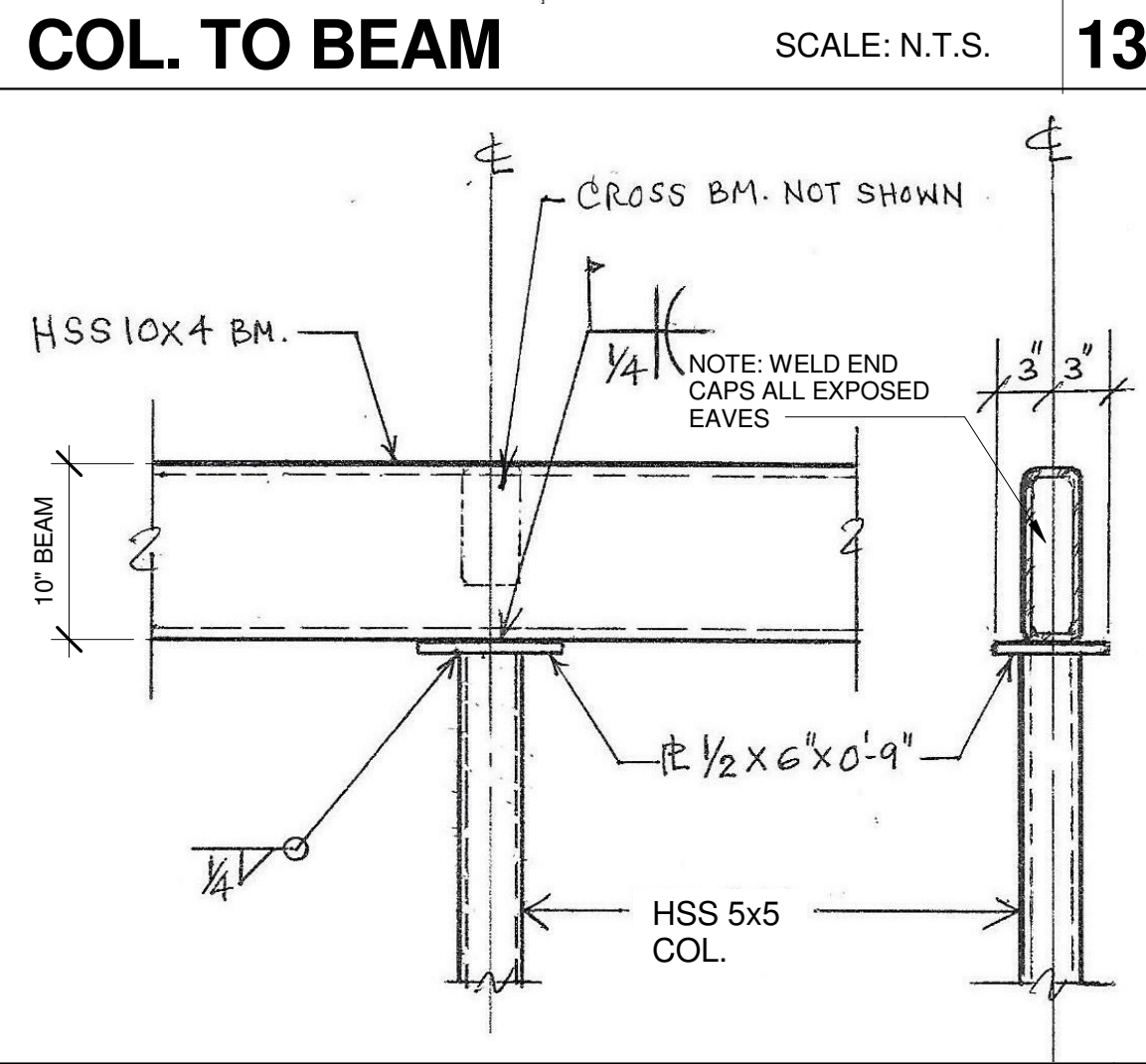
EDGE MEMBER DETAIL

SCALE: N.T.S. **19**



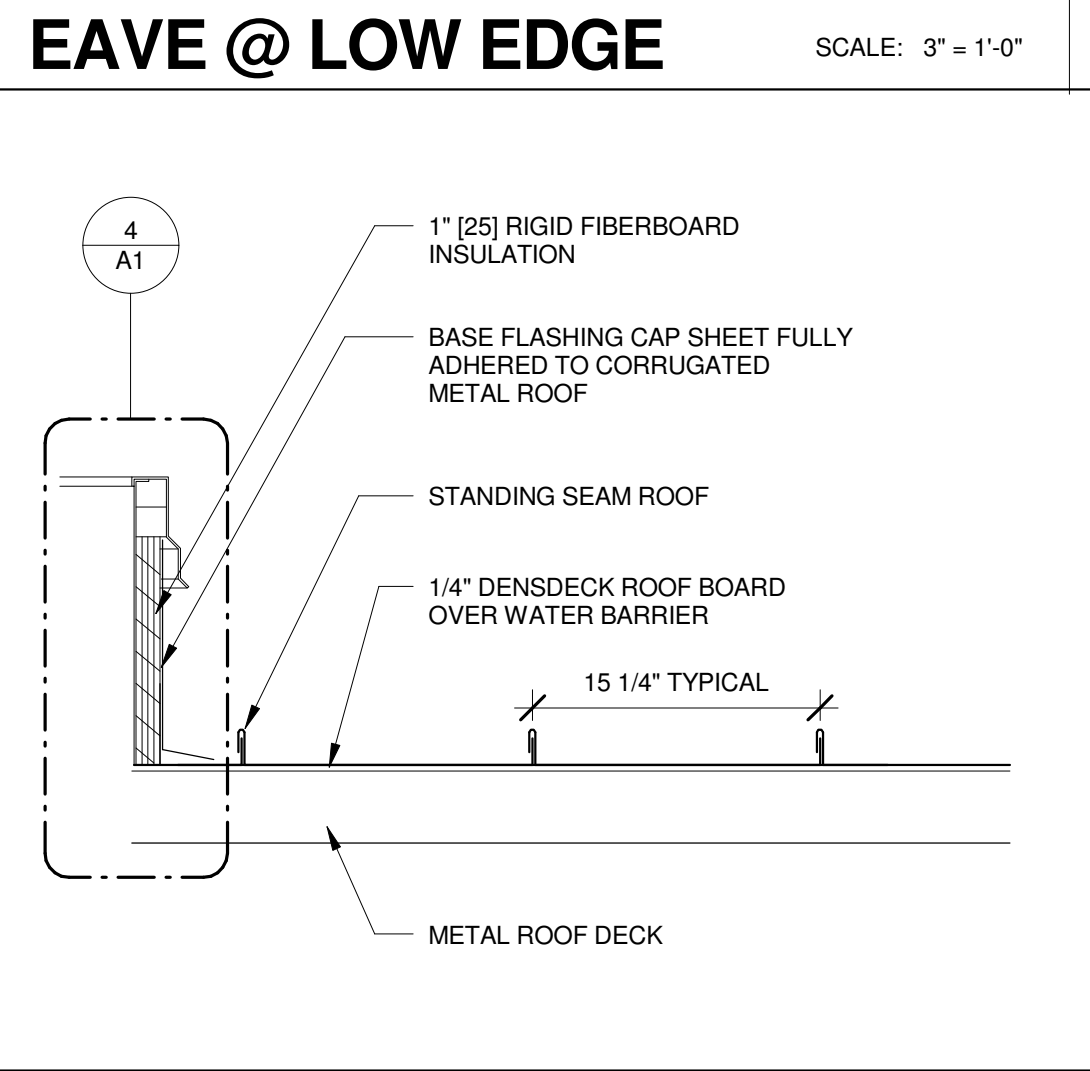
EDGE MEMBER

SCALE: N.T.S. **18**



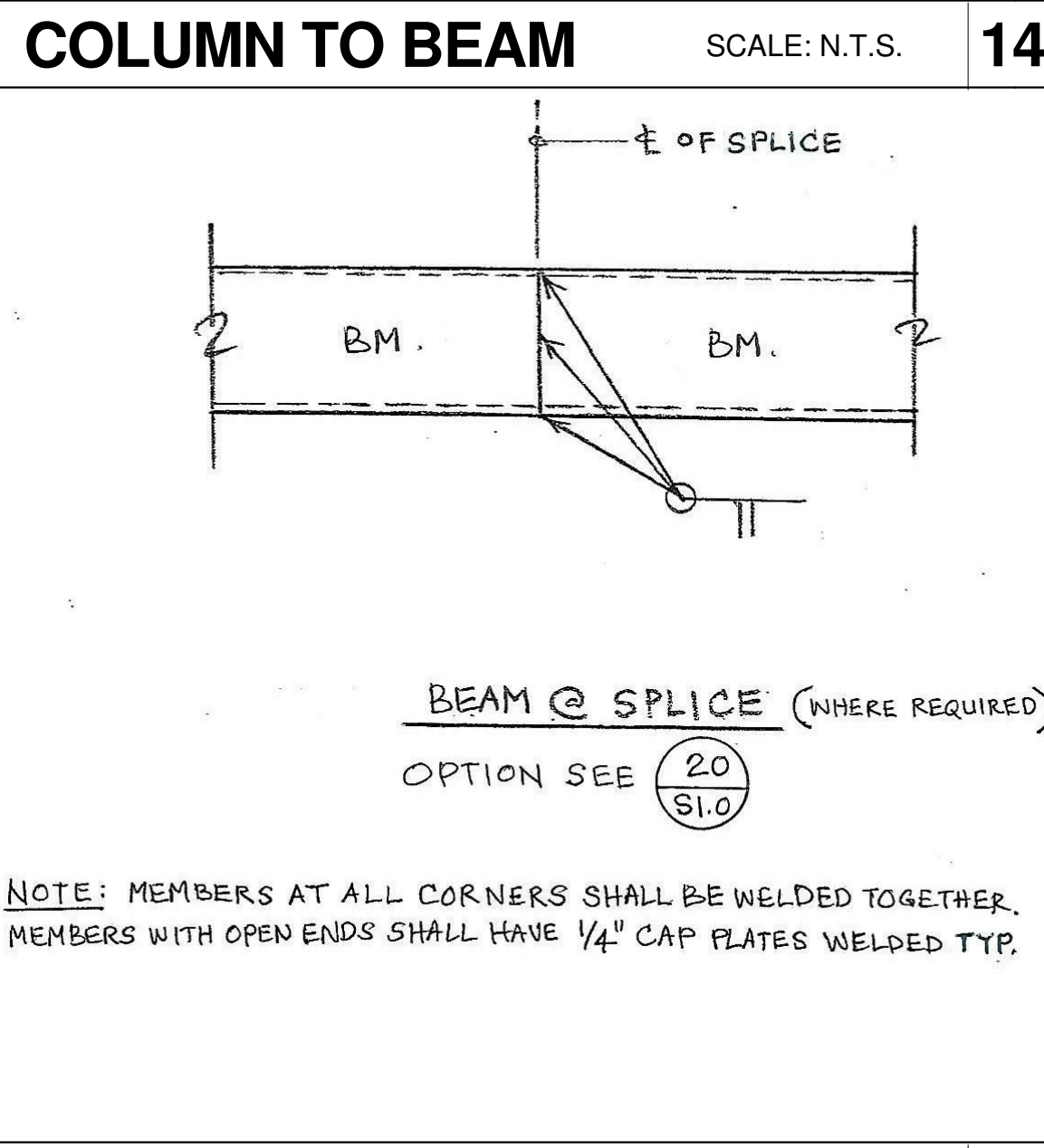
COLUMN TO BEAM

SCALE: N.T.S. **14**



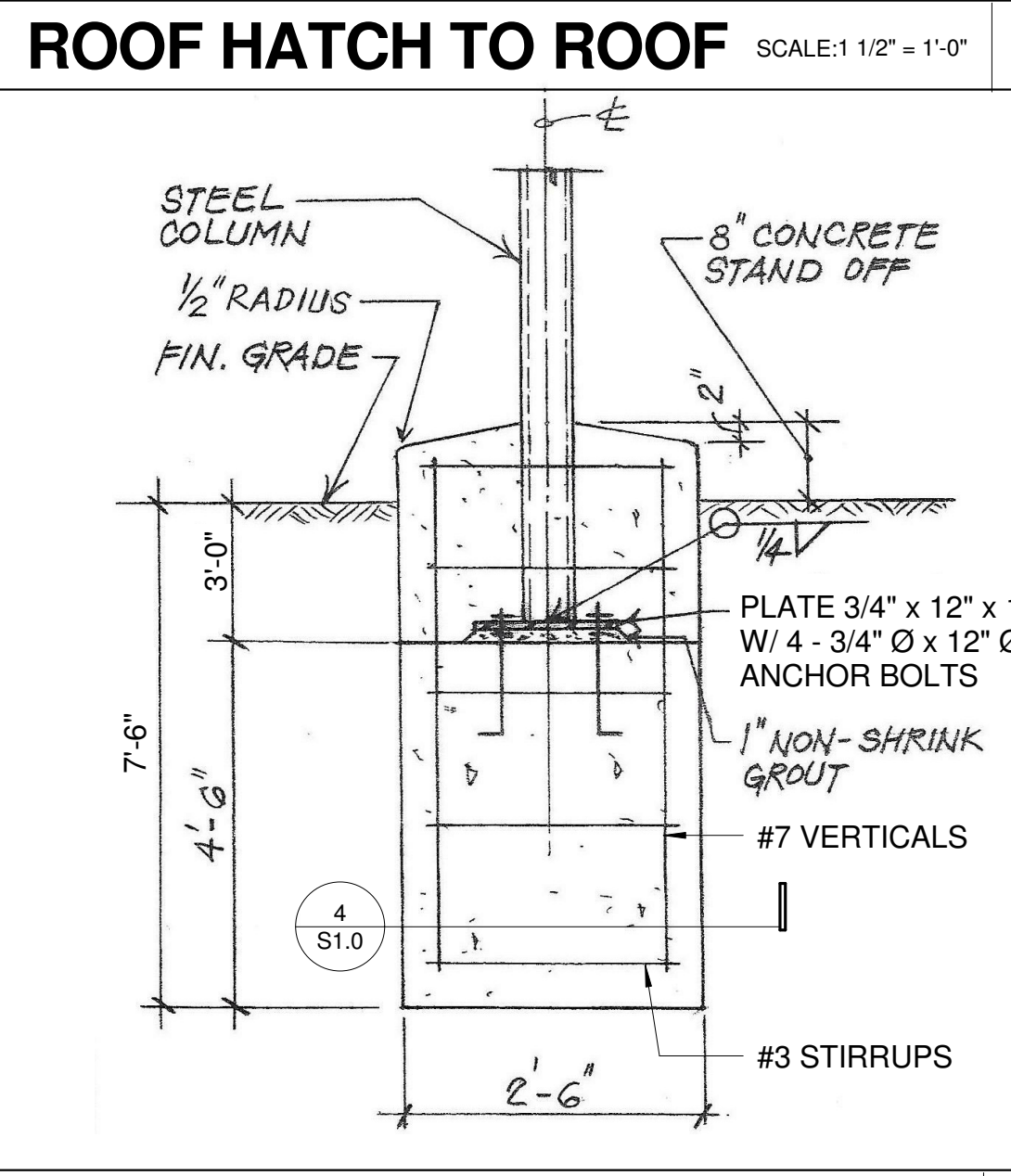
ROOF HATCH TO ROOF

SCALE: 1 1/2" = 1'-0" **9**



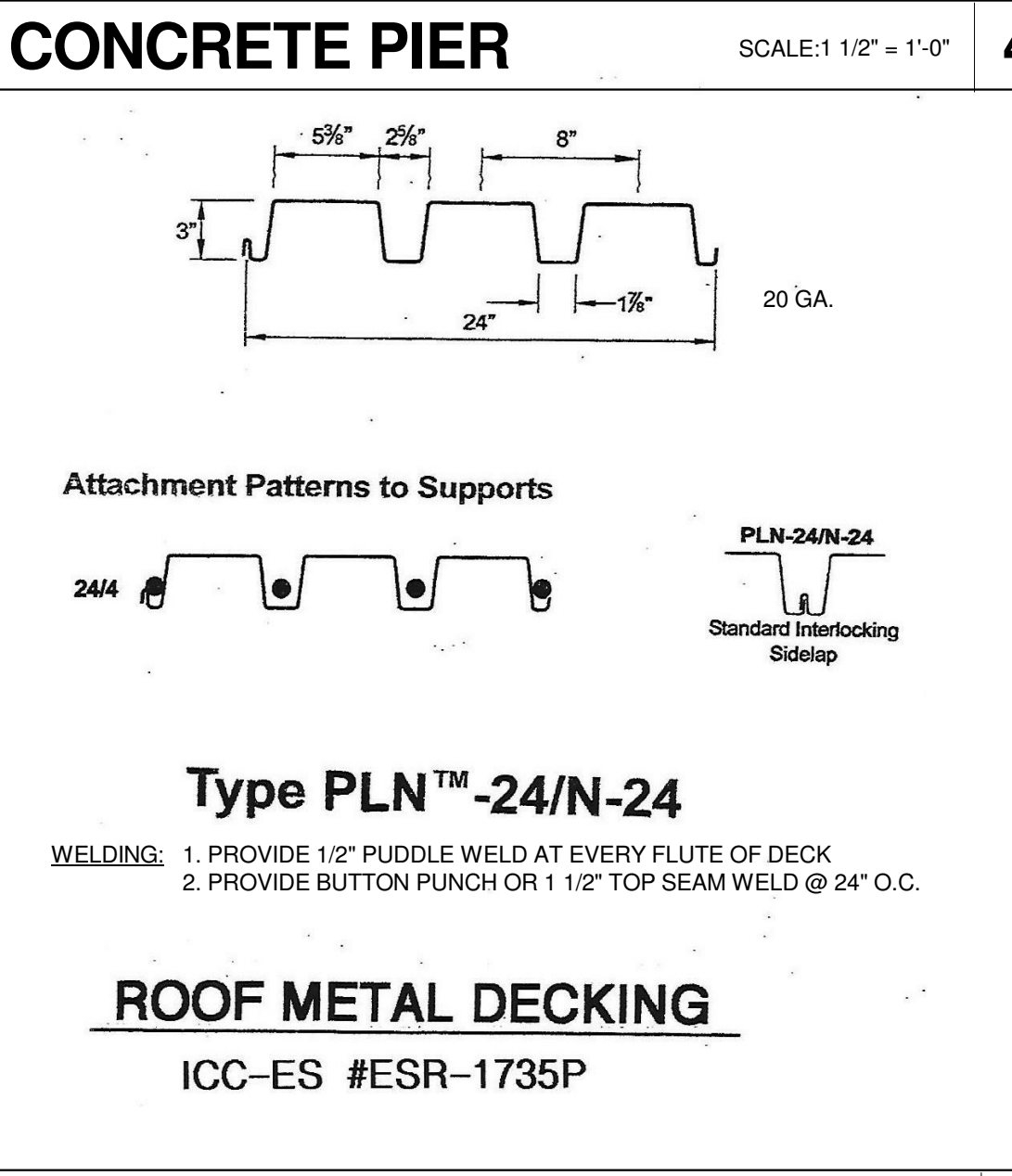
BM AT SPLICE

SCALE: N.T.S. **15**



STEEL COLUMN

SCALE: N.T.S. **10**



METAL DECK

SCALE: N.T.S. **5**

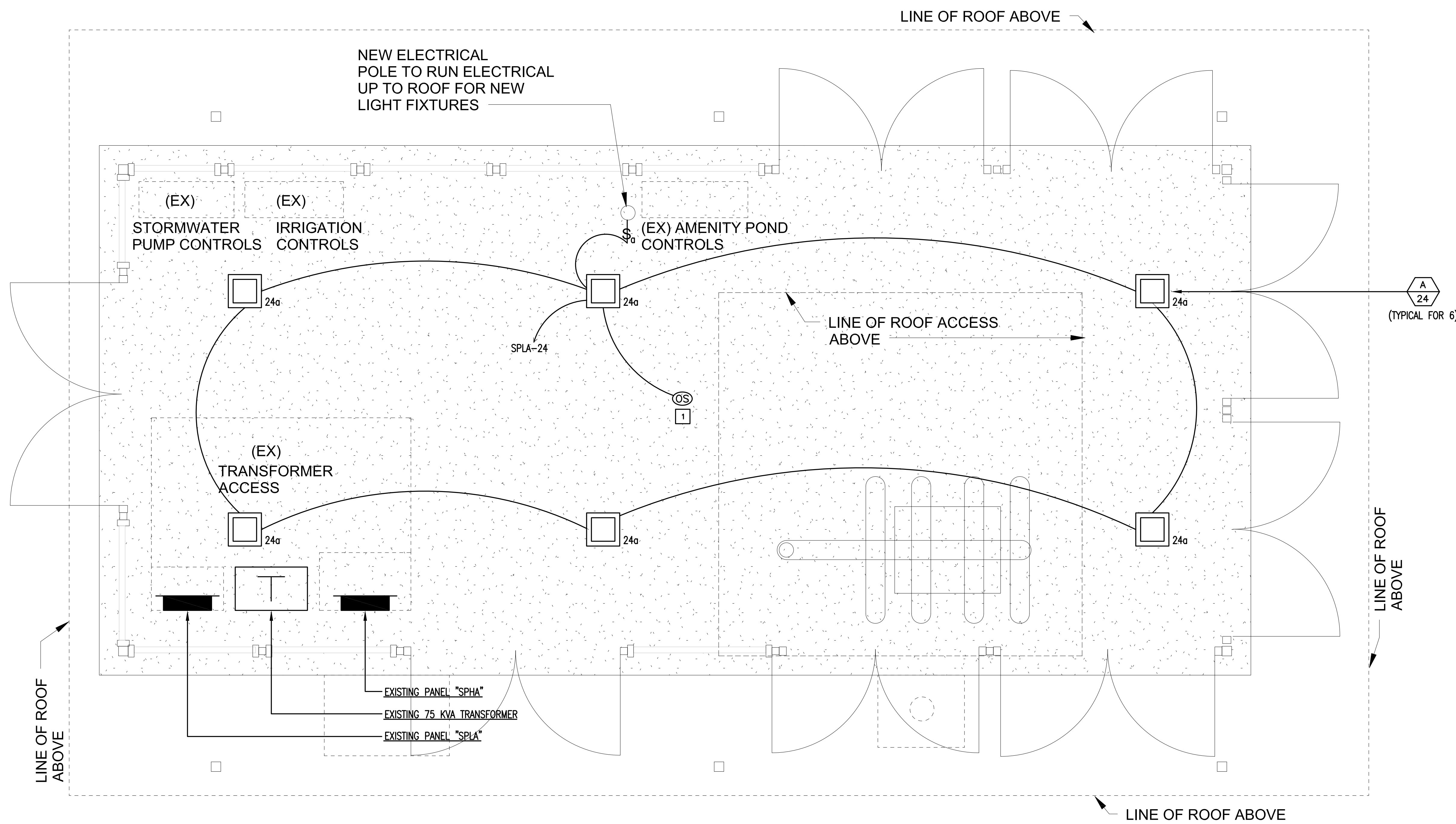
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| DRAWN BY: MAZU | | CHECKED BY: JS | | DATE: 5-31-17 | | SCALE: AS NOTED | | NO. | | DATE | |
| <p>DEVELOPER: _____</p> <p>SOILS ENGINEER: _____</p> <p>ARCHITECT: _____</p> <p>PLANS PREPARED BY: _____</p> <p>REPORT # _____</p> <p>LICENSE NO. / EXP. DATE _____</p> | | | | | | | | | | | |
| <p>SOUTH LAWN PUMP STATION</p> <p>ENCLOSURE</p> <p>CITY OF IRVINE</p> <p>COMMUNITY DEVELOPMENT DEPARTMENT</p> | | | | | | | | | | | |
| <p>PLAN CHECK: _____</p> <p>PERMIT: _____</p> <p>SHEET S1.0</p> <p>OF _____</p> | | | | | | | | | | | |

GENERAL NOTES:

- PER TITLE 24 STANDARDS SECTION 130.1(B), MULTI-LEVEL LIGHTING CONTROLS NOT REQUIRED BECAUSE THE SPACE DOES NOT EXCEED 0.5 WATTS PER SQUARE FOOT OF LIGHTING LOAD. (144 WATTS / 731 SQ. FT. = 0.20 W/SQ. FT.)
- CONDUIT SHALL BE RIGID STEEL GALVANIZED IMC (TYPICAL)

KEYED NOTES:

- PROVIDE DUAL TECHNOLOGY, LINE VOLTAGE OCCUPANCY SENSOR FOR CONTROL OF PUMP STATION LIGHTING. COORDINATE AS REQUIRED.



OVERALL PUMP STATION ELECTRICAL PLAN

SCALE: 1/2" = 1'-0"

| | | | |
|--|--|-------------|-----------|
| DESIGNED: | TL | NO. | DATE |
| DRAWN: | TL | | |
| CHECKED: | TL | | |
| DATE: | 04-12-2017 | | |
| SCALE: | AS NOTED | | |
| DEVELOPER: | | REPORT # | DATE |
| SOILS ENGINEER: | | | |
| ENGINEER: | | LICENSE NO. | EXP. DATE |
| PLANS PREPARED BY: | <p>THOMAS LEW ASSOCIATES 18521 PENHART AVE. CARSON, CA 90746-1936 Tel: 562-201-1111 Email: thomas@lewassociates.com</p> | | |
| <p>SOUTH LAWN PUMP STATION ENCLOSURE CITY OF IRVINE COMMUNITY DEVELOPMENT DEPARTMENT</p> | | | |
| PLAN CHECK: | | | |
| PERMIT: | | | |
| SHEET | E3 | | |
| OF | 5 | | |

STATE OF CALIFORNIA Electrical Power Distribution Certificate of Compliance. Project Name: SOUTH LAWN CITY OF IRVINE PUMP STATION ENCLOSURE. Date Prepared: 04-12-2017. Section 130.5(b). Separation of Electrical Circuits for Electrical Energy Monitoring. Existing to Remain. Table with columns: General Information, Electrical Power Distribution System Information and Method of Compliance, Electrical Service Rating, Enforcement Agency.

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance January 2016

STATE OF CALIFORNIA Electrical Power Distribution Certificate of Compliance. Project Name: SOUTH LAWN CITY OF IRVINE PUMP STATION ENCLOSURE. Date Prepared: 04-12-2017. Section 130.5(c). Voltage Drop Existing to Remain. Section 130.5(d). Circuit Controls for 120-Volt Receptacles and Controlled Receptacles. Field Inspector: [blank].

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance January 2016

STATE OF CALIFORNIA Electrical Power Distribution Certificate of Compliance. Project Name: SOUTH LAWN CITY OF IRVINE PUMP STATION ENCLOSURE. Date Prepared: 04-12-2017. Documentation Author's Declaration Statement. Responsible Person's Declaration Statement. Tables for Company and Responsible Person information.

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance January 2016

STATE OF CALIFORNIA Electrical Power Distribution Certificate of Compliance. Project Name: SOUTH LAWN CITY OF IRVINE PUMP STATION ENCLOSURE. Date Prepared: 04-12-2017. General Information. Table with columns: Document Number, Document Title / Descriptions, Document Sheet # or Page #, Applicable subsection of Section 130.5.

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance January 2016

STATE OF CALIFORNIA Electrical Power Distribution Certificate of Compliance. Project Name: SOUTH LAWN CITY OF IRVINE PUMP STATION ENCLOSURE. Date Prepared: 04-12-2017. Table with columns: Document Number, Document Title / Descriptions, Document Sheet # or Page #, Applicable subsection of Section 130.5.

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance January 2016

STATE OF CALIFORNIA Electrical Power Distribution Certificate of Compliance. Project Name: SOUTH LAWN CITY OF IRVINE PUMP STATION ENCLOSURE. Date Prepared: 04-12-2017. Documentation Author's Declaration Statement. Responsible Person's Declaration Statement. Tables for Company and Responsible Person information.

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance January 2016

STATE OF CALIFORNIA COMMISSIONING - CONSTRUCTION DOCUMENTS Certificate of Compliance. Project Name: SOUTH LAWN CITY OF IRVINE PUMP STATION ENCLOSURE. Date Prepared: 04-12-2017. Lighting Controls. Daylight Area. Daylight Controls. Table with columns: Code Section, Measure, Design Reviewer, Designer Response.

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance January 2016

STATE OF CALIFORNIA COMMISSIONING - CONSTRUCTION DOCUMENTS Certificate of Compliance. Project Name: SOUTH LAWN CITY OF IRVINE PUMP STATION ENCLOSURE. Date Prepared: 04-12-2017. Table with columns: Code Section, Measure, Design Reviewer, Designer Response.

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance January 2016

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CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance January 2016

STATE OF CALIFORNIA DESIGN REVIEW KICKOFF Certificate of Compliance. Project Name: SOUTH LAWN CITY OF IRVINE PUMP STATION ENCLOSURE. Date Prepared: 04-12-2017. A. General Information. B. Design Review Checklist. Table with columns: Code Section, Measure, Design Reviewer, Designer Response.

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance January 2016

STATE OF CALIFORNIA DESIGN REVIEW KICKOFF Certificate of Compliance. Project Name: SOUTH LAWN CITY OF IRVINE PUMP STATION ENCLOSURE. Date Prepared: 04-12-2017. Documentation Author's Declaration Statement. Responsible Person's Declaration Statement. Tables for Company and Responsible Person information.

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance January 2016

STATE OF CALIFORNIA COMMISSIONING - CONSTRUCTION DOCUMENTS Certificate of Compliance. Project Name: SOUTH LAWN CITY OF IRVINE PUMP STATION ENCLOSURE. Date Prepared: 04-12-2017. A. General Information. B. Design Review Checklist. Table with columns: Code Section, Measure, Design Reviewer, Designer Response.

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance January 2016

DESIGNED BY: THOMAS LEW ASSOCIATES. DRAWN BY: THOMAS LEW ASSOCIATES. CHECKED BY: THOMAS LEW ASSOCIATES. DATE: 04-12-2017. SCALE: AS NOTED. NO. DATE. REPORT #. LICENSE NO. EXP. DATE. SOUTH LAWN PUMP STATION ENCLOSURE. CITY OF IRVINE COMMUNITY DEVELOPMENT DEPARTMENT. PLAN CHECK: PERMIT: SHEET E4 OF 5. REVISIONS.

STATE OF CALIFORNIA INDOOR LIGHTING - LIGHTING CONTROLS CALIFORNIA ENERGY COMMISSION. CERTIFICATE OF COMPLIANCE. Project Name: SOUTH LAWN CITY OF IRVINE PUMP STATION ENCLOSURE. Date Prepared: 04-12-2017. Documentation Author Signature: Thomas Lew Associates. Address: 19521 REINHART AVE, CARSON, CA 90746. Phone: (949) 302-1820.

STATE OF CALIFORNIA INDOOR LIGHTING - LIGHTING CONTROLS CALIFORNIA ENERGY COMMISSION. CERTIFICATE OF COMPLIANCE. Project Name: SOUTH LAWN CITY OF IRVINE PUMP STATION ENCLOSURE. Date Prepared: 04-12-2017. Documentation Author Signature: Thomas Lew Associates. Address: 19521 REINHART AVE, CARSON, CA 90746. Phone: (949) 302-1820.

STATE OF CALIFORNIA INDOOR LIGHTING - LIGHTING CONTROLS CALIFORNIA ENERGY COMMISSION. CERTIFICATE OF COMPLIANCE. Project Name: SOUTH LAWN CITY OF IRVINE PUMP STATION ENCLOSURE. Date Prepared: 04-12-2017. Documentation Author Signature: Thomas Lew Associates. Address: 19521 REINHART AVE, CARSON, CA 90746. Phone: (949) 302-1820.

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance. April 2016. INDOOR LIGHTING POWER ALLOWANCE. Summary of lighting power allowances and calculations. Total Watts: 366.

STATE OF CALIFORNIA INDOOR LIGHTING - LIGHTING CONTROLS CALIFORNIA ENERGY COMMISSION. CERTIFICATE OF COMPLIANCE. Project Name: SOUTH LAWN CITY OF IRVINE PUMP STATION ENCLOSURE. Date Prepared: 04-12-2017. Documentation Author Signature: Thomas Lew Associates. Address: 19521 REINHART AVE, CARSON, CA 90746. Phone: (949) 302-1820.

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance. April 2016. INDOOR LIGHTING. Summary of lighting power allowances and calculations. Total Watts: 366.

STATE OF CALIFORNIA INDOOR LIGHTING POWER ALLOWANCE CALIFORNIA ENERGY COMMISSION. CERTIFICATE OF COMPLIANCE. Project Name: SOUTH LAWN CITY OF IRVINE PUMP STATION ENCLOSURE. Date Prepared: 04-12-2017. Documentation Author Signature: Thomas Lew Associates. Address: 19521 REINHART AVE, CARSON, CA 90746. Phone: (949) 302-1820.

STATE OF CALIFORNIA INDOOR LIGHTING - LIGHTING CONTROLS CALIFORNIA ENERGY COMMISSION. CERTIFICATE OF COMPLIANCE. Project Name: SOUTH LAWN CITY OF IRVINE PUMP STATION ENCLOSURE. Date Prepared: 04-12-2017. Documentation Author Signature: Thomas Lew Associates. Address: 19521 REINHART AVE, CARSON, CA 90746. Phone: (949) 302-1820.

STATE OF CALIFORNIA INDOOR LIGHTING CALIFORNIA ENERGY COMMISSION. CERTIFICATE OF COMPLIANCE. Project Name: SOUTH LAWN CITY OF IRVINE PUMP STATION ENCLOSURE. Date Prepared: 04-12-2017. Documentation Author Signature: Thomas Lew Associates. Address: 19521 REINHART AVE, CARSON, CA 90746. Phone: (949) 302-1820.

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance. April 2016. INDOOR LIGHTING - LIGHTING CONTROLS. Mandatory Lighting Control Declaration Statements. Includes table for lighting control requirements.

STATE OF CALIFORNIA INDOOR LIGHTING - LIGHTING CONTROLS CALIFORNIA ENERGY COMMISSION. CERTIFICATE OF COMPLIANCE. Project Name: SOUTH LAWN CITY OF IRVINE PUMP STATION ENCLOSURE. Date Prepared: 04-12-2017. Documentation Author Signature: Thomas Lew Associates. Address: 19521 REINHART AVE, CARSON, CA 90746. Phone: (949) 302-1820.

STATE OF CALIFORNIA INDOOR LIGHTING CALIFORNIA ENERGY COMMISSION. CERTIFICATE OF COMPLIANCE. Project Name: SOUTH LAWN CITY OF IRVINE PUMP STATION ENCLOSURE. Date Prepared: 04-12-2017. Documentation Author Signature: Thomas Lew Associates. Address: 19521 REINHART AVE, CARSON, CA 90746. Phone: (949) 302-1820.

Vertical sidebar containing project information: SOUTH LAWN PUMP STATION ENCLOSURE, CITY OF IRVINE, COMMUNITY DEVELOPMENT DEPARTMENT. Includes fields for PLAN CHECK, PERMIT, SHEET OF, and a professional seal for Thomas Lew Associates.

2.9



REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: AUGUST 8, 2017

TITLE: APPROVAL OF PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS FOR OPERATIONS SUPPORT FACILITY ACCESSIBILITY IMPROVEMENTS



Director of Public Works



City Manager

RECOMMENDED ACTION

1. Approve the construction plans, specifications and contract documents for the Operations Support Facility Accessibility Improvements, Capital Improvement Project 361602.
2. Approve the Engineer's Estimate, Construction Contingency and Project Funding Summary.
3. Authorize staff to solicit competitive bids and award the construction contract to the lowest responsive and responsible bidder, in accordance with the City's purchasing policies and procedures, within the approved project budget.

EXECUTIVE SUMMARY

Plans, specifications, and contract documents for the City Operations Support Facility (OSF) Accessibility Improvements are complete and ready for City Council approval. These documents are available for public review in the Public Works department. The City OSF complex is located at 6427 Oak Canyon Road and is comprised of four separate buildings serving as the primary maintenance yard for all City maintenance services including streets, landscaping, signals, fleet, and also houses the dispatch offices for the City's TRIPS program in the main administration building. The proposed work includes the construction of new access ramps, handrails and sidewalks to enhance public access to all OSF buildings, and renovation of the public restrooms in the main administration building with new water efficient fixtures. Approval of the recommended actions will allow staff to proceed with solicitation of competitive bids for construction and award of a contract to the lowest responsive and responsible bidder in accordance with the City's purchasing policies and procedures within the approved project budget.

COMMISSION/BOARD/COMMITTEE RECOMMENDATION

Not applicable.

ANALYSIS

The proposed improvements will update several exterior public areas of the City OSF buildings for conformance with Americans with Disabilities (ADA) standards. The project will construct new access ramps, handrails, sidewalk improvements and accessible parking areas with appropriate signing and striping to meet accessibility compliance. The proposed interior improvements will renovate the public restrooms in the main administration building. The location of the proposed improvements is depicted in Attachment 2.

The construction contract cost estimate prepared by the consultant design engineer for the project is \$210,000. A budget allowance of \$35,000 for construction engineering (material and equipment testing, inspection services and surveying) and \$40,000 for construction contingency is recommended, as shown in the Project Funding Summary (Attachment 3). The City's construction contracting policies and procedures limit the award of the construction contract by staff to a maximum of 10 percent over the engineer's estimate. These policies also restrict the use of the construction contingency only for unforeseen circumstances that may arise necessary to complete the work within the approved project scope and budget.

Staff is seeking City Council approval to proceed with soliciting competitive bids for construction. A copy of the Notice Inviting Bids, Construction Contract, Plans, Specifications and the proposed Schedule of Work listing the individual bid items for this project is included as Attachment 4. If approved by the City Council, construction is anticipated to begin in October 2017 with completion by December 2017. Work activity will take place primarily Monday through Friday between the hours of 7 a.m. and 3:30 p.m. The majority of work in the administration building restrooms will be constructed at night to limit disruptions to the public and City services.

ENVIRONMENTAL REVIEW

Pursuant to Section 4 of the City of Irvine California Environmental Quality Act (CEQA) Procedures and Article 19 of the State of California CEQA Guidelines, the proposed project is categorically exempt from the requirements of CEQA, under State Guideline Section 15301, Class 1(d), and Existing Facilities.

ALTERNATIVES CONSIDERED

The City Council could direct staff to defer the rehabilitation project to a future date or may direct staff to modify any of the elements of the project scope. The City Council may also approve the construction plans and related documents, authorize staff to solicit competitive bids and direct staff to bring back the results of the competitive bid process to the City Council for its review and consideration prior to award of the contract.

FINANCIAL IMPACT

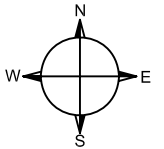
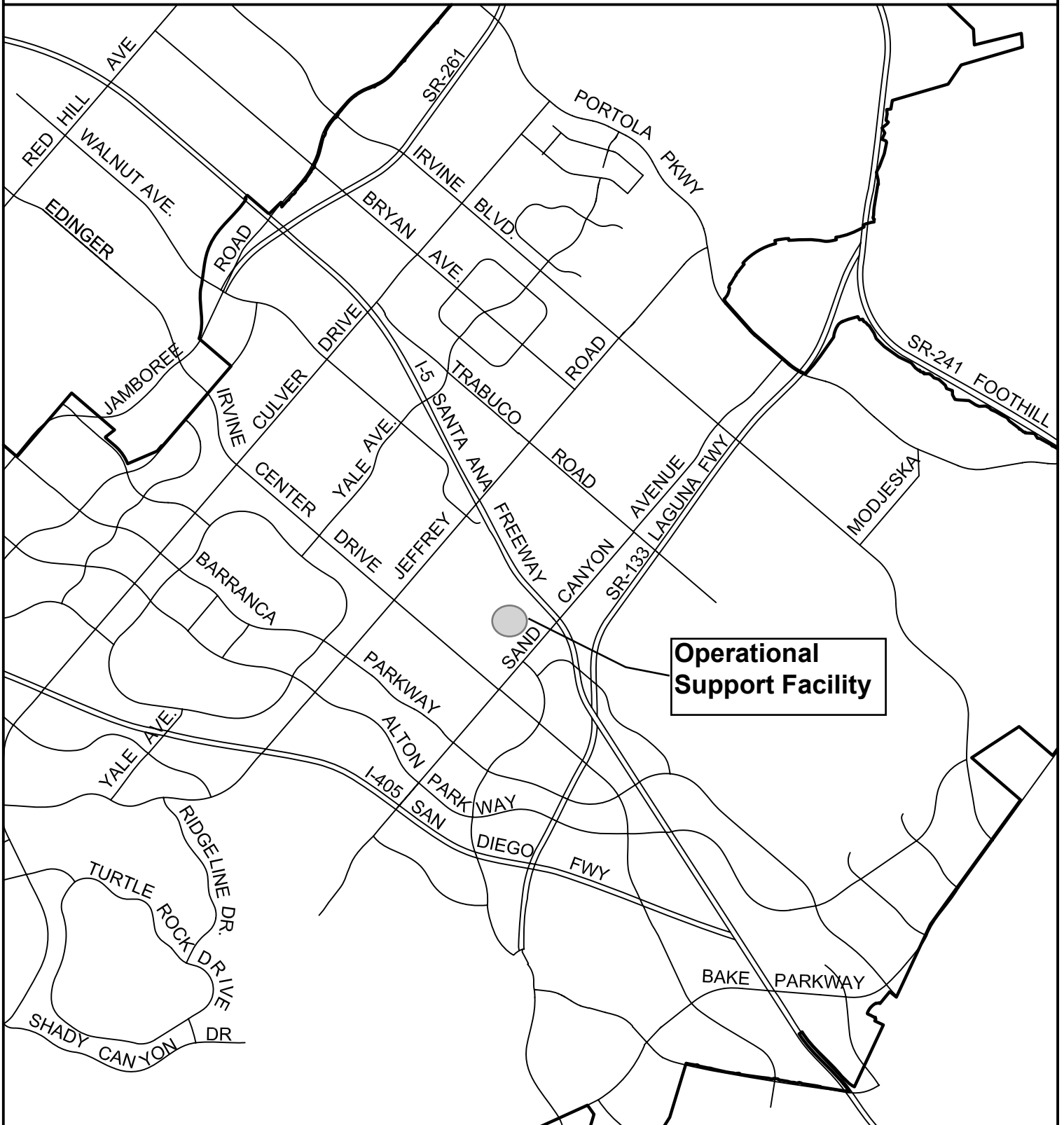
Project expenditures to date for preparation of the construction plans and contract documents total \$40,000. The construction contract estimate prepared by the design engineer is \$210,000. The recommended budget allowance of \$35,000 for construction engineering and \$40,000 for construction contingency brings the total estimated project cost for the construction phase to \$285,000. Funding for the construction phase is available in the City Council approved CIP 361602 from System Development Charge Fees. A complete Project Funding Summary for this project is provided in Attachment 3.

REPORT PREPARED BY Eric Gruber, Senior Project Manager

ATTACHMENTS

1. Vicinity Map
2. Site Map
3. Project Funding Summary
4. Notice Inviting Bids, Construction Contract, Plans, Specifications and Proposed Schedule of Work

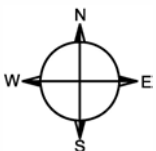
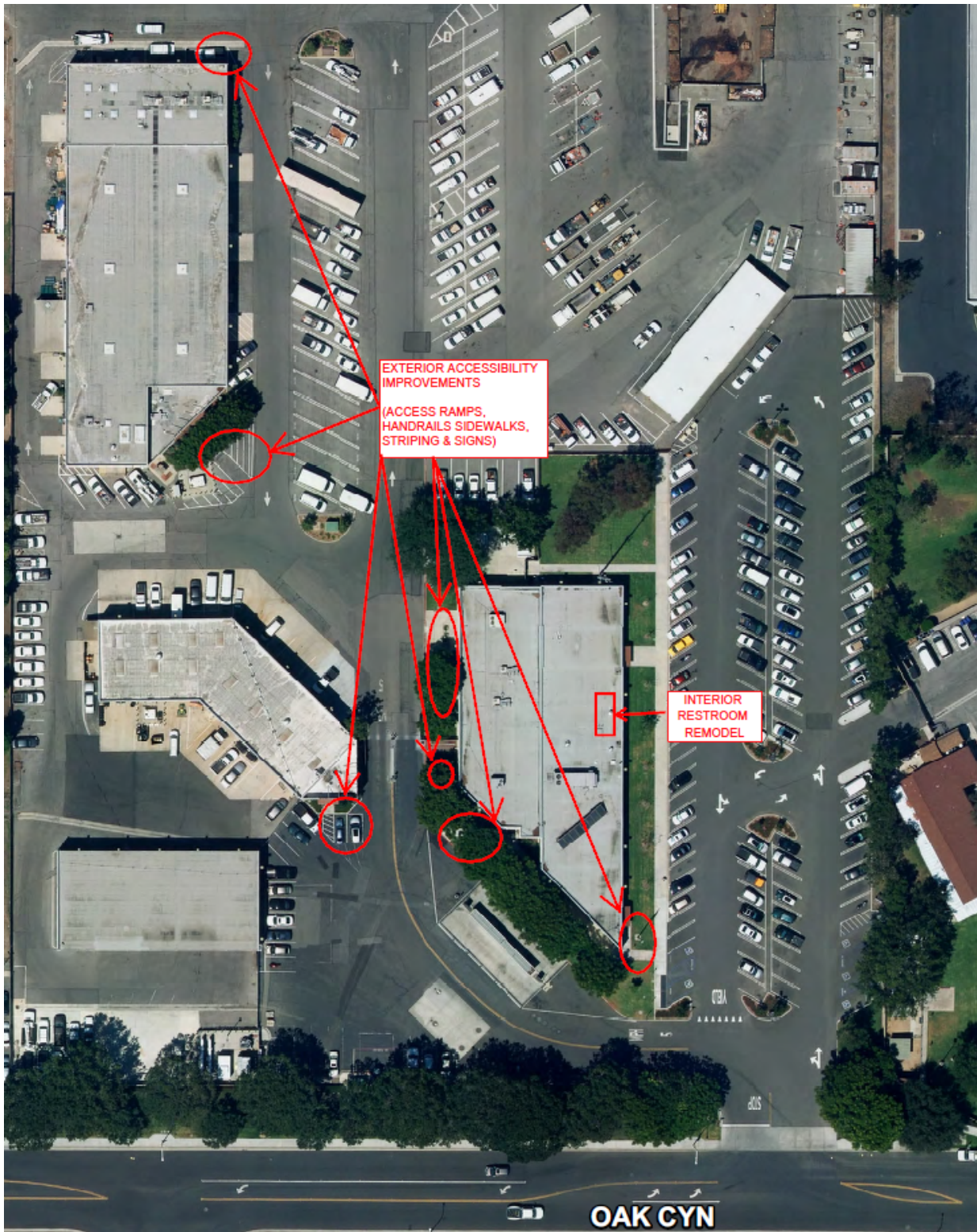
ACCESSIBILITY IMPROVEMENTS AT THE OPERATIONS SUPPORT FACILITY



VICINITY MAP



ACCESSIBILITY IMPROVEMENTS AT THE OPERATIONS SUPPORT FACILITY



SITE MAP



Project Funding Summary

ADA Facility Improvements

CIP 361602

August 8, 2017

Project Expenditures

| | |
|---|-------------------|
| Design Engineering | \$ 40,000 |
| Construction Contract (Engineer's Estimate) | \$ 210,000 |
| Construction Engineering | \$ 35,000 |
| Construction Contingency | <u>\$ 40,000</u> |
| Total Estimated Project Cost | \$ 325,000 |

Project Funding

| | |
|-------------------------------------|-------------------|
| CIP 361602 ADA Facility Improvement | <u>\$ 325,000</u> |
| Total Funding Available | \$ 325,000 |

**CITY OF IRVINE
ORANGE COUNTY, CALIFORNIA**

**PROJECT MANUAL
FOR
ADA FACILITY IMPROVEMENTS
OPERATIONS SUPPORT FACILITY – BUILDING 1
CIP 361602
BID NO. 18-1295**

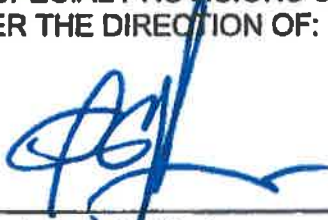
CITY OF IRVINE
ONE CIVIC CENTER PLAZA
P.O. BOX 19575
IRVINE, CALIFORNIA 92623-9575

PREPARED BY:
WARE MALCOMB
10 EDELMAN
IRVINE, CA 92618

JULY 2017

**ADA FACILITY IMPROVEMENTS
CIP 361602**

THE SPECIAL PROVISIONS CONTAINED HEREIN HAVE BEEN PREPARED BY OR
UNDER THE DIRECTION OF:

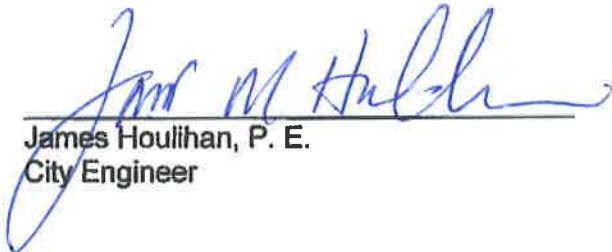


Lon Stephenson, Architect
Ware Malcomb

C22710

State of California license

APPROVED BY:



James Houlihan, P. E.
City Engineer

51568

R.C.E. No.

SECTION 00 01 10 - TABLE OF CONTENTS

PROCUREMENT AND CONTRACTING REQUIREMENTS

DIVISION 00 -- PROCUREMENT AND CONTRACTING REQUIREMENTS

- A. 00 01 01 – Project Title Sheet
- B. 00 01 05 – Certifications Sheet
- C. 00 01 10 – Table of Contents
- D. 00 11 13 – Notice of Inviting Bids
- E. 00 21 13 – Instruction to Bidders Proposal Requirements and Conditions
- F. 00 41 00 – Bidder's Proposal
- G. 00 50 00 – Construction Contract
- H. 00 50 01 – Performance Bond
- I. 00 50 02 – Payment Bond
- J. 00 71 00 – Definitions
- K. 00 72 00 – General Conditions

DIVISION 01 -- GENERAL REQUIREMENTS

- A. 01 10 00 – Summary
- B. 01 35 53 – Security Procedures
- C. 01 40 00 – Quality Requirements
- D. 01 41 00 – Regulatory Requirements
- E. 01 45 33 – Code Required Special Inspections
- F. 01 50 00 – Temporary Facilities and Control
- G. 01 51 00 – Temporary Utilities
- H. 01 53 00 – Mold Prevention Measures
- I. 01 55 00 – Vehicular Access and Parking
- J. 01 56 10 – Airborne Contaminant Controls
- K. 01 57 21 – Indoor Air Quality Controls
- L. 01 60 00 – Product Requirements
- M. 01 61 16 – Volatile Organic Compound (VOC) Content Restrictions
- N. 01 70 00 – Execution and Closeout Requirements
- O. 01 74 19 – Construction Waste Management and Disposal
- P. 01 76 10 – Temporary Protective Covering
- Q. 01 78 00 – Closeout Submittals

DIVISION 02 -- EXISTING CONDITIONS

- A. 02 20 00 – Earthwork
- B. 02 41 13 – Selective Site Demolition
- C. 02 41 19 – Selective Demolition
- D. 02 52 00 – Cement Concrete Pavement

DIVISION 03 -- CONCRETE

- A. 03 00 00 – General Concrete Construction

DIVISION 05 -- METALS

- A. 05 50 00 – Metal Fabrications

DIVISION 06 -- WOOD, PLASTICS, AND COMPOSITES

- A. 06 10 01 – Rough Carpentry

DIVISION 07 -- THERMAL AND MOISTURE PROTECTION

- A. 07 90 05 – Joint Sealers

DIVISION 08 -- OPENINGS

- A. 08 31 00 – Access Doors and Panels
- B. 08 83 00 – Mirrors

DIVISION 09 – FINISHES

- A. 09 21 16 – Gypsum Board Assemblies
- B. 09 30 00 – Tiling
- C. 09 65 00 – Resilient Flooring
- D. 09 90 00 – Painting and Coating

DIVISION 10 – SPECIALTIES

- A. 10 14 00 – Signage
- B. 10 21 13 – Toilet Compartments
- C. 10 28 00 – Toilet and Bath Accessories

DIVISION 12 -- FURNISHINGS

- A. 12 36 61 – Simulated Stone Countertops

DIVISION 31 -- EARTHWORK

- A. 31 10 00 – Site Clearing
- B. 31 22 00 – Grading
- C. 31 25 00 – Erosion and Sedimentation Controls

DIVISION 32 -- EXTERIOR IMPROVEMENTS

- A. 32 12 16 – Hot-Mix Asphalt Paving
- B. 32 13 13 – Concrete Paving
- C. 32 13 73 – Concrete Paving Joint Sealant
- D. 32 17 23 – Pavement Markings

END OF SECTION

**Section 00 11 13 - NOTICE INVITING BIDS
CITY OF IRVINE, CALIFORNIA**

BID NO. 18-1295

NOTICE IS HEREBY GIVEN that sealed bids will be received by the Purchasing Agent of the City of Irvine, California, for furnishing all labor services, materials, tools, equipment, supplies, transportation, utilities and all other items and facilities necessary therefore, as provided in the contract documents for **ADA Facility Improvements, Operations Support Facility-Building 1**, together with appurtenances thereto, in strict accordance with the specifications on file at the Department of Public Works, 6427 Oak Canyon, Bldg. 1, Irvine, California 92618-5202.

DATE OF OPENING BIDS: **Bid prices for each line item of the Schedule of Work must be entered on the BidsOnline system in accordance with the instructions beginning on page 00 41 00-3. All other required documents for the bid proposal packet (pages 00 41 00-1, 00 41 00-5 through 00 41 00-19) must be received at One Civic Center Plaza, Irvine, California, 92606-5207 no later than XX:XX:XX a.m. on Month Date, 20XX,** at which time and place bids will be publicly opened and read aloud. **No late bids will be accepted. Hand-delivered or courier-delivered bid packages shall be brought to the RECEPTIONIST for the Purchasing Agent at the reception desk located on the first floor of the Civic Center building at the City of Irvine, located at One Civic Center Plaza, Irvine, California 92606-5207. Mailed bids shall be sent to City of Irvine, c/o Purchasing Agent, P.O. Box 19575, Irvine, CA 92623-9575. All bids shall be submitted in sealed envelopes marked on the outside with "BID NO. 18-1295 FOR ADA FACILITY IMPROVEMENTS, OPERATIONS SUPPORT FACILITY-BUILDING 1, CIP 361602."** If mailed to the Purchasing Agent, include a label on outside of sealed bid **"SEALED BID--Do Not Open with Regular Mail."**

LOCATION OF THE WORK: The work to be performed hereunder is located in the City of Irvine, County of Orange, at **6427 Oak Canyon, Irvine, CA 92618.**

DESCRIPTION OF WORK: The work to be performed shall include, but not be limited to:

Interior accessibility improvements to the men's and women's restrooms within Building 1, exterior accessibility upgrades to the building entrances, sidewalks, access ramps, and handrails, along with various signs and striping for accessibility compliance and other items not mentioned here, but are required by the plans and Special Provisions. The Engineer's construction cost estimate for the project is above \$210,000 (rounded to the nearest ten thousand).

The interior improvements shall be constructed during after business hours.

The exterior improvements shall be constructed during normal business hours.

LICENSE REQUIREMENT: **Prime Contractor must possess a valid Class A or Class B license.** At the time of submitting the bid, the Bidder shall be licensed as a contractor in accordance with the provisions of California Business and Professions Code Chapter 9, Division 3.

DEBARRED CONTRACTORS: The City of Irvine Municipal Code Section 2-12-101 *et seq.* sets forth procedures to debar Contractors from bidding or performing work on City of Irvine contracts at any tier, whether prime, subcontractor, etc. Accordingly, certain Contractors have been debarred and are listed on the City's website at www.cityofirvine.org/purchasing. Click on the link which states: "For a list of Debarred Contractors, please [click here](#)."

COMPLETION OF WORK AND LIQUIDATED DAMAGES: All work shall be completed in a total of **Forty-five (45) Working Days** from the date specified in the Notice to Proceed. Liquidated damages shall be **Eight Hundred Dollars (\$800)** per Calendar Day, for each and every Calendar Days delay in finishing the work in excess of the number of Working Days prescribed above.

AWARD OF CONTRACT: The award of the Contract, if it is awarded, will be to the lowest responsive and responsible Bidder whose bid complies with all the requirements prescribed. The City reserves the right, after opening bids, to reject any or all bids, to waive any informality in a bid, to make awards in the interest of the City, and to reject all other bids.

PROPOSAL GUARANTEE AND BONDS: Each bid shall be accompanied by cash, a certified or cashier's check or by a bid bond issued by a surety company, admitted to do business in the State of California, on the form furnished by the City as guarantee that Bidder will, if an award is made to him in accordance with the terms of his bid, promptly secure Workers' Compensation insurance, and liability insurance, execute a contract in the required form, and furnish satisfactory bonds for the faithful performance of the contract ("Performance Bond") and for the payment of claims of materialmen and laborers thereunder ("Payment Bond"). Said cash, check or bid bond shall be in an amount of not less than ten percent (10%) of the amount of the bid. The Performance Bond and Payment Bond shall be not less than one hundred percent (100%) of the total amount of the bid price named in the contract. Only bonds issued by companies admitted to do business in the State of California will be accepted in accordance with the Code of Civil Procedure Section 995.311. Failure to submit acceptable Payment Bond and Performance Bond as required shall result in a rejection of the bid and a forfeiture of the Bid Bond.

PREVAILING RATES OF WAGES: Prevailing wage requirements apply to public works projects with a value exceeding \$1,000.00. The definition of "public works" is found at Labor Code Section 1720, et seq.

The City is subject to the provisions of law relating to public contracts in the State of California. It is agreed that all provisions of law applicable to public contracts are a part of this Agreement to the same extent as though set forth herein, and will be complied with by Contractor. Contractor shall abide by all applicable Sections of the California Labor Codes including Sections 1770 -1781, *et seq.* In accordance with the provisions of Section 1773 of the California Labor Code, the general prevailing rates of per diem wages and holiday and overtime work in the locality in which the Work is to be performed shall be in accordance with the rates posted on the Department of Industrial Relations website, found at <http://www.dir.ca.gov/dirdatabases.html>.

The Contractor, and any subcontractor under him, shall pay not less than the specified prevailing rates of wages to all workers employed in the execution of this Agreement.

The City of Irvine reminds all contractors and subcontractors of the adoption of **State of California Senate Bill No. 854 (SB 854)**, and encourages them to understand and comply with the requirements as set forth on the Department of Industrial Relations (DIR) website at <http://www.dir.ca.gov/Public-Works/PublicWorks.html>. All contractors and subcontractors who plan to bid on a public works project (including maintenance work) with a value exceeding \$1,000.00 must first be registered and pay an annual fee with the DIR. Effective March 1, 2015, the City will require all contractors and subcontractors to be registered with the DIR prior to submitting a bid on any public works project. Subject to the exceptions set forth in Labor Code Section 1725.5, bids from contractors that are not currently registered will be deemed nonresponsive. Further, effective April 1, 2015, the City will not award a contract to and no contractor or subcontractor will be allowed to work on a City public works project unless they are registered with the DIR pursuant to Labor Code Section 1725.5. Please visit the DIR website for further information.

A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.

LABOR REGULATIONS: The Contractor shall comply with all applicable requirements of the California Labor Code and the City of Irvine Municipal Code.

PLANS AND SPECIFICATIONS: A full set of bid documents consisting of Notice Inviting Bids, Proposal, Contract, Specifications and Contract Plans are available for inspection without charge at the Department of Public Works, Project Management Division, City of Irvine Operations Support Facility, 6427 Oak Canyon, Building 1, Irvine, California 92618-5202.

To obtain a copy of the bid documents, please visit the City of Irvine web site at www.cityofirvine.org/purchasing. Click on the “Supplier Registration and Bid Opportunities” link, and review the information about our online system. Next, click on the “BidsOnline” link. If you are not currently registered with the City of Irvine, please click on the “New Vendor Registration” button and then complete the electronic supplier registration to include your Contractors State License information. After registering your firm, click on the “Bid Opportunities” button to view and download the Bid Documents, which include the complete Notice Inviting Bids document. Contractors must register on the City’s web site and download the Bid Documents in order to submit a bid. Firms must also check the web site periodically for addenda information as failure to download any and all addenda, and acknowledge in the bid submittal, will result in bid disqualification.

SECURITY FOR COMPLETION OF WORK: The Contract Documents establish a provision for monthly progress payments based upon the percentage of work completed as determined by the Engineer. The City will retain a portion of each progress payment as security for completion of the balance of the work. At the request and expense of the successful bidder, the City will pay the amount so retained upon compliance with the requirements of California Public Contract Code § 22300 and the General Conditions.

PROJECT ADMINISTRATION: All questions relative to this project prior to opening bids shall be prepared in writing and transmitted to the attention of Eric Gruber, Senior Project Manager, by facsimile to 949-724-7565 or by email to ergruber@cityofirvine.org. No inquiries will be accepted later than five (5) business days prior to the bid opening date as this would not allow time to respond to all plan holders. No phone inquiries will be accepted.

CITY OF IRVINE

Published by:
Publication Date:

END OF SECTION

SECTION 00 21 13 - INSTRUCTION TO BIDDERS, PROPOSAL REQUIREMENTS AND CONDITIONS

1.01 CONTRACT DOCUMENTS: The Contract Documents shall consist of:

- A. Permits and Agreements
- B. Contract
- C. Addenda
- D. Instructions to Bidders, Proposal Requirements and Conditions
- E. Contract Specifications
- F. Contract Plans
- G. Reference Specifications
- H. City of Irvine Park/Public Facility Standards dated May 20, 2015,
 - all of which are on file at the City of Irvine in the Public Works Department, Project Management Division, Operations Support Facility, 6427 Oak Canyon, Bldg. 1, Irvine, California, and are hereby referred to and made a part hereof.

1.02 BID PROPOSALS: To be considered, bids shall be made in according to the following instructions:

- A. For the convenience of bidders, the "SCHEDULE OF WORK AND BID PRICES" has been posted on the City's BidsOnline system. Bidders must enter their unit price information online in accordance with the INSTRUCTIONS FOR ENTERING ELECTRONIC BIDS included herein. Unit prices must be entered online. The extended prices and total bid price will be automatically calculated.
- B. Bids shall be submitted only on bid items stated in the Bid Documents; bids on other bases will not be considered. Bids that do not reference all addenda or that are not submitted on the prescribed forms, and in accordance with the INSTRUCTIONS FOR ENTERING ELECTRONIC BIDS may be rejected. The completed forms shall be without interlineations or alterations; any such bid may be declared non-responsive.
- C. Unless called for, additive bids will not be considered.
- D. Pursuant to the provisions of Public Contract Code § 4101 to 4108, inclusive, every Bidder shall set forth in its bid:
 - 1. The Bidder shall list the name, license number and location of the place of business of each subcontractor performing work in an amount in excess of one-half of one percent (1/2%) of the prime contractor's total bid.
 - 2. The bid item numbers and the percentage of the bid item subcontracted.
- E. In the event additive bids are called for and the Bidder intends to use different or additional subcontractors on the additive(s), the Bidder shall fill out additional forms of the list of subcontractors and shall identify such forms with relation to whether they apply to the base or additive bids.
- F. If the Bidder fails to specify a subcontractor for any portion of the work to be performed under the contract in excess of one-half of one percent (1/2%) of the Bidder's total bid, the Bidder agrees to perform that portion of work himself. The successful Bidder shall not, without the consent of the City, either:
 - 1. Substitute any person, firm or corporation as subcontractor in place of the subcontractor designated in the original bid, or

2. Permit any subcontract to be assigned or transferred or allow the work to be performed by anyone other than the original subcontractor listed in the bid.
- G. Bid proposal packets shall be accompanied by cash, a certified or cashier's check, or an acceptable bid bond on the form furnished by the City for an amount not less than ten percent (10%) of the bid, made payable to the order of the City of Irvine. The cash, check or bid bond shall be a guarantee that the Bidder will enter into a contract and provide all required insurance and bonds if awarded the work; and in case of refusal or failure to enter into the contract, the cash, check or bid bond shall be forfeited. The City will return Bidder's cash or check if the project is not awarded to Bidder.

Only bonds issued by companies admitted to do business in the State of California will be accepted, in accordance with Code of Civil Procedure § 995.311 and Insurance Code § 12090.
 - H. Before submitting a bid, bidders shall carefully examine the work site, the Contract Documents and the form of Contract and shall fully inform themselves about all existing conditions and limitations. Bidders shall include in their bids a sum to cover the cost of all work included in the Contract.
 - I. Bid proposal packets shall be delivered to the office of the Purchasing Agent, City of Irvine, Irvine, California, on or before the day and hour set for the bid opening in the Notice Inviting Bids, in a sealed envelope that bears the title of the Work, Bidder's name, and the words "BID NO. 18-1295 FOR ADA FACILITY IMPROVEMENTS, OPERATIONS SUPPORT FACILITY-BUILDING 1, CIP 361602." If mailed to the Purchasing Agent, include a label on the outside of the sealed bid: "SEALED BID--Do Not Open with Regular Mail."
 - J. A bid may be considered non-responsive if it does not comply with the requirements set forth in these bid documents. A responsive bid is one that complies with the solicitation in all acceptability and material respects and contains no material defects.

1.03 WITHDRAWAL OF BIDS:

Bids may be withdrawn at any time before the bid deadline, by going back into the BidsOnline system and selecting "Withdraw."

1.04 INTERPRETATION OF DRAWINGS AND DOCUMENTS; REQUESTS FOR CLARIFICATION:

- A. If any person contemplating submitting a bid for the proposed Contract is in doubt as to the true meaning of any part to the plans and specifications, or other proposed Contract Documents, or finds discrepancies in, or omissions from, the drawings or specifications, he shall submit to the Purchasing Agent a written request for all interpretations or corrections thereof via email to the project manager and purchasing staff prior to the deadline for submitting questions, as set forth in the Notice Inviting Bids section herein. Any clarification or correction of the proposed documents will be made only by Addendum duly issued, with notice provided to all firms who downloaded the bid documents from the City's website. The City is not responsible for any other explanations or interpretations of the proposed documents.
- B. Any clarification or correction of the proposed documents will be made only by Addendum duly issued, with notice provided to all firms who downloaded the bid documents from the City's website. The City is not responsible for any other explanations or interpretations of the proposed documents.

1.05 ADDENDA TO THE CONTRACT DOCUMENTS:

- A. Any addenda issued during the time of bidding, or forming a part of the Contract Documents after the Bidder has downloaded the bid documents from the City's website, shall be taken into account in the bid and shall be made a part of the Contract.
- B. Addenda may be issued by the City of Irvine for any reason, including but not limited to, clarifying or correcting the Notice Inviting Bids, Special Provisions, Plans, or Bid.
- C. Bidders will be notified of such Addenda during the period of advertising, either by email or

posting on the City's website, provided however, each Bidder shall be solely responsible for obtaining any such Addenda.

- D. The Bidder shall acknowledge the receipt of Addenda on the form provided in the Bid package. Bids that do not reference all Addenda on the prescribed form may be rejected as non-responsive.

1.06 BIDDER RESPONSIVENESS:

Failure of the Bidder to provide requested information in a complete and accurate manner may be considered non-responsive resulting in rejection of the bid. The use of "N/A" or "n/a" in response to any request for information without an explanation as to why that abbreviation is being used may render the bid non-responsive.

1.07 BIDDER RESPONSIBILITY:

Bidders are hereby notified that, in accordance with the City of Irvine Municipal Code § 2-12, the City may make a determination that the Contractor is non-responsive if the hearing officer finds evidentiary support that the Bidder has committed any of the following: (1) violated a term of a contract, present or past, with the City or other entity; (2) committed an act or omission which negatively reflects on the Contractor's quality, fitness, or capacity to perform a contract with the City or any other entity or engaged in a pattern or practice which negatively reflects on the same; (3) committed an act or omission which evidences a lack of business integrity or business honesty; (4) made or submitted a false claim against the City or any other entity; or (5) received a fine or citation for performing work in an unsafe manner; or (6) violated a condition, rule, regulation, permit, or standard applicable to a contract with the City or any other entity. In arriving at his or her determination, the hearing officer may consider Bidder's past conduct on City projects or on any other public or private projects upon which Bidder performed work.

1.08 BIDDER DEBARMENT:

Bidders are hereby notified that, in accordance with the City of Irvine Municipal Code § 2-12, the City may make a determination that the Bidder shall be debarred if the hearing officer finds evidentiary support that the Bidder has committed any of the following: (1) violated a term of a contract, present or past, with the City or other entity; (2) committed an act or omission which negatively reflects on the Contractor's quality, fitness, or capacity to perform a contract with the City or any entity or engaged in a pattern or practice which negatively reflects on the same; (3) committed an act or omission which evidences a lack of business integrity or business honesty; (4) made or submitted a false claim against the City or any other entity; (5) received a fine or citation for performing work in an unsafe manner; or (6) violated a condition, rule, regulation, permit, or standard applicable to a contract with the City or any other entity. In arriving at his or her determination, the hearing officer may consider past conduct of the Contractor on City projects or on any other public or private projects which Contractor performed work.

1.09 OPENING BIDS:

Bids will be publicly opened and read at the time and place set in the Notice Inviting Bids.

1.10 BID PROTEST PROCEDURES:

A. BASIS FOR PROTEST:

It is the policy of the City to ensure that free and open competition takes place in all procurement activities. If, in the course of a procurement action, an interested party has reason to believe that these conditions do not exist, the interested party may file a protest in accordance with the provisions of these procedures with the City of Irvine Purchasing Agent requesting a review of the claim and a timely resolution of the issue. Any bidder on a project for which it submitted a timely bid may protest the contract award for that project; however, subcontractors, suppliers or other third parties may not protest contract awards. Moreover, complaints about alleged ambiguity of the bid documents and/or estimates are not appropriate

subject matters for bid protests.

B. BID PROTEST CONTENTS:

The bid protest shall be submitted in writing via email to the attention of the Purchasing Agent. The written protest shall include:

1. The solicitation number and project description.
2. The name, address, phone number, and email address of the protesting party.
3. A detailed statement of all the legal and factual grounds for the protest and all relevant, supporting documentation (including all written documentation). The grounds for protest must be fully supported.
4. Statement of the form of relief requested from the City.
5. Signature of an authorized representative of the protesting party.

C. DEADLINE TO SUBMIT BID PROTESTS:

Bid protests must be filed within five (5) business days after the deadline for receiving bids.

D. WHERE TO FILE:

All protests are to be directed to the City of Irvine Purchasing Agent. Protests must be submitted in writing via email to: purchasing@cityofirvine.org. A copy of the email must also be sent to the project manager whose email address is set forth in the bid documents. (A document is considered filed on a particular calendar day when it is received via email by the City of Irvine Purchasing Agent by 5:00 p.m., Pacific Standard Time, on that calendar day.) Although not required, in addition to submitting a protest via email, an original protest letter may be sent via United States Postal Service to: Attn: Purchasing Agent, City of Irvine, PO Box 19575, Irvine, CA 92623-9575.

E. BID PROTEST REVIEW:

Upon receipt, the Purchasing Agent shall consider the protest and may give notice of the protest and its basis to other persons including bidders involved in or affected by the protest. A protest shall be dismissed for failure to comply with any of the requirements set forth in the "Bid Protest Contents" section above. The Purchasing Agent shall review all material submitted with the protest. No additional material will be accepted for consideration from the protesting party unless specifically requested by the Purchasing Agent. If additional material is requested, it must be submitted by the requested date. The Purchasing Agent will respond to the protesting party via email within ten (10) business days after receipt of the protest. Final determinations will be binding, except as otherwise provided below.

F. RECONSIDERATION OF PROTEST DECISION:

A protesting party may request the Purchasing Agent's reconsideration of a decision prior to contract award only if one or both of the following conditions are met:

1. New information becomes available that was not previously known, or could not have been reasonably known, at the time of the original protest; and/or
2. The Purchasing Agent's decision contains an error of law.

Any request for reconsideration of a protest decision shall be submitted in writing via email to the Purchasing Agent within three (3) business days from the date of issuance of the initial decision. The request must include a detailed explanation of the basis for reconsideration as set forth above. The Purchasing Agent shall respond to the request for reconsideration within seven (7) business days from receipt of the request.

G. CONTRACT AWARD:

At its discretion, the City may delay the execution of any proposed agreement pending the resolution of a protest unless one or both of the following conditions are present:

1. The project or service being procured is urgently required; and/or
2. Failure to make prompt award will otherwise cause undue harm to the City.

H. REMEDIES:

There shall be no limitation on remedies selected by the City. Nothing contained herein shall be considered to either act as a limitation on the City's choice of remedies or confer any right upon any interested party to a remedy. In determining the appropriate remedy, the City shall consider all the circumstances surrounding the solicitation, the contract selection, and/or the contract award, including, but not limited to: the seriousness of any deficiency found to exist in the contracting process; the effect of the action of the competitive process; any urgency surrounding the contract requirement; and the effect that implementing the remedy will have on the City's overall ability to accomplish its mission. If the City determines that the award or proposed award was not made in accordance with the applicable City statutes, regulations, policies, and procedures, the City may, in its sole discretion, grant any of the following or any other remedy it deems appropriate: If pre-award, reject all bids and issue a new solicitation, make a new contractor selection or award a contract consistent with applicable statutes, regulations, policies, and procedures; or if post-award, refrain from extending the term of the contract or awarding task orders under an existing task order agreement; or at its sole discretion, take no further action.

1.11 AWARD OR REJECTION OF BIDS AND EXECUTION OF CONTRACT:

- A. The award of the Contract will be as of the date specified in the Notice of Award issued by the City. The award of the Contract shall not constitute a binding obligation on City until the Contract has been lawfully executed by all parties and the Contractor has submitted all required insurance certificates and bonds to the City.
- B. The Contractor shall not commence work in advance of the execution of the Contract and the delivery of the bonds and insurance certificates.
- C. The award of the Contract, if it is awarded, will be to the responsive and responsible Bidder who submitted the lowest Bid complying with these Proposal Requirements and Conditions and with the Notice Inviting Bids. Such award, if made, will be made within ninety (90) Calendar Days after the opening of the proposals. The ninety (90) Calendar Days period shall be subject to extension for such further period as may be agreed upon in writing between the City and the Bidder(s) concerned. All bids will be compiled on the basis of the estimated quantities of work to be done as shown in SECTION 00 41 00 - Bidder Proposal. However until an award is made, the City of Irvine reserves the right to reject any and all bids or to waive any informality in bids received, if doing so is deemed to best serve the interest of the City.

1.12 CONTRACT AND BONDS:

- A. The Contract, which the successful Bidder, as Contractor, will be required to execute, is included in the Section 00 50 00 and should be carefully examined by the Bidder.
- B. The successful Bidder, simultaneously with his execution of the Contract will be required to furnish a Payment Bond and a Performance Bond. Said bonds shall be in the form of SECTION 00 5001 - Performance Bond and SECTION 00 5002 - Payment Bond and based upon conditions specified in Article 1-4 of SECTION 0072 00 GENERAL CONDITIONS.
- C. Only bonds issued by companies admitted to do business in the State of California will be accepted, in accordance with Code of Civil Procedure § 995.311 and Insurance Code § 12090. Failure to submit acceptable Payment and Performance Bonds as required shall result in rejection of bid and forfeiture of the proposal guarantee.

- D. All alterations, extensions of time, extra and additional work, and other changes authorized by the Contract Documents will be made without securing the consent of the surety or sureties on the Contract bonds.
- E. The Contract shall be signed by the successful Bidder, and delivered to the City together with the Contract bonds within ten (10) days of the date specified in the Notice of Award issued by the City, not including Saturdays, Sundays and legal holidays. The Contractor shall submit insurance certificates electronically in accordance with Article 6-3 of the GENERAL CONDITIONS. The executed Contract, together with the required bonds, will be filed with the Clerk of the City of Irvine.
- F. Failure of the lowest responsive and responsible Bidder to execute the Contract and file acceptable insurance certificates and bonds as provided herein within ten (10) days of award of the Contract, not including Saturdays, Sundays and legal holidays, shall be just cause for the forfeiture of the bid bond. The successful Bidder may file with the City a written notice, signed by the Bidder or his authorized representative, specifying that the Bidder will refuse to execute the Contract if presented to him. The filing of such notice shall have the same force and effect as the failure of the Bidder to execute the Contract and furnish acceptable certificates of insurance and bonds within the time herein before prescribed.

1.13 SPECIAL NOTICE:

Bidders are required to inform themselves fully of the conditions relating to construction and labor under which the Work will be performed, and the Contractor must employ, so far as possible, such methods and means in the carrying out of this work as will not cause any interruption or interference with any other contractor.

1.14 BIDDERS INTERESTED IN MORE THAN ONE BID:

No person, firm or corporation shall be allowed to make or file or be interested in more than one bid as prime contractor for the same work.

1.15 BIDS TO BE LEFT ON DEPOSIT:

No Bidder may withdraw its bid for a period of ninety (90) Calendar Days after the time set for opening thereof. However, the City will return all proposal guarantees within fifteen (15) days, not including Saturdays, Sundays and legal holidays, after the award of the Contract or rejection of the bids, as the case may be, to respective Bidders whose bids are not accepted.

1.16 NON-COLLUSION DECLARATION:

All Bidders shall submit with their bids an executed non-collusion declaration on the form provided in the bidding documents.

1.17 SUBSTITUTIONS:

Where the Specifications or Plans specify any material, product, thing, or service by one or more brand names, whether or not "or equal" is added, and a Bidder wishes to propose the use of another item as being equal, he shall request approval therefor as set forth in the GENERAL CONDITIONS.

1.18 REPORTING SUSPECTED IMPROPRIETY, GROSS WASTE, FRAUD AND OTHER ACTS:

Any City and/or Great Park official, employee, and/or contractor who suspects any type of impropriety relating to purchasing or contracting activities, or gross waste, fraud, or abuse of City and/or Great Park funds or resources, a gross abuse of authority, a specified and substantial danger to public health or safety due to any act or omission of any City and/or Great Park official, employee, or contractor, or the use of a City and/or Great Park office or position or of City and/or Great Park resources for personal gain, should report the act by calling the City's Integrity Line at 866-428-1509. All such

reports shall remain anonymous if desired by the reporting party. Suspected fraudulent activities include bid rigging, product substitution, theft, overcharging, false certifications and representations, and the like. Any allegations of bribery, kickbacks, gratuities, and conflicts of interest involving City employees should also be reported.

1.19 ASSIGNMENT OF CONTRACT:

No assignment by the Contractor of any Contract to be entered into hereunder or of any part thereof, or of funds to be received thereunder by the Contractor, will be recognized by the City unless such assignment has had the prior written approval of the City and the surety has been given due notice of such assignment in writing.

1.20 OTHER REQUIREMENTS:

- A. Before entering into a Contract, the Bidder to whom the Contract has been awarded shall satisfy all insurance requirements per General Conditions and such insurance shall be maintained in full force and effect at its own expense during the life of this Contract.
- B. Upon request, the successful Bidder shall furnish to the City a statement of its financial condition and previous construction experience or such other evidence of his qualifications.

1.21 LABOR CODE:

PUBLIC WORKS CONTRACTOR REGISTRATION PROGRAM

- A. In accordance with State of California Senate Bill No. 854 (SB 854), contractors bidding on and/or engaging in the performance of public works projects (the definition of “public works” is found at Labor Code Section 1720, et seq.) shall be registered with the Department of Industrial Relations. By submitting a bid for City of Irvine Public Works project, the contractor acknowledges the above requirements and agrees to maintain a valid Department of Industrial Relations (DIR) Public Works Contractor registration during the term of this project.
 - 1. A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.
 - 2. Pursuant to Labor Code Section 1771.4, all bidders are hereby notified that this project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.
- B. In addition to the requirement for submittal of certified payroll records to the City, contractors and subcontractors shall furnish electronic certified payroll records to the Labor Commissioner **(State of California, Division of Labor Standards Enforcement)**.
- C. Contractors and subcontractors shall be responsible for complying and staying current with all DIR requirements and regulations. More information on SB 854 can be found at <http://www.dir.ca.gov/Public-Works/SB854.html>.
- D. Attention is directed to Labor Code § 1735 of which reads as follows:

No discrimination shall be made in the employment of persons upon public works because of the race, religious creed, color, national origin, ancestry, physical handicap, medical condition, marital status, or sex of such persons, except as provided in the Government Code §12940, and every contractor for public works violating this section is subject to all the penalties imposed for a violation of this chapter.

- E. The Contractor shall abide by the provisions of the California Labor Code § 1770-1781, et seq.
- F. In accordance with the provisions of the California Labor Code § 1773, the general prevailing rates of per diem wages and holiday and overtime work in the locality in which the work is to be performed has been obtained from the Director of the Department of Industrial Relations, a copy of which is on file in the office of the City Clerk of the City of Irvine and will be made available to any interested party upon request. The Contractor shall post a copy of the prevailing rate of per diem wages at the job site. The Contractor, and any subcontractor under him, shall pay not less than the specified prevailing rates of wages to all workers employed in the execution of the contract.
- G. Failure to comply with the subject sections will subject the Contractor to penalty and forfeiture provisions of the Labor Code § 1775.
- H. In accordance with of the Labor Code § 1773.1, the Contractor must make travel and subsistence payments to each worker employed in the execution of the Contract.
- I. The City will not recognize any claim for additional compensation because of the payment by the Contractor of any wage rate in excess of the prevailing wage rate set forth in the Contract. The possibility of wage increases is one of the elements to be considered by the Contractor in determining his bid, and will not under any circumstances be considered as the basis of a claim against the City on the Contract.
- J. The Contractor shall familiarize itself with the provisions of the Labor Code § 1777.5 regarding employment of apprentices, and shall be responsible for compliance therewith, including compliance by his subcontractors.
- K. The Contractor and subcontractors shall comply with Labor Code § 1777.6 which stipulates that it shall be unlawful to refuse to accept otherwise qualified employees as registered apprentices solely on the grounds of race, religious creed, color, national origin, ancestry, sex, or age except as provided in Labor Code § 3077, of such employee.
- L. The Contractor and subcontractors shall comply with Labor Code § 1810 and § 1811 which stipulates that eight hours labor constitutes a legal day's work, and § 1812 which stipulates that the Contractor and subcontractors shall keep an accurate record showing the name of and actual hours worked each calendar day and each calendar week by each worker employed by him in connection with the work performed under the terms of the Contract. Failure to comply with these sections of the Labor Code will subject the Contractor to penalty and forfeiture provisions of the Labor Code § 1813.

1.22 RESERVATION OF RIGHTS:

- A. The City reserves the right to:
 1. Disqualify any Bidder in accordance with the instructions herein.
 2. Reject any bids, at its discretion, including bids found to be conditional or incomplete, contain irregularities or found to be not responsive to this Instruction to Bidders Proposal Requirements and Conditions.
 3. Investigate the qualifications of any Bidder under consideration.
 4. Require confirmation of information furnished by the Bidder.
 5. Require additional evidence of Bidder's ability to perform the Work described in this Instruction to Bidders Proposal Requirements and Conditions.
 6. Contact the submitted references to confirm information provided in the bid.
 7. Postpone or cancel the entire Instruction to Bidders Proposal Requirements and Conditions or a portion thereof.

8. Postpone the bid opening or award for its own convenience.
 9. Award a Contract to other than the apparent low bidder.
 10. Award a Contract in part or in combination of items.
 11. Issue subsequent Instruction to Bidders Proposal Requirements and Conditions.
 12. Seek the assistance of outside technical experts to review the bids.
 13. Disqualify a bid upon evidence of collusion, with intent to defraud, or other illegal practices on the part of the Bidder.
 14. Waive any errors or informalities in any bid to the extent permitted by law.
 15. Require bidder to provide proof as to the equality, substitutability, and compatibility of any items proposed as alternates or equals.
 16. Determine, at the City's sole discretion, the equality, substitutability, and compatibility of any items proposed as alternates or equals.
 17. Exercise any other rights under the City's charter or municipal code.
- B. The City has no obligation to consider any bid unless it is responsive to this Instruction to Bidders Proposal Requirements and Conditions and conforming in all respects to the Form of Contract. This Instruction to Bidders Proposal Requirements and Conditions does not commit the City to enter into a Contract.

END OF SECTION

**SECTION 00 41 00 - BIDDER'S PROPOSAL
CONSTRUCTION
OF
ADA FACILITY IMPROVEMENTS
OPERATIONS SUPPORT FACILITY- BUILDING 1**

**CIP 361602
BID NO. 18-1295**

HONORABLE MAYOR AND MEMBERS OF THE CITY COUNCIL
CITY HALL
IRVINE, CALIFORNIA

THE UNDERSIGNED, HAVING CAREFULLY EXAMINED ALL OF THE CONTRACT DOCUMENTS; PERMITS ISSUED BY JURISDICTIONAL REGULATORY AGENCIES; CONTRACT; CONTRACT ADDENDA; INSTRUCTIONS TO BIDDERS; PROPOSAL REQUIREMENTS AND CONDITIONS; SPECIFICATIONS; THE PLANS (SHEETS 1 THROUGH 21); STANDARD PLANS; REFERENCE SPECIFICATIONS; AND ALL OTHER INFORMATION PROVIDED BY THE CITY FOR THE CONSTRUCTION LISTED ABOVE IN AND FOR THE CITY OF IRVINE, IS FAMILIAR WITH THE CONDITIONS, HAVING PERSONALLY VISITED THE SITE OF THE WORK, AND HEREBY PROPOSES TO FURNISH ALL LABOR, MATERIALS AND EQUIPMENT, AND ALL INCIDENTAL WORK NECESSARY TO DELIVER ALL THE IMPROVEMENTS COMPLETE, IN PLACE AND IN STRICT CONFORMITY WITH THE CONTRACT DOCUMENTS, FOR THE UNIT PRICES NAMED IN THE FOLLOWING SCHEDULE OF WORK AND BID PRICES.

Bidder's Company Name (please print or type)

Signature of Bidder

Print Name

00 41 00-1

**CITY OF IRVINE
 ADA FACILITY IMPROVEMENTS
 OPERATIONS SUPPORT FACILITY- BUILDING 1
 CIP 361602
 BID NO. 18-1295**

SCHEDULE OF WORK

| ITEM NO. | BID ITEM DESCRIPTION | UNIT | EST. QTY |
|----------|--|------|----------|
| 1 | Mobilization, Conditions and Controls | LS | 1 |
| | Building Interior Work | | |
| 2 | Interior Demolition | LS | 1 |
| 3 | Ceramic Tile | LS | 1 |
| 4 | Joint Sealant | LS | 1 |
| 5 | Millwork & Counter Tops | LS | 1 |
| 6 | Flooring / Base | LS | 1 |
| 7 | Framing / Drywall | LS | 1 |
| 8 | Painting | LS | 1 |
| 9 | Interior Signage | LS | 1 |
| 10 | Toilet Partitions / Accessories | LS | 1 |
| 11 | Plumbing / Fixtures | LS | 1 |
| 12 | Electrical | LS | 1 |
| | Site Work | | |
| 13 | Concrete Pavement | SF | 1,212 |
| 14 | Concrete Ramp | EA | 3 |
| 15 | Concrete Curb Ramps | SF | 727 |
| 16 | Truncated Domes | EA | 5 |
| 17 | AC Pavement (Overlay) | SF | 5,950 |
| 18 | Landscaping Area | LS | 1 |
| 19 | Curb | LF | 45 |
| 20 | Handrails | LF | 334 |
| 21 | Concrete Valley Gutter | LF | 40 |
| 22 | International ADA Symbol of Accessibility at Building Entrance | EA | 8 |
| 23 | ADA Directional Sign | EA | 1 |
| 24 | Remove Existing Curb | LF | 100 |
| 25 | Remove Existing Ramp | EA | 1 |
| 26 | Removal of Existing Landscape (including irrigation lines) | LS | 1 |
| 27 | Remove Concrete Pavement | SF | 670 |

Bidder's Name: _____

00 41 00-2

**CITY OF IRVINE
ADA FACILITY IMPROVEMENTS
OPERATIONS SUPPORT FACILITY- BUILDING 1
CIP 361602
BID NO. 18-1295**

INSTRUCTIONS FOR ENTERING ELECTRONIC BIDS

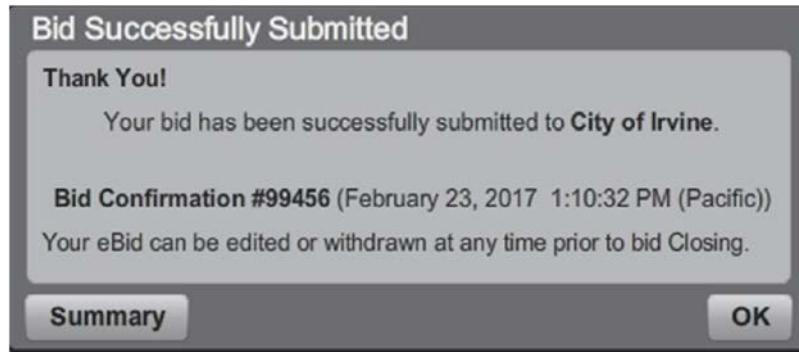
In order to access the BidsOnline system and ensure successful online submission of your bid prices, follow these steps:

1. Go to <https://www.planetbids.com/portal/portal.cfm?CompanyID=15927#>
2. On the Vendor Portal page, log into the system (lower right hand corner of screen) with your assigned user name and password. (You must be registered in order to download documents and submit a bid.)
3. Click on "Bid Opportunities" and then on the Bid # and Description that you wish to bid on. The selected bid will open to allow you to access all tabs, documents and the pricing sheet.
4. Click on the "Documents & Attachment" tab to be sure you have downloaded all documents that are part of this bid.
 - *If you have not already downloaded all bid documents, you must download them now, in order to submit your bid. The screen will indicate which documents you've already downloaded.*
5. Click on the tab "Addenda & Emails" to be sure you have read and acknowledged all addenda that have been issued for this bid.
 - *The screen will display "yes" or "no" next to each addendum to indicate whether you have viewed and acknowledged it. If you have not previously acknowledged an addendum, do so now by clicking on the addendum to open and read it, then click on the "Acknowledge" button on the lower left hand corner of screen.*
6. To begin entering your bid, click on "Place eBid" on the lower right corner of the screen. The bid "Terms and Conditions" will pop up with a button for you to click "Accept" to acknowledge your agreement to the terms of the bid.
7. Enter the Respondee information on the "Detail" tab.
8. Go to the "Line Items" tab and enter your unit prices on each line. The system will calculate the extended costs and grand total for you.
9. When you have finished entering all pricing and attachments, click on the "Save" button. This saves your bid as a draft for you to review or revise as needed anytime up to the bid submittal deadline. When you are ready to submit your bid, click the "Submit" button. You will receive a confirming message that looks like this:

Bidder's Name: _____

00 41 00-3

**CITY OF IRVINE
ADA FACILITY IMPROVEMENTS
OPERATIONS SUPPORT FACILITY- BUILDING 1
CIP 361602
BID NO. 18-1295**



Note: E-Bids are sealed and cannot be viewed by the City until the closing date and time. As noted in the screen print above, if you need to withdraw your bid, you may do so any time before the bid deadline, by going back into the system and selecting "withdraw".

Please begin entering your bid in sufficient time to complete and submit it prior to the stated deadline. The official closing time for the bid is determined, and controlled, by the electronic clock in the bid management system. Once the deadline is reached, the system will not allow any bids to be submitted, and any in process that are not completed will be rejected. The amount of time required to enter and submit your bid depends on the complexity of the bid and the processing speed of your server and internet connections.

Technical Support

In the event you encounter technical difficulties during the uploading process, please contact the Planet Bids, BidsOnline system team as shown below (M-F from 8 a.m. to 5 p.m.):

support@planetbids.com or call 818-992-1771, ext. 0

Bid prices must be entered on the BidsOnline system, and Bid Submittal Documents must be received at One Civic Center Plaza, Irvine, California, 92606-5207, before the date and time indicated in the Notice Inviting Bids. If bid prices are not entered by the deadline, or Bid Submittal Documents are not received by the deadline, the bid shall be declared non-responsive.

Bidder's Name: _____

00 41 00-4

**CITY OF IRVINE
ADA FACILITY IMPROVEMENTS
OPERATIONS SUPPORT FACILITY- BUILDING 1
CIP 361602
BID NO. 18-1295**

ADDENDA

Bidder acknowledges receipt of addenda to plans, specifications and other Contract Documents listed below, if any, and agrees this Bid Proposal is submitted on the basis of all changes in the work specified herein and said addenda are by this reference made a part hereof.

Addenda to Contract Documents Received:

| <u>No.</u> | <u>Date Received</u> |
|------------|----------------------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

If the Bidder does not list all applicable City-issued addenda above, the Bid Proposal will be rejected.

Bidder's Name: _____
00 41 00-5

**CITY OF IRVINE
 ADA FACILITY IMPROVEMENTS
 OPERATIONS SUPPORT FACILITY- BUILDING 1
 CIP 361602
 BID NO. 18-1295**

INFORMATION REQUIRED OF BIDDERS

In determining the lowest "responsible" bidder, consideration will be given to the general competency of the bidder in regard to the work covered by the Bid Proposal. To this end, each proposal shall be supported by a statement of the Bidder's experience on this form. **Failure of the Bidder to provide requested information in a complete, accurate and legible manner shall render the bid non-responsive.** Additionally, the City reserves the right to disqualify or refuse to consider a proposal if a Bidder is determined to be non-responsible in accordance with Irvine Municipal Code § 2-12-103 "Determination of Contractor Non-Responsibility."

The Bidder is required to supply the following information. Use additional sheets as necessary.

- A. Contact person name: _____ Email: _____
 Address: _____
 Telephone: () _____ Fax: () _____
- B. Type of firm (Individual, Partnership, or Corporation): _____
- C. State Contractor's License Number and Classification: _____
- D. DIR Registration Number: _____ Expiration Date: _____
- E. Number of years your firm has operated as a contractor: _____
- F. Number of years your firm operated under its present business name: _____
- G. List the **names and addresses** of all principals or officers authorized to bind your firm.

| Name: | Address: |
|-------|----------|
| | |
| | |
| | |
| | |

- H. List any project(s) your firm has **failed to complete** within the last five years due to a termination of contract. For each project, list the type of project, client's name, contact person, current telephone number, email address, and provide a brief description of the grounds for the termination.

Check appropriate box: None **See list below**

| Type of Project | Client Name | Contact Person | Contact Phone No. and email address |
|---------------------|-------------|----------------|-------------------------------------|
| | | | |
| Description: | | | |
| | | | |

Bidder's Name: _____

**CITY OF IRVINE
 ADA FACILITY IMPROVEMENTS
 OPERATIONS SUPPORT FACILITY- BUILDING 1
 CIP 361602
 BID NO. 18-1295**

| Type of Project | Client Name | Contact Person | Contact Phone No. and email address |
|---------------------|-------------|----------------|-------------------------------------|
| | | | |
| Description: | | | |

| Type of Project | Client Name | Contact Person | Contact Phone No. and email address |
|---------------------|-------------|----------------|-------------------------------------|
| | | | |
| Description: | | | |

- I. List projects of similar nature to the ADA FACILITY IMPROVEMENTS, OPERATIONS SUPPORT FACILITY-BUILDING 1, your firm is **currently** constructing. For each project, list the type of project, contract amount, client's name, contact person, current telephone number, email address, and a brief description.

Check appropriate box: None See list below

| Type of Project | Contract Amount | Client Name | Contact Person | Contact Phone No. and email address |
|---------------------|-----------------|-------------|----------------|-------------------------------------|
| | | | | |
| Description: | | | | |

| Type of Project | Contract Amount | Client Name | Contact Person | Contact Phone No. and email address |
|---------------------|-----------------|-------------|----------------|-------------------------------------|
| | | | | |
| Description: | | | | |

| Type of Project | Contract Amount | Client Name | Contact Person | Contact Phone No. and email address |
|---------------------|-----------------|-------------|----------------|-------------------------------------|
| | | | | |
| Description: | | | | |

Bidder's Name: _____

**CITY OF IRVINE
 ADA FACILITY IMPROVEMENTS
 OPERATIONS SUPPORT FACILITY- BUILDING 1
 CIP 361602
 BID NO. 18-1295**

J. List projects of a similar nature to the ADA FACILITY IMPROVEMENTS, OPERATIONS SUPPORT FACILITY-BUILDING 1, your firm has **completed** within the last five years. For each project, list the type of project, contract amount, date of completion, client's name, contact person, current telephone number, email address, and a brief description.

Check appropriate box: None See list below

| Type of Project | Contract Amount | Date of Completion | Client Name | Contact Person | Contact Phone No. and email address |
|---------------------|-----------------|--------------------|-------------|----------------|-------------------------------------|
| | | | | | |
| Description: | | | | | |

| Type of Project | Contract Amount | Date of Completion | Client Name | Contact Person | Contact Phone No. and email address |
|---------------------|-----------------|--------------------|-------------|----------------|-------------------------------------|
| | | | | | |
| Description: | | | | | |

| Type of Project | Contract Amount | Date of Completion | Client Name | Contact Person | Contact Phone No. and email address |
|---------------------|-----------------|--------------------|-------------|----------------|-------------------------------------|
| | | | | | |
| Description: | | | | | |

K. List the name of the person(s) (**A MINIMUM OF ONE**) who inspected the site of the proposed work for your firm.

| Name: | Date of Inspection: |
|-------|---------------------|
| | |
| | |
| | |

L. Complete the following in conformance with Labor Code Section 1725.5

| Name of Contractor and Subcontractors | Registered with DIR? | DIR Registration No. |
|---------------------------------------|----------------------|----------------------|
| | Yes ___ No ___ | |
| | Yes ___ No ___ | |
| | Yes ___ No ___ | |
| | Yes ___ No ___ | |

Bidder's Name: _____

**CITY OF IRVINE
 ADA FACILITY IMPROVEMENTS
 OPERATIONS SUPPORT FACILITY- BUILDING 1
 CIP 361602
 BID NO. 18-1295**

| | | |
|--|----------------|--|
| | Yes ___ No ___ | |
| | Yes ___ No ___ | |
| | Yes ___ No ___ | |
| | | |
| | | |
| | | |
| | | |
| | | |

M. If requested by the City, the Bidder shall furnish a notarized financial statement, financial data, or other information and references sufficiently comprehensive to permit an appraisal of its current financial condition or ability to perform the work.

Failure to furnish information upon request will render the bid nonresponsive.

All of the above statements regarding Contractor's experience and financial qualifications are submitted in conjunction with the Bid Proposal, as a part thereof, and the truthfulness and accuracy of the information is guaranteed by the Bidder.

Bidder's Name: _____

THE CITY OF IRVINE RESERVES THE RIGHT TO REJECT ALL BIDS

The undersigned understands the contract time limit allotted for the completion of the work required by the Contract is **Forty-five (45) Working Days**.

The undersigned agrees, if awarded the Contract, to sign the Contract and furnish the necessary insurance certificates and bonds within ten (10) days of the date specified in the Notice of Award of Contract, not including Saturdays, Sundays and legal holidays, and to begin work within ten (10) Working Days from the date specified in the City's Notice to Proceed. Contract time accounting shall begin on the date shown in the Notice to Proceed.

Accompanying this Bid Proposal is **(check appropriate box)**:

Cash **Cashier's Check** **Certified Check** **Bid Bond**

Sign Here if Individual:

(Signature) _____
(Print Name) _____
(Address) _____

Affix notary's acknowledgement

Sign Here if Co-Partnership:

Co-Partnership Name of Firm: _____
(Address) _____

Members Signing:

(Signature) _____
(Print Name) _____
(Address) _____

(Signature) _____
(Print Name) _____
(Address) _____

Affix notary's acknowledgement

Bidder's Name: _____

Sign Here if Corporation:

(Name of Corporation) _____

(Address) _____

Officers of Corporation Signing:

(Signature) _____

(Print Name) _____

(Title) _____

And

(Signature) _____

(Print Name) _____

(Title) _____

If executed by other than President and Secretary of the Corporation, attach a certified copy of resolution authorizing signature on behalf of the Corporation.

Affix notary's acknowledgement

Bidder's Name: _____

00 41 00-11

LIST OF SUBCONTRACTORS

The Bidder shall list each subcontractor performing work in an amount in excess of one-half of one percent (1/2%) of the prime contractor's total bid, or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half of one percent (1/2%) of the prime contractor's total bid. Complete columns (1) and (2) and submit with the bid. Complete columns (3) and (4) and submit with the bid or hand-deliver to the Receptionist for the Purchasing Agent at the reception desk located on the first floor of the Civic Center building at the City of Irvine, located at One Civic Center Plaza, Irvine, California 92606-5207 within 24 hours after the bid opening. Failure to provide complete information in columns (1) through (4) within the time specified shall render the bid non-responsive.

Subcontractors listed must not be debarred from performing the designated work.

| BUSINESS NAME and LOCATION (1) | CONTRACTOR LICENSE NUMBER (2) | BID ITEM NUMBERS (3) | PERCENTAGE OF BID ITEM SUBCONTRACTED (4)* |
|-----------------------------------|-------------------------------------|-------------------------|---|
| | | | |

Information must be typed or clearly printed.

*** If you are subcontracting a whole bid item, insert one hundred percent (100%); if less than one hundred percent (100%), insert actual percentage.**

Bidder's Name: _____

00 41 00-12

**NON-COLLUSION DECLARATION-CONTRACTOR
TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID
CITY OF IRVINE BID NO. _____**

The undersigned declares:

I am the _____ [title] of _____ [company name], the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on _____ [date], at _____ [city], _____ [state].

Signature

Print Name

Bidder's Name: _____

FORM OF BID BOND

**ADA FACILITY IMPROVEMENTS
OPERATIONS SUPPORT FACILITY-BUILDING 1
CIP 361602
BID NO. 18-1295**

(10% of the Proposal Amount)

KNOW ALL MEN BY THESE PRESENTS that we _____
_____ as Principal, and _____ as Surety, are held
and firmly bound unto City of Irvine, hereinafter called the City in the sum of _____
_____ Dollars (\$_____), for the payment of which sum well and truly to be
made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly
by these presents.

The conditions of this obligation are such that whereas the Principal submitted to the City a certain Bid Proposal, attached hereto and hereby made a part hereof, to enter into a contract in writing for the ADA FACILITY IMPROVEMENTS, OPERATIONS SUPPORT FACILITY-BUILDING1, and will furnish all required certificates of insurance and bonds as required by the Contract.

NOW THEREFORE, if said Bid Proposal shall be rejected; or in the alternate, if said Bid Proposal shall be accepted, and the Principal shall execute and deliver a contract in the prescribed Form of Contract, shall deliver certificates evidencing that the required insurance is in effect and shall execute and deliver Performance and Payment Bonds in the forms prescribed, and shall in all other respects perform the Contract created by the acceptance of said Bid Proposal, then this obligation shall be void; otherwise this obligation shall remain in force and effect, it being expressly understood and agreed that the liability of the Surety for any and all default of the Principal hereunder shall be the amount of this obligation as herein stated. In the event suit is brought upon this bond by City and judgment is recovered, Surety shall pay all costs incurred by City in said suit, including a reasonable attorney's fee to be fixed by the court.

The Surety, for the value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall in no way be impaired or affected by an extension of the time within which the City may accept such a Bid Proposal; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the above-bounded parties have executed this instrument this ____ day of _____, 20____, the name of each party being hereto written below and these presents duly signed by each party's undersigned representative, pursuant to authority of its governing body. This bond shall be authenticated by way of notarized acknowledgment, including a copy of the power of attorney, for the Surety.

This space intentionally left blank

Bidder's Name: _____

00 41 00-14

ATTEST:

(Principal) _____

(Address) _____

(By) _____

(Title) _____

ATTEST:

(Surety) _____

(Address) _____

(By) _____

(Title) _____

Bidder's Name: _____

00 41 00-15

FALSE CLAIMS

Bidder shall complete the **False Claims Act Certification** below or in the alternative, provide the information requested under **False Claims Act Violations** below. **Failure to certify or provide the requested information shall render the bid non-responsive.**

“False Claims Act” as used herein is defined as either or both the Federal False Claims Act, 31 U.S.C. § 3729, *et seq.*, and the California False Claims Act, Government Code § 12650, *et seq.*

FALSE CLAIMS ACT CERTIFICATION

I _____ hereby certify that neither
(Print name)

_____ (Contractor name)

nor _____
(Name of qualifying person licensed by Contractors State License Board)

has been determined by a court or tribunal of competent jurisdiction to have violated the False Claims Act as defined above.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed this _____ day of _____ at _____
(Month and year) (City and State)

By _____
(Signature of owner, officer, manager or licensee responsible for submission of Bid Proposal)

FALSE CLAIMS ACT VIOLATIONS

With regard to any determinations by a tribunal or court of competent jurisdiction that the False Claims Act, as defined above, has been violated by (1) the Contractor submitting this Bid Proposal or (2) the qualifying person licensed by the State Contractors License Board to perform the work described in this Bid Proposal, shall provide on a separate sheet the following information: (1) the date of the determination of the violation, (2) the identity of the tribunal or court, (3) the identity of the government contract or project involved, (4) the identity of the government department involved, (5) the amount of fine imposed, and (6) any exculpatory information of which the City should be aware.

Bidder's Name: _____

CIVIL LITIGATION AND ARBITRATION HISTORY

Bidder shall provide the certification or information requested below. Failure to certify or provide such certification or information shall render the bid non-responsive.

For five (5) years preceding the submittal date of this Bid Proposal, identify civil litigation and arbitration arising out of the performance of a construction contract within the State of California in which the (1) Contractor submitting this bid proposal or (2) the qualifying person licensed by the State Contractors Licensing Board to perform the work described in this Bid Proposal was a named as a party in a lawsuit brought by or against the project owner or any action to confirm, vacate or modify an arbitration award involving an owner.

CIVIL LITIGATION AND ARBITRATION CERTIFICATION

If the Bidder has no civil litigation and arbitration history to report as described above, complete the following:

I _____ certify that neither
(Print name)

_____ (Contractor name)

nor _____
(Name of qualifying person licensed by Contractors State License Board)

has been involved in civil litigation and arbitration as described above.

I declare under penalty of perjury that the foregoing is true and correct.

Executed this _____ day of _____ at _____
(Month and year) (City and State)

By _____
(Signature of owner, officer, manager or licensee responsible for submission of Bid Proposal)

Do not include litigation and arbitration which are limited solely to enforcement of mechanics' liens or stop notices. Provide on a separate sheet (1) the name and court case identification number of each case, (2) the jurisdiction in which it was filed, and (3) the outcome of the litigation, e.g. whether the case is pending, a judgment was entered, a settlement was reached, or the case was dismissed.

Bidder's Name: _____

00 41 00-17

CRIMINAL CONVICTIONS

Bidder shall provide the certification or information requested below. Failure to certify or provide such certification or information shall render the bid non-responsive.

CRIMINAL CONVICTION CERTIFICATION

If the Bidder has no criminal convictions to report as described above, complete the following:

I _____ hereby certify that neither
(Print name)

(Contractor name)

nor _____
(Name of qualifying person licensed by Contractors State License Board)

has been convicted of a criminal violation as described above.

I declare under penalty of perjury that the foregoing is true and correct.

Executed this _____ day of _____ at _____
(Month and year) (City and State)

By _____
(Signature of owner, officer, manager or licensee responsible for submission of Bid Proposal)

For the five (5) years preceding the date of this Bid Proposal is due, identify on a separate sheet any criminal conviction in any jurisdiction in the United States for a violation of law arising out of the performance of a construction contract (1) by the Contractor submitting this Bid Proposal or (2) by the qualifying person licensed by the State Contractors License Board to perform the work described in the Bid Proposal.

Provide on the following page labeled "Criminal Convictions Information." (1) the date of conviction, (2) the name and court case identification number, (3) the identity of the law violated, (4) the identity of the prosecuting City, (5) the contract or project involved, (6) the punishment imposed, and (7) any exculpatory information of which the City should be aware.

Bidder's Name: _____

00 41 00-18

VIOLATION OF LAW OR A SAFETY REGULATION

Has the Bidder, any officer of the Bidder, or any employee who has proprietary interest in the Bidder, ever been disqualified, removed, or otherwise prevented from bidding on, or completing a federal, state, or local government project because of a violation of a law or a safety regulation?

Yes **No**

If the answer is yes, explain the circumstances in the following space.

Name of bidder (print)

Signature

Address

State Contractors' License No. & Classification

City

Zip Code

Telephone

END OF SECTION

Bidder's Name: _____

00 41 00-19

**Section 00 50 00 - CONSTRUCTION CONTRACT
FOR CAPITAL IMPROVEMENTS**

CITY OF IRVINE

**ADA FACILITY IMPROVEMENTS
OPERATIONS SUPPORT FACILITY-BUILDING 1
CIP 361602**

This Contract made and entered into this ____ day of _____, 20__, by and between City of Irvine, a municipal corporation of the State of California, hereinafter referred to as "CITY" and _____, hereinafter referred to as "CONTRACTOR."

WITNESSETH:

That the CITY and the CONTRACTOR, for the consideration hereinafter named, mutually agree as follows:

- A. The complete Contract includes all of the Contract Documents, which are incorporated herein by this reference, to wit:
1. Permits and Agreements
 2. Contract
 3. Addenda
 4. Instructions to Bidders, Proposal Requirements and Conditions
 5. Contract Specifications
 6. Contract Plans
 7. Standard Plans
 8. Reference Specifications,

The Contract Documents are complementary, and that which is required by one shall be as binding as if required by all.

- B. CONTRACTOR shall provide and furnish all labor, materials, necessary tools, expendable equipment, and all utility and transportation services required for the following work of improvement:

Interior accessibility improvements to the men's and women's restrooms within Building 1, exterior accessibility upgrades to the building entrances, sidewalks, access ramps, and handrails, along with various signs and striping for accessibility compliance and other items not mentioned here, but are required by the plans and Special Provisions.

- C. CONTRACTOR agrees to perform all the said work and furnish all the said materials at his own cost and expense that are necessary to construct and complete in strict conformance with Contract Documents and to the satisfaction of the Engineer, the work hereinafter set forth in accordance with the Contract therefore adopted by the City Council and as prepared by Ware Malcomb.

- D. CITY agrees to pay and CONTRACTOR agrees to accept in full payment for performance of this work of improvement as described, the stipulated sum of _____ (\$ _____) the "Contract Price."

CITY agrees to make progress payments and final payment in accordance with the method set forth in the Special Provisions.

- E. CONTRACTOR agrees to commence construction of the work provided for herein within ten (10) Calendar Days after the date specified in the Notice to Proceed, and to continue diligently in strict conformance with Contract Documents and without interruption, and to complete the construction thereof within **Forty-five(45) Working Days** after the date specified in the Notice to Proceed.
- F. Time is of the essence of this Contract, and it is agreed that it would be impracticable or extremely difficult to ascertain the extent of actual loss or damage which the CITY will sustain by reason of any delay in the performance of this Contract. It is, therefore, agreed that CONTRACTOR will pay as liquidated damages to the CITY the following sum: **eight hundred (\$800)** per Calendar Day, for each and every Calendar Days delay in finishing the Work in excess of the number of Working Days prescribed above. If liquidated damages are not paid, as assessed by the CITY, the CITY may deduct the amount thereof from any money due or that may become due the CONTRACTOR under this Contract in addition to any other remedy available to CITY. By executing this Contract, Contractor agrees that the amount of liquidated damages is reasonable and shall not constitute a penalty.
- G. In accordance with State of California Senate Bill No. 854, CONTRACTOR will maintain and will require all subcontractors to maintain valid and current Department of Industrial Relations (DIR) Public Works Contractor registration during the term of this project. CONTRACTOR shall notify the CITY in writing immediately, and in no case more than twenty-four (24) hours, after receiving any information that CONTRACTOR'S or any of its SUBCONTRACTOR'S DIR registration status has been suspended, revoked, expired, or otherwise changed.
- H. CONTRACTOR will pay, and will require all subcontractors to pay, all employees on said Contract a salary or wage at least equal to the prevailing salary or wage established for such work as set forth in the wage determinations and wage standards applicable to this work, a copy of which is on file in the office of the City Clerk of the City of Irvine. Federal prevailing wage rates apply for federally funded projects. Travel and subsistence pay shall be paid in accordance with Labor Code § 1773.1.
- I. CONTRACTOR shall be subject to the penalties in accordance with Labor Code of § 1775 for each worker paid (either by him or by any subcontractors under him) less than the prevailing rate described above on the work provided for in this Contract.
- J. CONTRACTOR and subcontractors shall comply with Labor Code § 1810 and § 1811 which stipulates that eight hours labor constitutes a legal day's work, and § 1812 which stipulates that the CONTRACTOR and subcontractors shall keep an accurate record showing the name of and actual hours worked each calendar day and each calendar week by each worker employed by him in connection with the work performed under the terms of the Contract. Failure to comply with these sections of the Labor Code will subject the CONTRACTOR to penalty and forfeiture provisions of the Labor Code § 1813.
- K. CONTRACTOR will comply with the provisions of Labor Code § 1777.5 pertaining to the employment of apprentices to the extent applicable to this Contract.
- L. CONTRACTOR, by executing this Contract, hereby certifies:

"I am aware of, and will comply with the Labor Code § 3700 by securing

payment for, and maintaining in full force and effect for the duration of the contract, complete Workers' Compensation Insurance, and shall furnish a Certificate of Insurance to the City before execution of the Contract. The CITY, its officers, or employees, will not be responsible for any claims in law or equity occasioned by failure of the CONTRACTOR to comply with this paragraph."

CONTRACTOR further agrees to require all subcontractors to carry Workers' Compensation Insurance as required by the Labor Code of the State of California.

- M. CONTRACTOR shall, concurrent with the execution of this Contract, furnish two bonds approved by the CITY, one in the amount of One Hundred Percent (100%) of the Contract Price, to guarantee the faithful performance of the work "Performance Bond", and one in the amount of One Hundred Percent (100%) of the Contract Price to guarantee payment of all claims for labor and materials furnished "Payment Bond." This Contract shall not become effective until such bonds are supplied to and approved by the CITY.
- N. CONTRACTOR shall, prior to commencing work, furnish certificates evidencing compliance with all requirements of the Contract Documents pertaining to insurance.
- O. Any amendments to any of the Contract Documents must be in writing executed by the CONTRACTOR and the CITY. Any time an approval, time extension, or consent of the CITY is required under the Contract Documents, such approval, extension, or consent must be in writing in order to be effective.
- P. This Contract contains all of the agreements and understandings of the parties and all previous understandings, negotiations, and contracts are integrated into and superseded by this Contract.
- Q. In the event that any one or more of the phrases, sentences, clauses, paragraphs, or sections contained in this Contract shall be declared invalid or unenforceable by a valid judgment or decree of a court of competent jurisdiction, such invalidity or unenforceability shall not affect any of the remaining phrases, sentences, clauses, paragraphs, or sections of this Contract which are hereby declared as severable and shall be interpreted to carry out the intent of the parties hereunder.
- R. The persons executing this Contract on behalf of the parties hereto warrant that they are duly authorized to execute this Contract on behalf of said parties and that, by so executing this Contract, the parties hereto are formally bound to the provisions of this Contract.
- S. This Contract shall be binding upon and shall inure to the benefit of the parties hereto and their respective heirs, personal representatives, successors, and assigns.
- T. In performing its obligations and duties under this Contract, each party shall comply with all applicable local, state, and federal laws, regulations, rules, standards and ordinances.
- U. In the event any action is brought between the parties hereto relating to this Contract or the breach thereof, the prevailing party in such action shall be entitled to recover from the other party reasonable expenses, attorneys' fees and costs in connection with such action or proceeding.
- V. This Contract may be executed by the parties in counterparts, which counterparts shall be construed together and have the same effect as if all of the parties had executed the same instrument.

W. This Contract is to be governed by the laws of the State of California.

IN WITNESS WHEREOF, the said CONTRACTOR and the Director of Public Works, City Manager and City Clerk of the CITY have caused the names of said parties to be affixed hereto, the day and year first above written.

CONTRACTOR

(If Corporation, 2 signatures are required)

By _____

Print Name

Title

By _____

Print Name

Title

CITY OF IRVINE
A Municipal Corporation

Sean Joyce
City Manager of the City of Irvine

Manuel Gomez
Director of Public Works

ATTEST:

Molly McLaughlin
City Clerk

APPROVED AS TO FORM:
RUTAN & TUCKER, LLP

Jeffrey Melching

END OF SECTION

Section 00 50 01 - PERFORMANCE BOND

**ADA FACILITY IMPROVEMENTS
OPERATIONS SUPPORT FACILITY-BUILDING 1
CIP 361602**

KNOW ALL MEN BY THESE PRESENTS that we _____, as Principal, and _____ as Surety, are held and firmly bound unto City of Irvine, hereinafter called the City in the sum of _____ (\$ _____) (this amount being not less than one hundred percent (100%) of the total bid price of the contract awarded by the owner to the Principal), for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

The conditions of this obligation are such that whereas the Principal entered into a contract attached hereto, with the City of Irvine.

NOW THEREFORE, if the Principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions and agreements of said Contract during the original terms thereof, and any extensions thereof that may be granted by the Owner with or without notice of the Surety, and during the life of any guarantee required under the Contract, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions and agreements of any and all duly authorized modifications of said Contract that may hereafter be made, then this obligation shall be void otherwise this obligation shall remain in full force and effect.

Further, the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or modifications of the Contract Documents and/or of the Work to be performed thereunder shall in any way affect its obligations on this bond; and it hereby waives notice of any and all such changes, extensions of time, and alterations or modifications of the contract documents and/or of the work to be performed thereunder.

As a part of the obligation secured hereby and in addition to the face amount specified therefore, there shall be included costs and reasonable expenses and fees, including reasonable attorneys' fees, incurred by the City in successfully enforcing such obligation, and all to be taxed as costs and included in any judgment rendered by a court of law.

IN WITNESS WHEREOF, the above-bounded parties have executed this instrument this ____ day of _____, 20____, the name of each party being hereto written below and these presents duly signed by each party's undersigned representative, pursuant to authority of its governing body. This bond shall be authenticated by way of notarized acknowledgment, including a copy of the power of attorney, for the Surety.

This area is intentionally left blank.

ATTEST:

(Principal) _____

(Address) _____

(By) _____

(Title) _____

ATTEST:

(Surety) _____

(Address) _____

(By) _____

(Title) _____

END OF SECTION

Section 00 50 02 - PAYMENT BOND

**ADA FACILITY IMPROVEMENTS
OPERATIONS SUPPORT FACILITY-BUILDING 1
CIP 361602**

KNOW ALL MEN BY THESE PRESENTS that we _____, as Principal, and _____ as Surety, are held and firmly bound unto City of Irvine, hereinafter called the City in the sum of _____ (\$ _____) (this amount being not less than one hundred percent (100%) of the total bid price of the contract awarded by the owner to the Principal), for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

The conditions of this obligation are such that whereas the Principal entered into a contract, attached hereto, with the City of Irvine.

NOW THEREFORE, if the Principal shall promptly make payment to all persons supplying labor and material in the prosecution of the work provided for in said contract, and any and all duly authorized modifications of each contract that may hereafter be made, then this obligation shall be void, otherwise this obligation shall remain in full force and effect.

The condition of this obligation is such that, if said Principal or his subcontractors, or heirs, executors, administrators, successors, or assigns thereof, shall fail to pay any of the persons named in the Civil Code § 9100 for any material used in, upon, for or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or shall fail to pay any amount due under the Unemployment Insurance Code with respect to work or labor performed by any such claimant or any amount required to be deducted, withheld, and paid over to the Franchise Tax Board from the wages of employees of the Contractor and his subcontractors with respect to such work and labor, then said Surety will pay and, also, in case suit is brought upon the bond, will pay a reasonable attorney's fee to be fixed by the court. This bond shall inure to the benefit of all persons named in the aforesaid Civil Code § 9100 to give a right of action to them or their assigns in any suit brought upon the bond.

Further, the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or modification of the Contract Documents or of the Work to be performed thereunder shall in any way affect its obligations on this bond; and it hereby waives notice of any and all such changes, extensions of time, and alterations or modifications of the Contract Documents and/or of the work to be performed thereunder.

IN WITNESS WHEREOF, the above-bounded parties have executed this instrument this ____ day of _____, 20____, the name of each party being hereto written below and these presents duly signed by each party's undersigned representative, pursuant to authority of its governing body. This bond shall be authenticated by way of notarized acknowledgment, including a copy of the power of attorney, for the Surety.

This area is intentionally left blank.

ATTEST:

(Principal) _____

(Address) _____

(By) _____

(Title) _____

ATTEST:

(Surety) _____

(Address) _____

(By) _____

(Title) _____

END OF SECTION

SECTION 00 71 00 - DEFINITIONS

The terms used in the General Conditions and within the Contract Documents have the following meanings assigned to them applicable in both the singular and plural tense. Certain terms are fully capitalized for no other reason than ease of reading.

Addenda (or Addendum) - Additional written or graphical instructions issued prior to the opening of bids, which clarify, modify, correct, amend, add, delete and/or otherwise change the Contract Documents.

Administrative Closeout - Administrative Closeout shall be the duration allowed for completion of all Contract requirements after Substantial Completion such as Punch List items, submittal of final warranties and guaranties, and record documents.

Applicable Laws- All federal, state, and local statutes, law, ordinance, provision, rule, regulation pertaining to the furnishing of or performance of the Work.

Application for Payment - The City approved invoice form along with other supportive documentation as specified in the Contract Documents to be certified and submitted by Contractor in requesting progress and/or final payment.

"As Builts" - Plans and specifications received from Contractor following Substantial Completion that document field changes, additions or deletions to the Work (as defined in the original Contract Documents) that occurred during construction and reflect existing field conditions upon completion of the Work.

Calendar Day – The 24-hour day denoted on the calendar.

Calendar Month – The period including the first through the last day of a month.

Change Order - A written instrument confirming a change or adjustment to the Contract Amount, Milestones and/or Contract Time and/or an addition, deletion or revision in the Work. A Change Order is only effective upon approval by the City.

Change Order Proposal (COP) - A written instrument prepared and issued by Contractor, setting forth proposed adjustments to the Contract Amount, Milestones or Contract Time, if any, in response to a Request for Quotation and/or proposed addition, deletion or revision of the Work.

City – The City of Irvine, a municipal corporation.

City Representative - The person or engineering/architectural firm Agency authorizes to represent it during the performance of the Work by the Contractor and until Final Acceptance. The Agency Representative means the Agency Representative or his assistants.

Contract Completion- When City determines all Contract requirements of Contractor have been met or when the Administrative Closeout Period has expired and a Notice of Contract Completion is issued by City to Contractor.

Contract Amount – The dollar amount stated in the Contract payable by City to Contractor. The Contract Amount may be increased or decreased only by Change Order.

Contract Time - The duration in Working Days from the date in the Notice to Proceed to the Contract Completion, plus or minus Change Order adjustments.

Contractor - The person, firm, corporation or entity with whom the City has entered into the Contract.

Defective - When preceding the term work, it references Work deemed to be unacceptable, faulty, unsuitable, unsightly or otherwise not in compliance with the Contract Documents including any inspection, standard, test, submittal, and/or approvals required by the Contract Documents.

Engineer – The City Engineer acting either directly or through the Agency Representative.

Major Bid Item – A single Contract item constituting ten percent (10%) or more of the original Contract Price.

Plans- Pictorial or graphical portions of the Contract Documents, prepared by or on behalf of the Engineer, denoting the scope, design, extent, location, character, and dimensions of the Work to be performed and may include plans, elevations, sections, details, schedules and diagrams, etc., however, Shop Drawings are not Drawings as so defined herein.

Milestones- Designated events as set forth in the Construction Schedule in which Work or portions thereof are required to be started and/or completed. Supplementary Conditions may provide for the assessment of Liquidated Damages if Contractor fails to achieve one or more Milestones.

Notice of Award- Notice by City advising the successful bidder that the OWNER has issued the Contract.

Notice of Completion - Notice by City recorded with the County Recorder upon Substantial Completion.

Notice to Proceed - The written notice issued by City to Contractor establishing the date of commencement of the Contract Time and authorizing Contractor to proceed with the Work.

Partial Use or Occupancy - Use or occupancy by City of a partially completed portion, part, space or area of the Work, prior to Substantial Completion of the Work.

Product Data - Contractor furnished literature, illustrations, standard schedules, performance charts, instructions, brochures, diagrams, catalog cuts, color charts, templates, installation and maintenance instructions, test data, agency or regulatory approvals, or other required product information furnished by Contractor relative to the Work.

Punch List - A list of minor, corrective items, which does not include uncompleted Work.

Request for Information (RFI) - A written instrument prepared by Contractor and issued to Engineer requesting information or clarification of the Contract Documents.

Request for Quotation – Contemplated revision of Contract Documents by the Agency requesting detailed information from the Contractor on impacts to contract sum or contract time.

Samples - Contractor furnished physical specimens such as swatches, natural materials, materials, fabricated items, equipment, devices, appliances, cuts, containers, color boards, textures, fabrications, finishes, or other required samples furnished by Contractor relative to the Work.

Shop Drawings - Contractor furnished original drawings such as illustrations, diagrams, schedules, fabrications, erection, coordination, layout, setting, details, standards, performance charts or curves, installation, routing, iso-metric, wiring, control, piping, or other required shop drawings furnished by Contractor relative to the Work.

Specifications - Those portions of the Contract Documents consisting of the written technical and/or administrative descriptions of materials, equipment, systems, codes, regulations, procedures, standards, workmanship, services, facilities, supplies, instructions, transportation, quality, etc., as applied to the Work.

Subcontractor - The person, firm, corporation or entity executing a direct contract with Contractor or with any subcontractor for the performance of a portion of the Work.

Substantial Completion - The stage in the progress of the Work when all of the requirements of the Contract are completed, except Punch List items, final warranties and guaranties, and record documents submittals.

Subsurface Facility - All underground or below grade facilities and/or improvements, including but not limited to, any and/or all encasements such as pipelines, wells, conduits, raceways, duct banks, ducts, cables, conductors, sensors, manholes, valve boxes, metering devices or other such facilities which collect, furnish, supply, distribute, and/or transport to this or any other site or property electricity, telephone, data, steam, gases, petroleum, cable or satellite signals, sewage, signal systems, water, storm drainage, traffic signals, or other control systems.

Work- All of the terms and conditions set forth in the Contract Documents, including the various separately identifiable parts thereof to be furnished thereunder. The Work shall include, without limitation, all labor, materials, apparatus, supplies, services, facilities, utilities, transportation, manuals, warranties, training, and the like, necessary for Contractor to faithfully perform and complete all of its obligations under the Contract.

END OF SECTION

SECTION 00 72 00 - GENERAL CONDITIONS

ARTICLE 1 – SCOPE AND CONTROL OF WORK

1-1 CONTRACT AWARD AND EXECUTION - The City will award and execute the Contract as provided in the Specifications, Instructions to Bidders or Notice Inviting Bids.

1-2 ASSIGNMENT - Do not assign the Contract or any portion of it without the City's written consent, except that you may assign money due or which will accrue to you under the Contract. If given written notice, the City will recognize the assignment to the extent permitted by law. Any assignment of money is subject to all proper withholdings in the City's favor and to all deductions, the Contract allows. The City will use all money withheld, assigned or not, to complete the Work if you default.

Do not assign Contract performance except with the City's written consent. The City will not consent to any proposed assignment that would relieve you or your Surety of your Contractual responsibilities, or to any assignment of any of the Contract Work.

1-3 SUBCONTRACTS.

1-3.1 General. Comply with Chapter 4 of the Public Contract Code including Sections 4100 through 4113.

- A. The name and location of the place of business of each subcontractor who will perform work or labor or provide service to you in constructing the Work or improvement, or a subcontractor licensed by the State of California who, under subcontract to you, specially fabricates and installs a portion of the Work or improvement according to detailed drawings in the Plans and Specifications, in an amount exceeding one-half of 1 percent of your total bid.
- B. The portion of the Work each such subcontractor will do under this act. List only one subcontractor for each portion as defined in your bid.

If you fail to specify a subcontractor or specify more than one subcontractor for the same portion of the Contract Work to be performed in excess of one-half of 1 percent of your total Bid, you must be qualified to and must perform that portion yourself unless the Code provides otherwise.

Pursuant to § 4107, if your Bid is accepted you may not substitute any person as a subcontractor in place of a subcontractor listed in your Bid except for the causes and by the procedures in § 4107.5, which provide procedures to correct a clerical error in listing a subcontractor.

Section 4110 provides that violating any of the provisions of Chapter 4 violates the Contract and the City may, after a public hearing, either cancel the Contract or assess you a penalty not exceeding 10 percent of the subcontract involved.

If you subcontract any part of Contract, you are as fully responsible to the City for the acts and omissions of your subcontractors as you are for the acts and omissions of your direct employees. Nothing contained in the Contract Documents creates any contractual relationship between any subcontractor and the City. Bind every subcontractor to the terms of the Contract Documents applicable to its work.

Do not employ debarred contractors on the Work pursuant to the provisions of Labor Code § 1777.1 and City of Irvine Council Ordinance No. 08-10. The Labor Commissioner publishes and distributes a

list of contractors ineligible to work as a subcontractor on a public works project. This list is available from the Department of Industrial Relations web site <http://www.dir.ca.gov/dlse/debar.html>.

The U.S. General Services Administration maintains a list of individuals, firms and organizations debarred, suspended or who have voluntarily excluded themselves from Federal Procurement and Non-Procurement Programs, which is available from the website <http://www.sam.gov>.

According to SB 854, you and each of your subcontractors must maintain a valid, current Department of Industrial Relations Public Works Contractor registration during the term of this project.

Before including a subcontractor's name on the bid, verify that each one is properly licensed and not debarred from performing the designated work.

The City will withhold payment for noncompliant subcontracted work from progress payments due, or to become due, until the noncompliance is corrected. The City may terminate the Contract if you fail to comply.

If the Engineer finds any subcontractor or person you employ is incompetent or is acting improperly, then at the Engineer's request, dismiss them from the job immediately and do not employ them on the Work again.

File a copy of each subcontract with the City before the subcontractor begins work. Each subcontract must reference the Contract with the City and its terms and all its parts are made part of that subcontract as applicable to the work it covers. Each subcontract must allow you to annul it at the City's order if in the City's opinion the subcontractor fails to comply with Contract requirements.

1-3.2 Self Performance. Perform, with your own employees, Contract work amounting to at least 15 percent of the Contract Price on building/facility contracts. When an entire item is subcontracted, base the value of work subcontracted on the Contract Unit Price. When a portion of an item is subcontracted, calculate the value of the subcontracted portion using the estimated percentage of the Contract Unit Price based on information you submit, subject to the Engineer's approval.

Give personal attention to fulfilling the Contract and keep the Work under your control. Subcontractors are your employees and you are responsible for their work.

1-3.3 Status of Subcontractors. The City will not conduct business with an individual, firm or organization, and you shall not employ or otherwise use at any tier, any subcontractor, supplier, or equipment vendor on the City's debarment list, the Department of Industrial Relations debarment list, or the U.S. General Services Administration "List of Parties Excluded from Federal Procurement and Non Procurement Programs."

1-4 CONTRACT BONDS. Before executing the Contract, file surety bonds with the City for its approval in the amounts and for the purposes noted below. Bonds issued by a surety who is listed in the latest version of U.S. Department of Treasury Circular 570, who is authorized to issue bonds in California, and whose bonding limitation shown in that circular is sufficient to provide bonds in the amount required by the Contract, is approved unless the City specifically rejects them. Attach all of the documents listed in the Code of Civil Procedure, § 995.660 a) to bonds from all other sureties and pay all bond premiums, costs and incidentals.

You and the Surety sign each bond and incorporate the Contract by reference. Notarize the Surety's authorized agent's signature.

Provide two sufficient surety bonds. The "Payment Bond" must be for 100 percent of the Contract Price to satisfy claims of material suppliers, and mechanics and laborers you employ on the Work. Maintain the bond in full force until the City accepts the Work and all claims for materials and labor are paid, and otherwise comply with the Civil Code.

The "Performance Bond" must be for 100 percent of the Contract Price to guaranty faithful performance of all work within the time prescribed and in a manner satisfactory to the City, and that all materials and workmanship are free from original or developed defects. The bond must remain in effect until the end of all warranty periods in the Contract Documents.

Should any bond become insufficient, renew the bond within 10 days after notice from the City.

If at any time the City finds any surety unsatisfactory, it will notify you and no additional payments will be due or made under the Contract until a new surety qualifies and the City accepts it.

Changes in the Work or extensions of time made pursuant to the Contract do not release you or the surety from your and its obligations and the Surety must waive notice of these changes or extensions.

1-5 THE CONTRACT DOCUMENTS.

1-5.1 General. Keep at the Work site a copy of the Plans and Specifications for the Engineer to access at all times. Supplement the Plans with those working drawings and shop drawings necessary to adequately control the Work.

If, either before beginning or during the work, you find any discrepancy between the Specifications and the Plans or between either of them and the physical conditions at the Work site or find any error or omission in any of the Plans or in any survey, promptly notify the City of the discrepancy, error or omission. Promptly notify the City in writing if you observe any plans or specifications at variance with any applicable law, ordinance, regulation, order or decree.

The City, on receiving the notice, will investigate the circumstances and give you appropriate instructions. Until then, any work you do after discovering an error, discrepancy or conflict directly or indirectly affected by the error, discrepancy or conflict, is at your risk and you bear all costs arising from it.

The City will provide, free of charge, three (3) copies of Plans and Specifications for you and one (1) copy of Plans and Specifications for each subcontractor listed in your Proposal. The City can provide additional copies of the Plans or Specifications at your expense. Keep one set of Plans and Specifications in good order and available to the City Representative at the Work site.

Titled sections of the Contract Documents, including, without limitation, the Specifications, are for convenience only and do not dictate the trade or craft involved.

Where "as shown," "as indicated," "as detailed," or words of similar meaning are used, they refer to the Drawings accompanying the Specifications unless stated otherwise. Where "provide," "furnish," "install," "complete," or words of similar meaning are used, they mean to put in place for the intended use or operation. Where "as directed," "as required," "as permitted," "as authorized," "as accepted," "as selected," or words of similar meaning are used, the Engineer's direction, requirement, permission, authorization, approval, acceptance or selection is intended unless stated otherwise.

Division 00 Procurement and Contracting Requirements, and Division 01 General Requirements, are a part of every section of the Contract Documents.

The Contract Documents are written in an abbreviated form, and may not include complete sentences. Omission of words or phrases like "Contractor shall," "shall be," etc., are intentional. Nevertheless, the requirements of the Contract Documents are mandatory. Omitted words or phrases are supplied by inference.

Words in the singular include the plural whenever applicable or the context indicates or requires.

In the interest of brevity, the Contract Documents frequently omit modifying words like "all" and "any" and articles like "the" and "an," but the fact that a modifier or an article is absent from one statement and appears in another does not affect the interpretation of either statement.

1-5.2 Contract Documents are Complementary and Inclusive. The Plans, Specifications and other Contract Documents govern the Work. The Contract Documents are complementary and cooperative. Anything in the Specifications not shown on the Plans or shown on the Plans and not in the Specifications are as though shown on or in both.

1-5.3 Conformance with Laws. As applicable, unless modified elsewhere in the Specifications, Contract Work must conform to the current editions of: Uniform Building, Plumbing, Mechanical Codes, Uniform Fire Code, National Electrical Code and City of Irvine Amendments to the aforementioned codes.

Perform all work according to the current editions and City of Irvine Amendments to, the California Building Code, the California Electrical Code, the California Plumbing Code with key amendments, California Green Building Standards Code, Building Energy Efficiency Standards, California Playground Safety Regulations, City of Irvine Codes & Ordinances, City of Irvine's Grading Manual, City of Irvine's Standards and Design Manual, City of Irvine's Park/Public Facility Standards, City of Irvine's Construction Site Security Requirements, Americans with Disabilities Act (ADA), Chapter 11B Title 24 of the California Code of Regulations, California Public Contract Laws, the Specifications, Attachments, and Construction Plans and all their applicable requirements.

Check and review the Contract Documents from a construction standpoint for conformity and compliance with all laws, ordinances, codes, rules and regulations of all governmental authorities and public utilities affecting the construction and operation of the physical portion of the Project, all quasi-governmental and other regulations affecting the construction and operation of the physical portion of the project and other special requirements, if any, designated in the Contract Documents. If you see any violation of any law, ordinance, code, rule or regulation or inconsistency with any restrictions or special requirements in the Contract Documents, give notice to the Engineer and correct the violation or inconsistency in the prescribed manner before beginning that portion of the Work. Unless specifically

stated otherwise in the Contract Documents, Contract Document provisions take precedence in resolving any violation and inconsistency between provisions of the Contract Documents and provisions of any laws, ordinances, codes, rules and regulations applicable to the Work unless applying the provisions of the Contract Documents would directly violate those laws, ordinances, codes, rules and regulations. If the requirements of this article or the Engineer's written interpretation or clarifications do not resolve the violation or inconsistency, the Engineer's decisions and directives regarding the Work are final.

1-5.4 Intent of Plans and Specifications. The Plans and Specifications describe the Work. The Specifications describe Work not indicated on the Plans like quality of materials, workmanship and execution; the Plans generally describe Work dimensions, elevations and general layout. The Specifications do not specify every item of Work shown on the Plans nor do the Plans show all Work described or specified in the Specifications even if the items could have been included. Provide all aspects of the Work on the Plans or in the Specifications or that are reasonably inferable from them necessary to complete the Work, whether or not the aspects of the Work are expressly covered in the Plans or the Specifications. You are responsible for insuring the Work is sound, quality construction and for including all direct and indirect costs and expenses to cover all items indicated, described or implied in the Work.

1-5.5 Ambiguity, Conflicts, Difference or Discrepancy. In the event of an ambiguity, conflict, difference or discrepancy between the various Contract Documents, the more stringent, higher quality, greater quantity and higher-level work controls. If discrepancies in the Contract Documents are not corrected by Addenda during the bid period, you warrant that the scope and amount of your bid includes all materials, supplies, equipment, services, facilities, apparatus and methods of construction to provide the higher cost, quantity and quality.

1-5.6 Priority of Addenda. Addenda take precedence over all other Contract Documents at the time of bid. Subsequent Addenda issued govern over prior Addenda only to the extent specified, where applicable and according to Title 24, California Code of Regulations.

1-5.7 Standard Technical Specifications of Societies, Institutions, Associations, etc. Any reference to standard technical specifications of any society, institute, association or governmental authority refers to that organization's standard technical specifications in effect on the date you submit your bid for the Work. If applicable standard technical specifications are revised before completing any part of the Work, you may, if acceptable to the Engineer, perform that Work according to the revised standard technical specifications. The standard technical specifications, except as modified in the Contract Documents, are as though printed in the Contract Documents. Before beginning any portion of the Work, check and review the Contract Documents from a construction standpoint for conformance and compliance with the provisions of all standard technical specifications, listed or otherwise. If you note a conflict, ambiguity or discrepancy between the provisions of the Contract Documents and standard technical specifications, notify the Engineer and ensure the conflict, ambiguity or discrepancy is corrected as prescribed before beginning that portion of the Work. Unless stated otherwise in the Contract Documents, provisions of the Contract Documents take precedence in resolving any conflict, ambiguity or discrepancy between the provisions of the Contract Documents and standard technical specifications. If the requirements of this article or the written interpretation or the Engineer's clarifications do not resolve the conflict, ambiguity or discrepancy, the Engineer's decisions and directives are final for proceeding with the Work. If you believe an Engineer's order establishes a basis for an adjustment in the Contract Amount, Milestones and Contract Time, then pursuant to Article 2, submit a Change Order Proposal within ten (10) days after the Construction Directive is issued.

1-5.8 Rules of Contract Interpretation. Provide the more stringent, higher quality material and work and greater quantities for the Work in the case of a conflict between the various sections of the Contract Documents, including the Plans and Specifications.

Where applicable, City-approved requirements on any item submitted as a Deferred Approval according to Title 24, California Code of Regulations, take precedence over any previously issued Addenda, Plan or Specification.

Except as provided in this section, in a conflict between the Plans, the following govern:

- A. Specific notes govern over all other notes;
- B. General notes, when identified as such, are incorporated in other portions of the Plans;
- C. Schedules, when identified as such, are complementary with other notes and other portions of the Plans including those identified as general notes;
- D. Larger scale Drawings govern over smaller scale Drawings;
- E. Calculated, derived or numerical dimensions govern over scaled dimensions; do not perform or allow Work to be performed based on dimensions obtained by scaling the Drawings.

1-5.9 Ownership and Use of the Contract Documents. Neither you, your Subcontractors, nor your material or equipment suppliers, own or claim a copyright in the Plans, Specifications and other Contract Documents or use them on other jobs.

1-5.10 Document Retention Policy. Maintain at your sole expense for a period of ten (10) years after the Notice of Completion is recorded, a full set of project records including plans, specifications, correspondences, submittals, record documents and all other project documentation in hard copy or electronic form. If the City or its designated agent or representative makes a written request for the documents, produce or make them available for review and photocopying or electronic reproduction within ten (10) days of receiving the City's written request.

1-5.11 Request for Information (RFI) Procedures. This Section contains procedures Contractor shall follow when discovering any apparent conflicts, omissions, or errors in Contract Documents or when having any question about interpretation.

A. PROCEDURES

1. Submit requests for clarification or additional information in writing to Engineer using Request for Information (RFI) form provided by Engineer or a similar, Engineer-approved form.
2. Number RFIs sequentially. Add a sequential alphabetical suffix after the RFI number for each resubmission. For example, first RFI is 001, second is 002 and first resubmittal of RFI 002 is 002A.
3. Limit each RFI to one subject.
4. Submit an RFI if one of the following occurs:
 - a. Contractor discovers an unforeseen condition or a circumstance not described in Contract Documents.
 - b. Contractor discovers an apparent conflict or discrepancy between portions of Contract Documents that appears inconsistent or not reasonably inferred from intent of Contract Documents.
 - c. Contractor discovers what appears to be an omission from Contract Documents that cannot be reasonably inferred from intent of Contract Documents.
5. Submit an RFI or clarification when discovered. Submit RFIs promptly so as not to delay

Contract schedule and allow Engineer full response time described below.

6. Do not submit an RFI:
 - a. As a request for substitution;
 - b. As a submittal;
 - c. Under pretense of a Contract Document discrepancy or omission without thoroughly reviewing documents;
 - d. In a manner suggesting specific portions of Contract Documents are assumed excluded, or by taking an isolated portion of Contract Documents in part rather than in whole;
 - e. In untimely manner without properly coordinating and scheduling Work of related trades.
 - f. If Contractor submits an RFI contrary to any of above, Contractor shall pay cost of any review and Engineer shall deduct that cost from Contract sum.

B. RESPONSE TIME

1. Engineer, whose decision is final, shall resolve these questions and direct Contractor within a reasonable time. In most cases, Engineer will respond within 5 days. In cases involving complex issues or emergencies, parties may agree in writing to lengthen or shorten response time as appropriate.
2. If Contractor proceeds with affected work before receiving Engineer's response within timeframe described above, Engineer may require Contractor to remove or replace any portion of Work not done according to Engineer's interpretations, clarifications, instructions, or decisions and Contractor is responsible for all resulting losses.
3. If Contractor and Engineer cannot agree on the scope of Contract requirements, Contractor shall follow procedures set forth in General Conditions.

1-6 SUBMITTALS.

1-6.1 General. Provide submittals as specified or when the Engineer requests. Do not furnish or fabricate materials or perform any work requiring submittals before the Engineer reviews and accepts them. Neither the Engineer's review nor acceptance of submittals relieves you of responsibility for errors, omissions or deviations from the Contract Documents unless you specifically called them to the Engineer's attention in the letter of transmittal. You are responsible for the accuracy of the submittals. Allow a minimum of twenty (20) Working Days to review submittals unless otherwise stated in the Specifications. Include a transmittal letter with each submittal. Include payment for submittals in the contract unit price for various bid items. The review period begins again after each submittal or resubmittal.

In providing submittals, you certify they are complete in all respects and that all materials, equipment, and other work included conforms to the Contract Documents. Where the manufacturer, fabricator, subconsultant or designee designs or engineers an item, an engineer registered by the State of California, executing the design within the scope of his registration, must sign the drawings and supporting calculations. Unless the Engineer accepts it, only you may submit data. Data that, in the Engineer's opinion, are incomplete or which you have not checked or which are illegible or do not comply with Contract requirements will be returned to you for resubmittal in the proper form. The City may make this determination at any time during the review period.

Submit data in a format similar to the arrangement of the applicable section(s) of the Specifications unless otherwise specified. The City will return for resubmittal, without review, any submittal that does not follow the format specified and does not conform to the requirements listed below:

- A. Data includes drawings and descriptive information in sufficient detail to show the kind, size, arrangement and operation of component materials and devices, the external connections, anchorages and supports required, performance characteristics, dimensions needed for installation and correlation with other materials and equipment, and all additional information required in the detailed section(s) of the Contract Documents. Identify field dimensions and show their relation to adjacent or critical features, work or products.
- B. Calculations, when the Specifications require them, to support the adequacy of the design to meet specified performance ratings or requirements.
- C. Each drawing or data sheet clearly marked with the name of the project, your name and references to applicable Specification paragraphs and Plan sheets. Collate submittals containing multiple drawings or data sheets prior to submittal.
- D. Where data sheets, catalog cuts or drawings show more than the item under consideration cross out all but the applicable information. Submit only relevant pages; mark each copy of standard printed data to identify pertinent products referenced to Specification Section and Article number. Show reference standards, performance characteristics and capacities, wiring and piping diagrams and controls, component parts, finishes, dimensions and required clearances.
- E. Include drawings showing wiring and pipe layouts on data submitted. Describe the proposed changes in a cover letter and show the essential details of the changes in the data submitted.
- F. Present data clearly and thoroughly. Title each drawing with the project name and number; identify each element of the drawings by reference to a sheet number and detail, schedule or room number of the Contract Documents.
- G. Provide manufacturer's preparation, assembly and installation instructions.
- H. Submit a full range of manufacturer's standard finishes except when more stringent requirements are specified, indicating colors, textures, and patterns for the Engineer's selection.
- I. Submit samples to illustrate functional characteristics of products, including parts and attachments. Label each sample with identification required for the transmittal letter. The Specification section lists approved samples for the Work.
- J. Provide field samples of finishes for the Work at a location acceptable to the Engineer as required by the individual Specifications section. Install each sample complete and finished. You may retain in the completed work, finishes in place that the Engineer has accepted.

A letter of transmittal listing the submittal contents must accompany submittals. Drawings must show the name of the project, your name and, if any, the names of suppliers, manufacturers and subcontractors. Submit shop drawings with enough time for the City's review and in an orderly sequence according to the progress schedule to avoid delay in doing the Work. The City will return for resubmittal the following: drawings not submitted on either 11"x17" or 24"x36" sheets, submittals not accompanied by conforming transmittals and transmittals sent with an incomplete form.

Use a separate letter of transmittal for each specific item or class of materials or equipment that requires a submittal. Transmitting shop drawings on various items using a single letter of transmittal is permissible only when the items taken together constitute a manufacturer's "package" or are so functionally related that expediency indicates review of the group or package as a whole.

The City will return any submittal sent (1) without a transmittal letter, (2) with an incomplete form, or (3) by facsimile.

Assign a unique sequential number to each submittal package clearly written in the space provided on the transmittal letter. Use this number in all correspondence to the City when referencing a particular submittal. Do not assign the same submittal number to different submittal packages.

On resubmittals, use the original submittal number followed by the revision number, i.e., the first resubmittal of submittal #1 is numbered 1R1, the second 1R2, etc. The City will return improperly numbered submittals and resubmittals without review. Indicate on the transmittal letter that either no exceptions to the Contract Documents are taken or deviations are submitted. List all deviations indicated on the transmittal letter. You are solely responsible for any omitted deviations. If any deviations are omitted, the City will return the submittal and the engineering data without review for resubmittal. You bear any consequences from the resulting delay.

The Engineer's review of your submittals covers only general conformity to the Contract Documents. The Engineer's acceptance of drawings returned marked NO EXCEPTION TAKEN or RESUBMITTAL NOT REQUIRED (CORRECTIONS ARE NOTED) does not constitute a blanket approval of dimensions, qualities and details of the materials, equipment, device or item shown and does not relieve you of any responsibility for errors, omission or deviations from conforming to the Contract Documents. The City reserves the right to reject any previously accepted equipment, material and construction method that deviates from the Contract Documents. When the City returns drawings and data marked CORRECT AND RESUBMIT, make the corrections noted as the Engineer instructs then resubmit in the same manner as the original submittal.

If the Engineer rejects the submittal, you are responsible for any subsequent time delays at no additional compensation from the City. Subject to these requirements, drawings and data, after final processing by the Engineer, become part of the Contract Documents and the work they show or describe is performed in conformity with them unless the Engineer requires otherwise. In the event of conflict between accepted submittals and other Contract Documents, the most stringent requirements apply unless the City has agreed in writing to less stringent requirements in response to a deviation listed on a submittal letter of transmittal.

Do not begin any part of the Work requiring a submittal until the Engineer has reviewed it and returned it to you with a notation indicating that resubmittal is not required.

The Engineer's review is only of general conformance with the design of the project and general compliance with the Contract Documents. It does not relieve you of full responsibility for providing Contract-required materials, equipment and work, properly fitting and constructing the Work, providing accurate and complete submittals, selecting construction fabricating processes and techniques and performing the Work safely.

1-7 WORK TO BE DONE. Perform all work necessary to complete the Contract in a satisfactory manner. Unless otherwise provided, furnish all materials, equipment, tools, labor and incidentals necessary to complete the Work. Leave the Work area in a neat condition. Perform any work not shown in the Plans or Specifications but necessary to complete the Work according to law and government codes and regulations as if in the Plans and Specifications.

Remove and dispose of all structures, debris or other obstructions of any character necessary to accommodate the Work. Where the obstructions are improvements the City is not legally required to remove, you must remove, maintain and permanently replace them at your expense.

1-8 SUBSURFACE DATA. Soil and test hole data, groundwater elevations and soil analyses shown on the Plans or included in the Specifications apply only at the location of the test holes and to the depths indicated. Soil test reports for test holes already drilled are available for inspection at the Engineer's office. You may perform additional subsurface exploration at your own expense. The indicated groundwater elevation is that which existed on the date specified in the data. It is your responsibility to determine and allow for the groundwater elevation on the date you perform the Work. A difference in groundwater elevation between that shown in soil boring logs and that actually encountered during construction is not a basis for Extra Work per 2-3.

1-9 RIGHTS OF WAY. The City has provided rights of way, easements, agreements, licenses or rights of entry (collectively, right of way) for the Work. The City may also have acquired temporary right of way to construct one or more portions of the Work. If the City did acquire temporary right of way, the documents or their contractual terms and obligations are included in the Contract Documents. Comply with all the terms and obligations related to the physical use of the temporary right of way and the eventual return of the property to the owner. Schedule Work that may include landscape establishment, maintenance periods and final acceptance within the temporary right of way to start and finish within the time allotted in each temporary right of way agreement. If, through no fault of the City, there is a work delay, you are responsible for all costs the City incurs to extend use of the temporary right of way.

1-10 REFERENCE POINTS AND ELEVATIONS.

1-10.1 General. When required by the Work, the City will furnish at its expense an engineering survey of the project site giving, as applicable, benchmark elevation points, property lines and corners. Lay out the Work and preserve all established benchmark elevation points, property lines and corners and do not demolish, relocate or change the location of any benchmark elevation point, property line or corner without the Engineer's prior written approval. If any benchmark elevation point, property line or corner is lost, destroyed or relocated, notify the Engineer before replacing and relocating it. At your expense, engage the services of a State of California licensed surveyor to replace and relocate benchmark elevation points, property lines or corners lost, destroyed or relocated.

1-10.2 Conformity with the Contract Documents. The Work must conform to the lines, grades, dimensions, tolerances and material and equipment requirements shown on the Contract Documents. Although the Engineer may consider measurement, sampling and testing in determining conformity, the Engineer is the sole judge of whether the work or materials deviate from the Contract Documents and that decision is final.

If the Plans do not show specific lines, grades and dimensions, those the Engineer furnishes govern.

1-11 ENGINEER'S AUTHORITY. The Engineer is authorized to enforce compliance with the Plans and Specifications. Promptly comply with the Engineer's instructions. The Engineer's decision is final and binding on all questions relating to quantities, acceptability of material, equipment or work, execution, progress or sequence of work and interpretation of the Plans, Specifications or other Contract Documents. This precedes any payment under the Contract unless the Engineer orders otherwise.

Subject to the provisions of Government Code § 8546.7, this Contract and all related documents are subject to the examination and audit of the State Auditor at the request of the City or as part of any audit of the City, for a period of three (3) years after final payment under the Contract.

At the City's request, prepare and give the City any reports concerning your performance under this Contract. The City may also, at any time with 72 hours advance written notice, audit your books, records and documents related to your performance and your compliance with all Contract terms and conditions.

All drawings, documents, and other materials you prepare in performing this Contract are:

- A. City property. At the City's request or upon termination of the Contract, deliver them to the City at your cost; and
- B. Confidential. Do not make them available to any individual or entity without the City's prior written consent.

1-12 INSPECTION.

1-12.1 General. The City Representative will inspect the Work and the inspection will include monitoring and enforcing compliance of materials, equipment, installations, workmanship and methods to requirements of the Contract Documents.

The City Representative must, at all times, have safe access to the Work during construction and must be given every reasonable means to ascertain the progress, workmanship and character of materials and equipment used in the Work.

If you change project work hours and require City inspection services during those hours, give the Engineer at least two (2) Working Days written notice to arrange them.

The City Representative will inspect all installations to be backfilled or covered before backfilling. Give the City Representative a minimum of two (2) Working Days advance notice before backfilling or covering any part of the Work.

Work performed or materials concealed without the required notice specified above is subject to any tests or exposure necessary to prove to the Engineer's satisfaction that all materials used and work done conform to the Contract Documents. Furnish and pay for all labor and equipment necessary to expose, test and replace, at no cost to the City, any materials or work damaged by exposure or testing.

At your expense, make good defective work including any unsuitable materials and equipment the City Representative inspected and whose payment has been included in an estimate for payment.

Inspection of the Work does not relieve you of your obligation to fulfill all Contract requirements.

Send all Work-related inspection submittals and correspondence between you and the City to the Engineer.

Follow directions and procedures for code inspections mandated by building permits. The City will charge contractors for additional inspection fees for the third (3rd) re-inspection on any item and every re-inspection thereafter.

1-12.2 Inspection Requirements. Notify the City Representative a minimum of two (2) Working Days before inspection is required.

Unless stated elsewhere in the Specifications, the City will inspect the Work between 7a.m. and 3:30 p.m., Monday through Friday, excluding City holidays. Pay for any inspections required by your actions outside these hours at the prevailing rate of 1 1/2 times the regular hourly wage rate plus 21 percent for overhead costs.

- A. Submit a request to the Engineer for approval a minimum five (5) Calendar Days, before inspections are required as a result of your actions on Saturdays, Sundays or City and federal holidays. Pay for these inspections at the prevailing rate of 1 1/2 times for Saturdays and 2 times the regular hourly wage rate for Sundays or City and federal holidays plus associated overhead costs.

- B. For purposes of this section, the City observes the following holidays:
 - 1. New Year's Day
 - 2. Martin Luther King Jr. Day
 - 3. Presidents' Day
 - 4. Memorial Day
 - 5. Independence Day
 - 6. Labor Day
 - 7. Veterans Day
 - 8. Thanksgiving Day
 - 9. Day after Thanksgiving
 - 10. Christmas Eve
 - 11. Christmas Day

A construction calendar showing the days each of these holidays are observed is available from the Engineer.

- C. Telephone the City Representative at least two (2) Working Days before starting construction or resuming construction after suspension of the Work for any reason.

Before beginning any work on the Contract, submit a complete City of Irvine Inspection Overtime Permit form.

- D. In addition to any inspection required by Codes and Ordinances or Contract Documents, notify the Engineer a minimum of two (2) Working Days before permanently concealing any materials or work. The following list is typical but not inclusive of such required inspections:
 - 1. Foundation/subgrade material, footing and slab beds
 - 2. Reinforcing for concrete, masonry and plaster
 - 3. Contact surface of concrete forms
 - 4. Concrete and masonry surfaces
 - 5. Piping and conduit

6. Finish grade prior to paving, seeding or planting
7. All soil mixes prior to installation
8. All chemicals and amendments prior to installation or application
9. Framing
10. Insulation
11. Waterproofing

1-13 SPECIAL NOTICES. Any notice to be served according to this section, whether provided in the Specifications or directed by the Engineer, must be in writing, dated and signed by you or the Engineer. These notices are not effective unless served as follows:

- A. Notice to the City: by personal delivery or by deposit in the United States mail, in a sealed envelope addressed to the City, postage paid and registered.
- B. Notice from the City to you: by personal delivery to you or to your authorized representative or by deposit in the United States mail, in a sealed envelope addressed to you at your regular place of business or any other address established to conduct the work under this Contract, postage paid and registered.
- C. Notice to the surety or to any other person: by personal delivery, or by deposit in the United States mail, in a sealed envelope addressed to the surety or person at the address of the surety or person given to the noticing party, postage paid and registered.

1-14 CORRESPONDENCE. Unless the Engineer specifies or requests otherwise, do not send routine correspondence, including submittals, by facsimile (fax) machines or internet email. The City will allow internet email for urgent matters such as notification of a change of conditions. Unless otherwise allowed by the Engineer, direct all internet email to the Engineer. The Engineer will give you his/her internet email address at the pre-construction meeting. Internet email received after 2 p.m. is considered received the following Working Day. Follow up all internet email with a paper copy mailed to the Engineer on the same day you send the internet email. The Engineer will not accept any illegible internet email correspondence.

1-15 CONTRACT COORDINATION. Coordinate scheduling, submittals and the Work to assure an efficient and orderly sequence of installing construction elements that will accommodate later installations.

Hold coordination meetings and pre-installation conferences with City Representatives and subcontractors in addition to the weekly progress meetings required by the City, to assure coordination of the Work.

If the City exercises partial Acceptance or beneficial occupancy of the premises, coordinate site access to complete work or to correct defective work and work not strictly conforming to the Contract Documents to minimize disruption of the City's activities.

ARTICLE 2 – CHANGES IN THE WORK

2-1 CHANGES REQUESTED BY THE CONTRACTOR.

2-1.1 General - The Engineer may grant changes to the Plans and Specifications that you request in writing, which do not materially affect the Work and which are not detrimental to the Work or to the City's interests. This does not grant you the right to demand that the Engineer accept your changes.

To request a change, submit a written Change Order Request to the Engineer that contains:

- A. Description of the proposed changes;
- B. Statement of the reason for the changes;
- C. Reference to applicable Specifications sections and specific plans that support your request;
- D. Statement of the effect on the Contract Price and Contract Time;
- E. Statement of the effect on the work of separate subcontractors;
- F. Documentation supporting any change in Contract Price or Contract Time, if appropriate.

2-2 CHANGES REQUESTED BY THE CITY.

2-2.1 General. The City may issue a written Change Order that includes the dollar value of the change or establishes the payment method and any adjustment in the Contract Time to modify the Work including, but not limited to, the Plans, Specifications, character, quantity or time of the Work.

The Engineer may order minor changes in the Work not involving an increase or decrease in the Contract Price, or a change in the time for completion but that are consistent with the purposes for which the works are being constructed. If you believe any order for minor changes in the Work involves changes in the Contract Price or time of completion, stop work on the minor changes ordered and immediately after receiving the order, notify the Engineer in writing of your estimate of the change in the Contract Price and time of completion.

The City will not pay for changes in the Work or in the time of completion unless the changes are covered by a City-approved, written Change Order before you begin the changed work.

Once both parties execute a Change Order it is final and you waive your right to seek additional compensation for the work covered or by any project impacts. All Change Orders constitute full payment for the work they cover, including all direct and indirect overhead expenses.

Despite any other provision in the Contract Documents, the City's Change Order does not constitute the City's waiver of, or preclude the City from asserting, any claim respecting it, including but not limited to, a claim of breach of contract or a claim that the issued Change Order covers work included in the scope of Work in the Contract Documents for which you were not entitled to additional funds and time extension.

A Change Order is approved when the City signs it and a purchase order is issued.

The Engineer may approve and issue a Contract Change Order at any time. If you disagree with any terms or conditions in an approved Contract Change Order, you did not execute, proceed with the Change Order work according to 2-5 of the Specifications and submit a written protest to the Engineer within fifteen (15) days after receiving the approved Contract Change Order. The protest must include the points of disagreement and cite the Specification references, quantities and costs involved. If you

do not submit a written protest, you will be paid per the approved Contract Change Order and that payment constitutes full compensation for all work included in or required by it. The City considers unprotested approved Contract Change Orders as executed Contract Change Orders.

The Engineer may also initiate changes by sending you a Request for Quotation that includes a detailed description of the change, products, location of the change and supplementary or revised Plans and Specifications. This request is not an instruction to execute the changes or to stop work in progress.

Support each quotation for a lump-sum proposal and for each unit price not previously established, with sufficient substantiating data to allow the Engineer to evaluate the quotation.

On request, provide additional data to support time and cost computations, labor, equipment, product requirements, a recommended purchase source and unit cost and quantities required, taxes, insurance as well as credit for work deleted from the Contract, similarly documented, and justification for any change in Contract Time.

Support each claim for additional costs and for work done on a time-and-material/force account basis with the documentation required for a lump-sum proposal, plus the following:

- A. Name of the City Representative who ordered the work and the date of the order;
- B. Dates and times work was performed and by whom;
- C. Time record, summary of hours worked and hourly rates paid;
- D. Receipts and invoices for equipment used showing dates and times of use, products used, quantities and subcontracts.

In lieu of a Request for Quotation, the Engineer may issue a written Field Order for you to proceed with a change subsequently included in a Contract Change Order. Field Orders describe changes in the Work, both additions and deletions, and include a copy of revised Contract Documents defining details of the change and designate how any change in the Contract Price and the Contract Time is determined. The Engineer will sign and date the Field Order as authorization for you to proceed with the changes. You may sign and date the Field Order to indicate agreement with its terms. Do the work ordered before you receive an approved Contract Change Order.

2-2.2 Contract Unit Prices.

2-2.2.1 General. If a change is ordered in a work item covered by a Contract Unit Price not involving a substantial change in the character of the work from that shown on the Plans or stated in the Specifications, the City will adjust payment based on the increase or decrease in the quantity and Contract Unit Price.

If the actual quantity of an item of work covered by a Contract Unit Price and constructed in conformance with the Plans and Specifications varies from the Bid quantity by 25 percent or less, payment will be at the Contract Unit Price. If the actual quantity of the item of work varies from the Bid quantity by more than 25 percent, payment will be per 2-2.2.2 or 2-2.2.3.

In the case of an increase or decrease in a Bid Item, using this basis to adjust payment is limited to that portion of the change that, together with all previous changes to that item, does not exceed 25 percent of the total cost of the item based on the original quantity and Contract Unit Price.

2-2.2.2 Increases of More than 25 Percent. If the actual quantity of an item of work covered by a Contract Unit Price and constructed in conformance with the Plans and Specifications exceeds the Bid quantity by more than 25 percent, payment for the quantity in excess of 125 percent of the Bid quantity is based on an adjustment in the Contract Unit Price we mutually agree to or, at the Engineer's option, on the basis of Extra Work per 2-3. The Extra Work per 2-3 basis of payment does not include fixed costs. You recover fixed costs through payment for 125 percent of the Bid quantity at the Contract Unit Price. If payment for units of a bid item that exceeds 125 percent of the price shown on the Bid Item List is less than \$5,000 at the unit price, the Engineer may not adjust the unit price unless you request an adjustment in writing.

2-2.2.3 Decreases of More than 25 Percent.

If the actual quantity of an item of work covered by a Contract Unit Price and constructed in conformance with the Plans and Specifications is less than 75 percent of the Bid quantity, there is no payment adjustment unless you request one in writing. If you make a request, payment is based on an adjustment in the Contract Unit Price mutually agreed to or, at the Engineer's option, based on Extra Work per 2-3. In no case, however, will payment be less than would be made for the actual quantity at the Contract Unit Price nor more than would be made for 75 percent of the Bid quantity at the Contract Unit Price.

2-2.3 Agreed Prices. If mutual agreement cannot be reached, the Engineer may direct you to proceed on the basis of Extra Work per 2-3, except as otherwise specified in 2-2.2.2 and 2-2.2.3. Agreed prices must be negotiated before beginning the changed work.

2-2.4 Eliminated Items. If any Bid item is eliminated, payment will be for your actual costs incurred in connection with the eliminated item before written notification from the Engineer stating its elimination. If you order material conforming to the Plans and Specifications to use in the eliminated item before the date the Engineer notifies you of its elimination and that order cannot be canceled, you will be paid for the actual cost of the material which then becomes the City's property. The City will pay you for additional actual handling costs. If the material can be returned, you must return it and the City will reimburse you for the actual cost to do so as well as any handling charges. Actual costs as used here are computed based on Extra Work per 2-3.

2-2.5 Acceleration Clause.

- A. The City reserves the right to accelerate the Work. If the City directs acceleration, its directive will be in writing. Keep cost and other project records related to the acceleration directive apart from normal project costs and records and provide a daily written record of the acceleration cost to the City.
- B. If you believe that the City's action or inaction constitutes an acceleration directive, immediately notify the City in writing. In your written notification, detail the circumstances of the acceleration directive. Do not accelerate your work efforts until the City responds. If the City directs or requires acceleration, maintain all cost records referred to above and provide them to the City daily.
- C. To recover additional costs due to acceleration, document the additional expenses you incurred and paid. The only recoverable labor costs are overtime or shift premium costs or the cost of additional laborers brought to the Site to perform the accelerated work. The only recoverable equipment costs are the cost of added equipment mobilized to the Site to perform the accelerated work.

2-3 EXTRA WORK.

2-3.1 General. The Engineer will classify new or unforeseen work not covered by Contract Unit Prices as Extra Work.

All costs set forth in A through J, below, are part of your overhead and profit and as included in the Contract Amount and covered in 2-3.2.6. Do **not** include any of the following in the Cost of the Work:

- A. Payroll costs and other compensation of your project manager, superintendents, project engineers, officers, executives, principals, owners, general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks and other personnel you employ at the Project site or in your principal or a branch office for general administration of the Work;
- B. Costs and expenses of your principal office, branch offices and office located at the Project site;
- C. Any part of your capital expenses, including interest on your capital employed for the Work and charges against you for delinquent payments;
- D. Cost of premiums for all bonds and for all insurance whether or not the Contract Documents require you to purchase and maintain them excepting the cost of premiums in 2-3.2.6;
- E. Costs due to negligence, act or failure to act by you, any subcontractor, or anyone else directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, correcting defective Work, disposal of materials or equipment furnished in error and repair and replacement of any property damage;
- F. Consumable materials, such as drill bits, abrasive discs, gloves, rags, rope, welding tips, etc.;
- G. Tools and equipment with an original costs of less than \$1,000;
- H. Other overhead or general expense costs of any kind and the cost of any item not specifically set forth in 2-3.2.6;
- I. Consequential expenses including bonding capacity impairment, lost opportunity, labor, wage or cost escalations, legal expenses or changes in taxes;
- J. All costs in 2-3.1 apply to any claims of subcontractors and suppliers, regardless of tier.

2-3.2 Payment.

2-3.2.1 General. When we cannot agree on the price for extra work before you begin it, the City will pay for the extra work based on the accumulation of costs provided here.

2-3.2.2 Basis for Establishing Costs.

- A. Labor - The cost of labor is the actual cost for the wages of workers performing the Extra Work, plus employer paid payroll taxes, workers' compensation insurance, liability insurance, health and welfare, pension, vacation, apprenticeship funds and other direct costs resulting from federal, state, or local laws, as well as assessments or benefits required by lawful collective bargaining agreements.

Do not use a labor classification that would increase the Extra Work cost unless you establish the need for it. Report labor costs for equipment operators and helpers only when the costs are not included in the invoice for the equipment rental. The labor cost for foremen must be only for time spent on the Extra Work.

- B. Materials - Report the cost of materials at the invoice or lowest current price at which the materials are locally available and delivered to the Work site in the quantities required plus sales tax, freight and delivery. The City reserves the right to approve materials and supply sources or

to supply materials to you if necessary for the progress of the Work. The City will not apply a markup to any material it provides.

2-3.2.3 Tools and Equipment Rental. To determine equipment rental rate costs, use the rates listed for the equipment in the State of California, Department of Transportation (Caltrans) publication "Equipment Rental Rates and Labor Surcharge," available from Caltrans at <http://www.dot.ca.gov/hq/construc/equipmnt.html>, in effect on the date the work is performed, regardless of ownership and any rental or other agreement you enter into to use the equipment. If the Engineer decides it is necessary to use equipment not listed in that publication, the Engineer will establish a suitable rental rate. You may furnish any cost data that might assist the Engineer to establish the rental rate. Rental time is not reimbursed while the equipment is inoperative due to breakdowns.

Operators of rented equipment will be paid as provided in 2-3.2.2.

The rental rates paid include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance necessary equipment loading, transportation costs and all incidentals.

Equipment used intermittently that could, when not in use, be returned to its rental source at less expense to the City than holding it at the Work site, must be returned unless you elect to keep it at the Work site at no expense to the City.

All equipment must be acceptable to the Engineer, in good working condition and suitable for the purpose for which it is used.

The reported rental time for equipment already at the Work site is the duration of its use on the Extra Work. This time begins when the equipment is first used on the Extra Work plus the time required to move it from its previous site and back or to a closer site.

2-3.2.4 Other Items. The City may authorize other items required on the Extra Work including labor, services, material and equipment. These items must be different from those required for the Work and be of a type not ordinarily available from you or subcontractors.

2-3.2.5 Invoices. Submit vendors' invoices for material, equipment rental and other expenditures with the daily report per 2-3.3. If you do not substantiate the daily report with invoices or other documentation, the City will establish the cost of the item involved at the lowest price that was current at the time of the report.

2-3.2.6 Markup.

2-3.2.6.1 Work by Contractor. The City will add the following percentages to your costs as determined under 2-3 that constitutes the markup for all overhead, increase in your bonds, administrative expenses and profit on your work:

| | |
|---------------------------------|-----|
| A. Labor | 20% |
| B. Materials | 15% |
| C. Equipment Rental | 15% |
| D. Other Items and Expenditures | 15% |

2-3.2.6.2 Work by Subcontractors. When any part of the Extra Work is performed by a subcontractor of any tier, the markup established in this section will be applied to the subcontractor's actual cost of the work. Your markup on subcontractor work is limited to 5 percent.

The City will not pay for any item not set in 2-3.2.6.1 and 2-3.2.6.2, including without limitation, your overhead, general administrative expense, supervision or damages claimed for delay in performing the remainder of the Work.

Do not construe this to preclude recovery of your damages stemming from a delay the City is responsible for that is unreasonable under the circumstances and was not within our mutual contemplation.

2-3.3 Contractor Daily Reports. When we cannot agree on the cost of the Extra Work, submit a daily report to the Engineer on City-approved forms that includes applicable delivery tickets listing all labor, materials and equipment involved for that day and other authorized services and expenditures. If you do not submit the daily report by the close of the next working day, you waive any rights for that day. The City will try to reconcile the report daily, which you and the City Representative will sign. If there is a disagreement, each party will enter relevant notes to explain the points in question. Each party keeps a signed copy of the report. Submit reports by subcontractors or others to the City.

Notify the City Representative at the beginning of each day when Extra Work is in progress. The City will not pay for work it has not verified.

The report shall:

- A. List the names of workers, classifications and hours worked
- B. Describe and list quantities of materials used
- C. List the equipment type, size, identification number and hours of operation including loading and transportation, if applicable
- D. Describe other services and expenditures the City requires.

2-3.4 Price Reduction for Defective Cost or Pricing Data.

- A. If the City determines that any price, including profit or fee, negotiated in connection with any Change Order or claim settlement under this Contract, or any cost reimbursable under this Contract, was increased because:
 - 1. You furnished cost or pricing data that was not accurate, complete and current as certified in your Certificate of Current Cost or Pricing Date;
 - 2. A subcontractor, supplier, materialman or prospective subcontractor at any tier furnished cost or pricing data to support a subcontract in your cost estimate that was not accurate, complete and current on the date certified in your Certificate of Current Cost or Pricing Data; or,
 - 3. You or a subcontractor, supplier, materialman or prospective subcontractor at any tier furnished data not within 1 or 2 above, which was not accurate.
- B. The City will reduce the price and modify the Contract in writing, if necessary, to reflect the reduction. Any reduction in the Contract price because of a prospective subcontractor's defective subcontract data, when the subcontract was not awarded to that subcontractor, is limited to the amount plus applicable overhead and profit, by which the actual subcontract or actual Contract cost if there was no subcontract, was less than the prospective subcontract cost

estimate you submitted, provided that the actual subcontract price was not affected by the defective cost or pricing data.

- C. Provide the following certification on all Change Order cost quotations or requests or all requests for equitable adjustment exceeding \$5,000.

| CERTIFICATE OF CURRENT COST AND PRICING DATA | |
|--|-------|
| This is to certify that, to the best of my knowledge and belief, cost or pricing data submitted in writing, or specifically identified in writing if actual submission of the data is impractical, to the City to support (proposal quotation, request for equitable adjustment, or other submissions involved, appropriately identified) are accurate, complete and current as of (date). | |
| Contract No. | _____ |
| Proposed Change Order No. | _____ |
| Company: | _____ |
| Name: | _____ |
| Title: | _____ |
| Date: | _____ |
| Signature: | _____ |

2-4 CHANGED CONDITIONS. Notify the Engineer of the following Work site conditions, “changed conditions,” in writing, when discovered and before disturbed:

- A. Subsurface or latent physical conditions differing materially from those represented in the Contract Documents;
- B. Unknown physical conditions differing materially from those ordinarily encountered and generally recognized as inherent in work of the character being performed; and
- C. Remove to a Class I, Class II or Class III disposal site according to provisions of existing law, material differing from that in the Contract Documents you believe may be hazardous waste as defined in § 25117 of the Health and Safety Code

The Engineer will investigate conditions that appear to be changed conditions. If the Engineer determines that conditions are changed conditions and will materially affect costs, the Engineer will issue a Change Order adjusting compensation for that portion of the Work according to 2-2.2, and you may submit a written request for a time extension according to 5-6, which the Engineer will grant.

If the Engineer determines that the conditions do not justify a compensation adjustment, you will be notified in writing. The notice will also advise you of your obligation to notify the Engineer in writing if you disagree.

If you disagree with the decision, submit a written notice of potential claim to the Engineer before beginning the disputed work. This dispute does not excuse you from any scheduled completion date in the Contract and you must proceed with all Contract Work. However, you retain all rights provided either by the Contract or by law pertaining to dispute and protest resolution between the contracting parties. Proceed according to 2-5.

Failing to give notice of changed conditions when discovered and before being disturbed constitutes a waiver of all claims connected to them.

2-5 DISPUTED WORK. If we are unable to reach agreement, the City may direct you to proceed with the Disputed Work and will pay you pursuant to 2-2, 2-3, mediation or arbitration if the City and Contractor agree to it, or as fixed in a court of law.

Keep and furnish records of Disputed Work to the Engineer according to 2-3 but do not construe this as proceeding under 2-3.

ARTICLE 3 – CONTROL OF MATERIALS

3-1 MATERIALS AND WORKMANSHIP.

3-1.1 General. Furnish all materials required to complete the Work, except materials the Specifications designate as City-furnished materials.

All materials, parts, and equipment you furnish for the Work must be new, high grade and defect free. Do not use used materials, parts and equipment unless allowed in the Specifications.

The quality of materials and workmanship are subject to the Engineer's approval. The Engineer will reject materials and workmanship that do not conform to the requirements of the Specifications. At the Engineer's direction, immediately remove defective work or material, whether in place or not, from the Work site at your expense.

If you fail to replace defective or damaged work or material after reasonable notice, the Engineer may have the work or materials replaced and deduct the replacement expense from money owed you.

3-1.1.1 Contractor Equipment and Plants. Operate only equipment and plants suitable to produce the quality of work and materials required on the project. Maintain the equipment and plants in good repair during the Work. Do not use obsolete or badly worn equipment and plants; do not exceed the Manufacturer's ratings.

Design and construct plants according to the general practice for the equipment and with enough capacity to ensure a material production rate adequate to ensure completion within the time limit(s) specified in the Contract Documents, if any.

When ordered by the Engineer, remove unsuitable equipment from the Work site and do not use the unsatisfactory plants and equipment.

3-1.1.2 Adoption or Revision Date for Standards, Codes and Tests. Whenever a standard, code, specification, or test is referred to and the designation representing the adoption date or the latest revision is omitted, use the latest revision of the standard, code, specification or test in effect on the day the Notice Inviting Bids is dated.

Submit, according to Public Contract Code § 3400, data substantiating requests for substitution of "equal" items within thirty-five (35) days of Contract award or before 10 percent of the Contract Working Days have expired, whichever is less. This time is included in the number of Working Days allowed to complete the Work. The Engineer's decision regarding substitution acceptability is final.

Materials, equipment and supplies provided must, at no charge to the City, fully conform to all applicable local, state and federal safety laws, rules and regulations and orders and provide only those materials, equipment, and supplies even though omitted in the Contract Documents, of the particular material, equipment or supply specified.

3-1.2 Protection of Work and Materials. Provide and maintain storage facilities and employ measures that preserve the specified quality of materials used in the Work. Stored materials must be reasonably accessible for inspection. Adequately protect new and existing work and all equipment for the duration of the Contract.

Do not, without the City's written consent, assign, sell, mortgage, pledge or remove installed or delivered equipment or materials necessary to complete the Work.

3-1.3 Inspection Requirements. The Engineer may inspect and test materials for the Work. Supply without charge, any samples that may be required

Give the Engineer a list of your sources of materials including locations where the materials will be available for inspection a minimum of twenty (20) Calendar Days before they are used. The Engineer may inspect, sample or test materials at the supply source or at other locations but the inspection, sampling or testing will not happen until you assure the Engineer of both your cooperation and assistance and that of the material supplier. Insure that the Engineer has free access at all times to the material inspected, sampled or tested. These inspections and tests, if made other than where the material will be incorporated in the Work, do not guarantee acceptance of the material or the continued acceptance of material presumed similar to what the City inspected and tested. The City's inspection and testing do not relieve you or your suppliers of responsibility for quality control.

Deliver the manufacturers' warranties, guarantees, instruction sheets and parts lists furnished with certain materials incorporated in the Work, to the Engineer before the Contract Work is accepted.

You may examine reports and records of inspections made and tests performed when they are available at the Work site.

3-1.3.1 General. The Engineer may inspect material production or product manufacture at the supply source but not before you assure the Engineer of the cooperation and assistance of both you and the material producer. The Engineer must have free entry at all times to the parts of the plant that concern the manufacture or production of the materials. Furnish free of charge, adequate facilities to make the necessary inspection. The City assumes no obligation to inspect materials at the supply source.

Unless otherwise stated in the Specifications, inspection is required at the source for asphalt concrete pavement mixtures, structural concrete, metal fabrication, metal casting, welding, concrete pipe manufacture, protective coating application and similar shop or plant operations. The Specifications list additional materials and fabricated items that require inspection at the source.

Steel pipe in sizes less than 18 inches and vitrified clay and cast iron pipe in all sizes, are acceptable when certified as compliant with the Specifications subject to sampling and testing by the City. Standard items of equipment such as electric motors, conveyors, elevators, plumbing fixtures, etc., are inspected only at the Work site. Special items of equipment like designed electrical panel boards, large pumps, sewage plant equipment, etc., are inspected only at the performance testing source. Inspection at the source for other items is provided in the Specifications.

3-1.3.2 Inspection of Materials Not Locally Produced. When you intend to purchase materials, fabricated products or equipment from sources more than 50 miles beyond the City's geographical limits, engage at your expense an inspector or accredited testing laboratory, approved by the Engineer, to inspect the materials, equipment or process before producing any material or equipment. The inspector or representative of the testing laboratory must evaluate the materials to confirm they comply with the requirements of the Plans and Specifications. Forward the required reports to the Engineer. The approved agent must conduct a proper inspection before any materials ship or are processed, fabricated or treated. The agent's approval does not relieve you of your responsibility for complying with the requirements of the Contract Documents.

3-1.3.3 Inspection by the City. The City will provide all inspection and testing laboratory services within 50 miles of its geographical limits.

3-1.4 Test of Materials. Before incorporation into the Work and at no cost to the City, submit samples of materials the Engineer may require and deliver the materials for testing to the place and at the time the Engineer designates. The Engineer may direct, unless otherwise specified, all initial testing and a and two additional retests at no expense to you. The Specifications identify testing you provide and pay for.

To allow enough time to perform the tests, notify the Engineer in writing at least twenty (20) Working Days before you intend to use the materials. The notice must name the proposed supplier and the material source.

If you send the notice of intent to use before the materials are available for testing or inspection, or so far in advance that the materials on hand at the time will be replaced by a new lot before it's used on the Work, re-notify the Engineer when representative samples are available.

The Engineer or a designated representative will make the inspection and testing but if made at any point other than at the point of incorporation in the Work, they do not guarantee acceptance of the materials nor of continued acceptance of materials presumed similar to those inspected and tested.

Test materials according to commonly recognized procedures of technical organizations and any special procedures prescribed in the Contract Documents. Material sampling and testing will occur when, during the process of the Work, the Engineer deems desirable; cooperate in obtaining the samples.

3-1.4.1 Testing Laboratory. Use and pay for the services of an independent testing laboratory, subject to the City's approval, to perform other testing and inspection services required by the Contract Documents.

Before starting Work, submit the name, address and telephone number of your testing laboratory as well as the names of a full-time registered engineer and a responsible officer.

Using testing laboratories does not relieve you of your obligation to perform the Work according to the Contract Documents.

Laboratory field technicians employed by the City have no authority to release, revoke, alter or enlarge on the requirements of Contract Documents or to approve, accept or stop any portion of the Work.

You must:

- A. Cooperate with laboratory personnel, provide access to work and arrange access to manufacturer's operations.
- B. Provide preliminary representative material samples to the laboratory in the required quantities.
- C. Furnish copies of mill test reports.
- D. Provide casual labor and facilities for access to work being tested, obtain and handle samples at the site, facilitate inspections and tests and provide facilities for the laboratory's exclusive use to store and cure test samples.
- E. Coordinate testing requests through the City Representative. Notify the City Representative at least three (3) Working Days before operations to allow for assignment of personnel and scheduling of tests.
- F. Pay for additional laboratory inspections, sampling and testing required for your convenience and when initial tests indicate that work does not comply with Contract Documents.
- G. When required by the Contract Documents, submit the manufacturer's certificate, executed by a responsible officer, certifying that the product(s) meet or exceed specified requirements. Provide the certification in duplicate.

3-1.5 Certificate of Compliance. Give an original, wet signed Certificate of Compliance to the Engineer before using any material or assembled material required by the Specifications or the Engineer.

The Engineer may waive Specifications materials testing requirements and accept the manufacturer's written certificate of compliance that the supplied materials meet those requirements. The Engineer may require inclusion of materials test data with the submittal.

Materials used based on a Certificate of Compliance may be sampled and tested at any time. Submitting a Certificate of Compliance does not relieve you of responsibility for incorporating material into the Work that conforms to the requirements of the Contract Documents. The Engineer may reject any material not conforming to the requirements whether in place or not.

3-1.6 Trade Names or Equals. You may supply any of the materials specified or offer an equivalent. The Engineer will determine whether the material offered is equivalent to that specified. Allow adequate time for the Engineer to make this determination.

A materials list is not intended to be comprehensive or in order of preference. You may offer any material, process or equipment you consider equivalent to that indicated. At your expense, furnish data about items you offer as equivalent to those specified as provided in the Contract Documents.

If the Engineer requires it, test the material to confirm that its quality, strength, physical, chemical or other characteristics including durability, finish, efficiency, dimensions, service and suitability will allow it to fulfill its intended function. The Engineer must approve the test methods. Report the test results promptly to the Engineer who will evaluate them and determine whether the substitute item is equivalent.

The Engineer's findings are final. Do not install and use a substitute item until the Engineer approves it.

If your substitute is not found equal to the specified material you must furnish and install the specified material. No circumstances resulting from the provisions of this section affect the Contract completion time.

Submit a products list as follows:

- A. Within the time stated in the Specifications, send the Engineer the number of copies you need plus four (4) of a list of major products you propose installing that includes the manufacturer's name. Arrange the products by specification section number, title and article number.
- B. For products specified only by reference standards, give manufacturer, trade name, model or catalog designation and reference standards.
- C. The Engineer will reply in a writing that states whether there is a reasonable objection to the listed items. Failure to object to a listed item does not constitute a waiver of Contract Documents requirements.

The following limitations apply to substitutions:

- A. The City will only consider requests for substitutions of products during the time specified in the Contract Documents. The City will consider subsequent requests only in the case of product unavailability or other conditions beyond your control. Material delivery schedules do not justify a substitution.
- B. The City will not consider substitutions indicated on shop drawings or product data submittals without a separate formal request, or if requested directly by a subcontractor or supplier or if acceptance will require a substantial revision of the Contract Documents.
- C. Do not order or install substitute products without the Engineer's written acceptance.
- D. The Engineer will only consider one request for substitution for each product line. If a

substitution is not accepted, provide the specified product.

E. The Engineer will determine the acceptability of substitutions.

Requests for substitutions shall conform to the following:

- A. Submit each request for substitution separately and document each request with complete data to substantiate its compliance with requirements of Contract Documents.
- B. Identify the product by Specifications section and article numbers. Provide the manufacturer's name and address, trade name or product and model or catalog number; list fabricators and suppliers as appropriate.
- C. Include an itemized comparison of the proposed substitution with the specified product, listing variations and referencing Specifications section and article numbers.
- D. Provide cost data comparing the proposed substitution with the specified product and the net change to the Contract Price.
- E. List the availability of maintenance services and replacement materials.
- F. Discuss the substitution's effect on the construction schedule and any changes required in other work or products.

A request for substitution is your representation that you have investigated the proposed product and have determined it is equal to or superior in all respects to the specified product and that you provide the same warranty for the substitution as for the specified product. Coordinate installing the accepted substitute, making any changes necessary for the Work to be complete in all respects. Certify that the cost data you present is complete and includes all related costs under this Contract and waive claims for additional costs related to the substitution that may later become apparent. Submit the number of copies you need plus four (4) of the request for substitution. For accepted products, submit shop drawings, product data and samples and tests conducted in accordance with 1-6.

3-1.7 Weighing and Metering Equipment. Use only scales and metering equipment inspected for accuracy and certified within the past 12 months by the State of California Bureau of Weights and Measures, by the County Director or Sealer of Weights and Measures, or by a scale mechanic registered with or licensed by the county for proportioning materials.

The accuracy of a scale, except as stated here, must meet the standards of the Business and Professions Code and the Code of Regulations pertaining to weighing devices. Give the Engineer a Certificate of Compliance for approval prior to operation. Renew the Certificate of Compliance whenever the Engineer requires, at no cost to the City.

Arrange scales, whose figures must be clearly legible, for easy reading from the operator's platform or area. The scales must indicate the true net weight without applying any factor. Scales must be accurate to within one (1) percent when tested with the plant shut down. Weighing equipment must be insulated against vibration or movement by other operating equipment in the plant area so that the weight error with the entire plant running does not exceed two (2) percent for any setting or one and one half (1.5) percent for any batch.

3-1.8 Calibration of Testing Equipment. Testing equipment including, but not limited to, pressure gages, metering devices, hydraulic systems, force (load) measuring instruments and strain-measuring devices must be calibrated by a testing method acceptable to the Engineer at intervals not exceeding 12 months and after the equipment has been repaired, modified or relocated. Provide calibration certificates when the Engineer requests them.

3-1.9 City-Furnished Materials. City-furnished materials listed in the Specifications are available to you free of charge.

Give the Engineer a written request for City-furnished material at least fifteen (15) Working Days before the date you intend to use it that includes the quantity and type of each material.

The Specifications designate locations where City-furnished materials will be available to you free of charge. Haul those materials to the Work site at your expense, including any loading and unloading that may be involved. If the Specifications do not designate locations, the City will furnish the materials to you free of charge at the Work site. In either case, all handling and placing costs of City-furnished material are included in the price for the contract item involved.

You are responsible for City-furnished materials given to you and must pay all demurrage and storage charges. Once you take possession of City-furnished materials, replace at your cost any that are lost or damaged from any cause. You are liable to the City for the cost of replacing City-furnished materials and the City may deduct those costs from any monies due or that become due to you. All City-furnished materials not used on the Work remains the City's property and you must arrange with the City Representative to return it to the City at your expense.

ARTICLE 4 – UTILITIES

4-1 GENERAL. For purposes of this Article 4, definitions of the terms referenced below are as follows:

An “unidentified” underground main or trunk line utility is one not indicated at all on the Plans; a “misidentified” underground main or trunk line utility is one not indicated on the Plans with reasonable accuracy (a “misidentification”). An underground main or trunk line utility is one indicated on the Plans with reasonable accuracy unless its actual location is substantially and materially different from that indicated on the Plans.

The term “rearrangement” of utilities means relocating, altering, reinstalling and reconstructing utilities, including removing existing related utilities there, necessary to accommodate the Work. Whenever in this Article 4 one or more of these rearrangement activities is referenced, the reference includes all other activities required to accommodate the Work.

4-2 LOCATION.

4-2.1 General. The Plans or the Specifications include known utilities and their respective owners. Where the Plans show underground utilities, assume every property parcel will be served by a service connection for each type of utility.

Pursuant to Government Code § 4216, contact the appropriate regional notification center (Underground Service Alert of Southern California [USA] at 1-800-422-4133) for an inquiry identification number at least two (2) but not more than fourteen (14) Working Days before beginning any excavation required for the Work. Caltrans and some other agencies are not required to be a member of a regional notification center. Contact non-member agencies directly and ask them to locate and mark their subsurface installations. Pursuant to Government Code § 4216.2., coordinate any proposed excavation within ten (10) feet of a high priority subsurface installation with the operator.

Before starting the Work, physically locate subsurface installations within 24 inches of any side of excavations required for the Work. Determine the horizontal and vertical location, alignment, depth, material type and size of each subsurface installation. Excavate according to Government Code § 4216.4, and provide the subsurface installation location data to the Engineer within the time stated in the Specifications.

Notify the Engineer in writing immediately after identifying potential physical conflicts between existing subsurface installations and the Work. Include in the written notification:

- A. Location date;
- B. Location method;
- C. Type, size, and material of subsurface installation;
- D. Horizontal location;
- E. Elevation (or depth from existing pavement or ground surface) of the top and bottom of the subsurface installation; and
- F. Presumed owner.

Complete excavation, backfill and placement of temporary resurfacing on the same day. Place permanent resurfacing within five (5) Working Days unless otherwise required by the Specifications or directed by the Engineer.

A list of utility companies with facilities located in or near the construction area is in the Specifications. The Engineer tried to determine existing utility substructures at the Work site by reviewing the records of owners of known utilities in the area and consulting with them, and used their information to show on the Plans their utility substructures (except for service connections) that may affect the Work.

Utility information provided on the Plans and in the Specifications has not been verified and may not be accurate or complete. Except as expressly provided in this Article 4, do not rely on the utility information. The City assumes no responsibility for its accuracy or completeness. Changed conditions within the scope of 2-4 do not include utilities.

Determine the exact location, both horizontal and vertical, type and size of all existing utilities including service connections, before beginning work that could damage the utilities or otherwise affect or be affected by the utilities or interfere with their service. Where the Plans show underground main distribution conduits like water, gas, sewer, electric power, telephone or cable television, assume that every adjacent property parcel will be served by a service connection for each type of utility shown. Investigate, research, survey and pothole as you believe necessary to make the determinations and immediately notify the Engineer of any utility discovered in a different location than indicated on the Plans or not indicated on the Plans at all.

Your cost to locate any unidentified or misidentified underground main or trunk line utility will be paid for as an addition to the Work according to Article 2. You are not entitled to this additional compensation if the existence and location of the utility, with reasonable accuracy, was or should have been known to you on the date Bids were due or could have been inferred at that time from the presence of visible facilities such as buildings, meters, junction boxes or identifying markers. The cost to locate all other utilities is included in prices in the Bid for other items of the Work.

Information about underground and internal utilities and appurtenances you are required to record in the Record Documents as specified in 6-14 must include but not be limited to, the accurate location of underground utilities determined pursuant to 4-2 that remain in place as well as utilities either you or the utility owners rearrange.

Ask the City of Irvine Traffic Operations Division at 949-724-7649, to locate any existing traffic signal conductors and interconnect within the construction area before performing Work that may affect or be affected by the existing facilities.

Except as expressly provided in this Article 4 regarding unidentified or misidentified underground main or trunk line utilities, a utility company's failure to accurately mark its facilities does not justify a time extension or additional compensation from the City.

Obtain photographs of all markings made by your forces as well as all USA markings and submit to the Engineer within two (2) Working days. All the photographs must show the markings in relation to one or more identifiable landmarks that will remain in place after completion of the Work and of any utility removal and rearrangement work in the vicinity.

Governmental agencies and utility owners reserve the right to enter at any time, any street, alley, right of way or easement to maintain and repair their property.

4-2.2 Payment. Include payment for your cost to locate utilities in the various items of work; the City will not pay additional compensation for this cost.

4-3 PROTECTION. Do not interrupt the service or disturb the support of any utility without authority from the utility owner or direction from the Engineer. Maintain valves, switches, vaults and meters as readily accessible for emergency shutoff.

Unless otherwise provided on the Plans or in the Specifications, furnish and place necessary protection and support where required to ensure support of utilities potentially impacted by the Work.

The City will pay any additional cost you incur to protect and support an unidentified underground main or trunk line utility or from misidentifying an underground main or trunk line as an addition to the Work according to Article 2. You are not entitled to this additional payment if the utility's existence and

location or with reasonable accuracy should have been known to you on the date Bids were due or could otherwise have been inferred at that time from the presence of visible facilities such as buildings, meters, junction boxes or identifying markers. Include the cost to protect and support all other utilities in prices in the Bid for other items of the Work.

Immediately notify the Engineer and the utility owner if any utility is disturbed or damaged during the Work. If the Engineer directs, restore, repair or replace the disturbed or damaged utility.

The City will pay your cost to restore, repair or replace any unidentified or misidentified underground main or trunk line utility disturbed or damaged by the Work that does not result from your failure to perform your obligations under the Contract Documents including without limitation, § 4-2, or to exercise reasonable care as an addition to the Work according to Article 2. Except where this paragraph allows additional compensation, either you or the utility owner must restore, repair or replace at your expense, all utilities you disturb or damage in the course of the Work.

To the full extent allowed by law, all obligations listed in 6-3.2 apply if any claims or liabilities as defined there, are asserted or claimed by any person or entity resulting from any disturbance or damage to utilities your act or omission caused, whether or not the utilities are accurately marked on the Plans or in the field by the utility owner and whether or not there is concurrent active or passive negligence by the City and City Personnel, but excluding any claims or liabilities arising from the sole active negligence or willful misconduct of City or City Personnel.

When placing concrete around or contiguous to any non-metallic utility installation, you must at your expense:

- A. Furnish and install a 2-inch cushion of expansion joint material or other similar resilient material; or
- B. Provide a sleeve or other opening which will result in a 2-inch minimum-clear annular space between the concrete and the utility; or
- C. Provide other acceptable means to prevent embedment in or bonding to the concrete.

Where concrete is used for backfill or for a structure which would result in embedment or partial embedment of a metallic utility installation, or where the coating, bedding or other cathodic protection system is exposed or damaged by your operations, notify the Engineer and contact the affected utility owner about how to maintain or restore the integrity of the system, and implement the procedures at your expense.

4-4 REMOVAL. Remove all interfering portions of utilities shown on the Plans as "abandoned" or "to be abandoned in place." Before starting removal operations, ask the City whether the abandonment is complete, and include the removal and disposal costs in your Bid for the items of work requiring the removals.

4-5 RELOCATION. When feasible, the owners responsible for utilities within the area affected by the Work will complete necessary installations, relocations, repairs, or replacements before you begin the Work. When the Plans or Specifications indicate that others will relocate, alter or construct a utility installation, the City will negotiate with the owners and have the utility work done at no cost to you. Protect relocated utilities in their new position and include the cost to protect in the Bid for the items of work requiring the relocation.

If you find utilities that interfere with the Work after the Contract is awarded, the respective utility owners will rearrange them, or the Engineer may order you to perform the rearrangement as an addition to the Work per Article 2. Alternatively, the Engineer may order changes in the Work to avoid the interference per

Article 2. The utility owner must be satisfied with your work on its utility and it must comply with the Contract Document requirements.

When the Plans or Specifications require you to rearrange a utility as part of the Work, all costs for the work are considered included in the Bid for the items of work requiring it. If an underground main or trunk line utility you are to rearrange is misidentified in the Plans, any additional cost you incur for the work as a result is treated as an addition to the Work according to Article 2 unless its location, with reasonable accuracy, was or should have been known to you on the date Bids were due or could have been inferred then by visible facilities like buildings, meters, junction boxes or identifying markers. Except as provided in this paragraph, you are not entitled to any additional compensation because of inaccuracies in the Plans regarding utility rearrangements included in the Work.

If you request temporary or permanent utility rearrangement for your convenience it is your responsibility to make all arrangements necessary for the work and to bear all related costs. You are not entitled to any additional compensation because of the utilities or work.

The provisions of this paragraph are subject to the provisions of the previous paragraph. Where the Plans or Specifications require you to rearrange any service connections, this work is included in your Bid for the items of work necessitating the work.

Where necessary, the utility owner will relocate service connections within the limits of the Work or within temporary construction or slope easements. When the Engineer directs, arrange to relocate service connections between the meter and the property line or between a meter and the limits of temporary construction or slope easements. Payment to relocate the service connections are according to 2-2 or 2-3. Payment includes restoring all existing improvements that are affected. You and the utility owner may agree to disconnect and reconnect interfering service connections. The City will not be a party to that agreement.

4-6 DELAYS. The construction schedule developed in accordance with 5-1 allows adequate time for you or the utility owner to protect, remove and rearrange utilities. If the utility owner performs the work, the construction schedule will allow for the time the utility owner requires for it. Notify the Engineer in writing of any subsequent changes in the construction schedule that will affect the time available to protect, remove, or rearrange utilities and get the Engineer's approval of the changes.

You are not entitled to any extensions of the Contract Time or compensation for damages incurred by delays attributable to utilities at the Work site except as provided in 5-6.1, or as provided below. Delays described below are not delays for which the City is responsible within the meaning of 5-6.3.

- A. Subject to 5-6.2 and 5-6.4, you are entitled to an extension of the Contract Time for any delay in the Work directly attributable to an unidentified underground main or trunk line utility or the misidentification of an underground main or trunk line utility in the Plans, unless the utility's location, with reasonable accuracy, was or should have been known to you or could have been inferred from visible facilities like buildings, meters, junction boxes or identifying markers on the date Bids were due. If you are entitled to a time extension, you are also entitled to compensation for equipment idle time because of the delay, determined by the Engineer the same way determinations are made for equipment used in performing Extra Work according to Article 2. You are not entitled to any other compensation or damages because of the delay.
- B. You may be given a time extension but no additional compensation for unforeseen delays attributable a utility owner's failure to complete utility rearrangement work within the time scheduled for the work in the construction schedule or to complete utility rearrangement work that the Contract Documents indicate will be completed before your construction operations begin.

You are not entitled to a time extension or additional compensation for delays or losses described here that:

- A. Result from your actions or omissions or which could have been avoided by any reasonable means, like the judicious handling of forces, equipment or plant; or
- B. Arise in connection with utilities rearranged for your convenience. The Engineer will determine what damages you could have avoided.

Immediately notify the Engineer of any delays to your operations described here. Delays described here are not right of way delays within the scope of 1-9.

4-7 CONTRACTOR RESPONSIBILITIES. You must:

- A. Cooperate with and provide Work site access to utility personnel.
- B. Coordinate Contract Work with affected utilities. Remove all USA markings after completing the work requiring them before the City accepts and approves the Work.
- C. Asphalt concrete pavement not overlaid or slurry sealed as part of the project bid items that is damaged by trenching, potholing or otherwise, must be slurry sealed after the pavement section is repaired. "Perpendicular" street cuts must be slurry sealed ten (10) feet each side of the cut and "longitudinal" cuts must be slurry sealed from pavement lane to pavement lane line for the entire damaged area or as directed by the City Representative. Type I slurry must be used on non-arterial streets and Type II slurry must be used on arterial streets. Replace damaged traffic striping, legends and markers. Avoid "patchwork" application of slurry by joining closely grouped areas of slurry applications. Compensation for this requirement is included in the prices paid for related items of work and no additional compensation is allowed.

4-8 PERMANENT UTILITIES. Contact and coordinate with utility owners all requirements for installing and connecting permanent utilities necessary for the Work including but not limited to, natural gas, electricity, water, sewer and telephone. Include all costs for this work, as well as costs to operate permanent utilities before the City accepts the Work, in Bid prices for the related items of work.

ARTICLE 5 – PROSECUTION, PROGRESS AND ACCEPTANCE OF THE WORK

5-1 CONSTRUCTION SCHEDULE AND COMMENCEMENT OF WORK. Begin the Work on the date in the Notice to Proceed and diligently complete it in the time provided in the Contract.

- Interior improvements must be constructed during after-hours of City's operations.
- Exterior Improvements shall be constructed during normal business hours.

Notify the Engineer of your intent to begin work at least two (2) Working Days before starting any work.

Give the Engineer, within ten (10) days after executing the Contract, a construction progress schedule using the critical path method that shows the proposed dates for beginning and completing each item of the Work and the amount you anticipate each monthly payment will be due to you based on the progress schedule.

Format of the schedule is follows:

- A. Prepare schedules as horizontal bar charts with a separate bar for each portion of work or operation according to the approved schedule of values that identifies the first workday of each week. Allow space to update.
- B. Sequence of Listings: Chronological order at the start of each item of work.
- C. Sheet Size: Multiple of 11x17 inches.
- D. Provide a two week look-ahead schedule updated weekly.

Content of the schedules must:

- A. Show the complete sequence of construction by activity, with dates for beginning and completing each construction element. Include any special sequencing specified in the Contract Documents.
- B. Show lane closure notifications and dates.
- C. Provide sub-schedules to define major and significant portions of the entire schedule.
- D. Show the accumulated completion percent for each item and the total percent of Work completed as of first day of each month.
- E. Provide a separate schedule showing dates for product procurement and delivery, shop drawing submittals and equipment installation as well as decision dates for finish selection, if applicable.
- F. Show delivery dates for City-furnished products, if applicable.
- G. Show the critical path.

Revisions to schedules must:

- A. Indicate the progress of each activity to the submittal date and the projected completion date of each activity.
- B. Identify activities modified since the previous submittal, major changes in scope and other identifiable changes.
- C. Provide a written report describing any problem areas, anticipated delays and their impact on the schedule and include the corrective action taken or proposed and its effect.
- D. Revise periodically as the Engineer directs. Failing to comply with an Engineer's directive is

grounds for delaying the progress payment.

- E. Show the revised critical path.

Required submittals:

- A. Submit initial schedules within ten (10) days of executing the Contract. If requested, resubmit required revisions within seven (7) days of the request.
- B. Submit an update schedule on or before the first day of each month beginning one month after the initial schedule as outlined in A, above. If requested, resubmit required revisions within seven (7) days of the request.
- C. Submit four (4) copies of schedules to the Engineer.
- D. Submit with a transmittal letter.

In addition:

- A. Distribute copies of current schedules to the job site file, subcontractors, suppliers and other concerned parties.
- B. Instruct recipients to report promptly, in writing, problems they anticipate will result from schedule projections.

Include the cost to conform to these requirements in the various items of work at no additional compensation.

5-2 PROSECUTION OF THE WORK. Diligently perform the Work to completion. If the Engineer determines you are not timely performing the Work you must, upon the Engineer's order, immediately take steps to remedy the situation. Include all costs to perform the Work as specified in the Contract Price. If you fail to take the necessary steps to comply fully with the Engineer's orders, the Engineer may suspend the Work completely or in part, until you do. If Work is suspended through no fault of the City, you are responsible for all expenses and losses you incur during the suspension. If you do not properly provide for public safety, traffic and protection of the Work during periods of suspension, the City may elect to do so and deduct its cost from monies due you. These actions do not relieve you of liability.

5-2.1 Time of Completion and Forfeiture Due to Delay. Complete the Work called for under the Contract within the time set forth in the Contract Documents.

You agree, according to Government Code § 53069.85, to forfeit the per day amount required by the Contract for each day of delay. The City will deduct that amount from any payments due or that become due to you.

The City has endeavored to identify all areas of the site which may contain hazardous waste as defined by Health and Safety Code § 25117, and unless otherwise noted, hazardous waste in these areas has been mitigated. However, the parties acknowledge the possibility that additional hazardous waste exists not previously identified. If, during the course of your work, you encounter hazardous waste, promptly notify the City through its designated representative. If the material is "hazardous waste" pursuant to Health and Safety Code § 25117, the City may have you perform the mitigation work or may have it done under a separate contract. If you perform the mitigation work, the City will pay its cost as an addition to the work according to Article 2. To the maximum extent permitted by law, the City is not be liable for any damages other than an appropriate time extension for delays caused by the hazardous waste conditions contemplated here.

The City will not penalize you for delays in completing the work due to unforeseeable causes beyond your control and without your fault or negligence, including but not limited to acts of nature or of the

public enemy, acts of the government, acts of the City, acts of another contractor in performing a contract with the City, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes and unusually severe weather. These delays, except for acts of the City, do not entitle you to additional compensation. Your sole remedy is a time extension granted according to this section.

Within five (5) Calendar Days from the beginning of the delay, notify the Engineer in writing of the cause of the delay. The Engineer will establish the facts and the extent of the delay and extend the time to complete the Work if, in his judgment, the findings of fact justify an extension. The Engineer's findings are final.

5-2.2 Order of Work Requirements. When required by the Specifications or the Plans, follow the sequence of operations and restrictions required.

- Interior improvements must be constructed during after-hours of City's operations.
- Exterior Improvements shall be constructed during normal business hours.

Perform the Work to conform to the construction staging in the Specifications. Subject to the Engineer's approval, non-conflicting work in subsequent stages may proceed concurrently with work in preceding stages if you maintain satisfactory progress in the preceding stages. The Engineer's approval of any modifications you request to the order of work or staging of the work are not grounds for a Change Order request or a time extension request. If you deviate from the specified order of work or the staging plans, you do so at your own risk and assume all time impacts and cost associated with them.

5-3 SUSPENSION OF THE WORK.

5-3.1 General. The Engineer may suspend the Work in whole or in part for any time the Engineer finds in the City's best interest, for its convenience or due to your failure to carry out orders given or to perform any provision of the Contract. Immediately comply with the Engineer's written order to suspend the Work in completely or in part and resume work only when the Engineer orders or approves in writing.

The City is not liable for these suspensions except as specified in 5-6.3., which provides that delays resulting from suspensions the Engineer ordered because you failed to carry out orders given or to perform any provision of the Contract are not delays for which the City is responsible.

If the Engineer orders a work suspension as provided here, do at your expense, all the work necessary to provide a safe, smooth unobstructed passageway through construction for the public during the suspension period as provided in 6-9 and as stated in the Specifications. If you do not perform the work specified above, the City will perform the work and, if the suspension is due to your failure to carry out orders given or to perform any provision of the Contract, the City will deduct the cost from monies due or that become due to you.

If the Engineer orders a work suspension according to this section, the days on which the suspension order is in effect are Working Days if those days are Working Ways within the meaning of the definition in 5-7.2.

Suspending the Work does not relieve you of your responsibilities in the Contract Documents.

You may resume the Work after you provide:

- A. A revised schedule showing each task yet to be accomplished and the timeline to perform each one to completion
- B. Work force projections attached to each task listed by workweek

- C. Cost expenditures attached to each task summarized by workweek
- D. Lien releases from each subcontractor, supplier and vendor from whom you requested materials, equipment or any other service acknowledging the payments received
- E. An Income and Expense Statement projecting how you will finance the rest of the project

5-3.2 Archaeological and Paleontological Discoveries. If you discover items of archaeological or paleontological interest, immediately stop excavation in the area and do not continue until ordered to do so by the Engineer. When resumed, excavation operations within the area of discovery are at the Engineer's direction.

Discoveries that you may encounter include, but are not be limited to, dwelling sites, stone implements or other artifacts, animal bones, human bones and fossils.

You are entitled to an extension of time and compensation in accordance with 5-6.

5-4 TERMINATION OF THE CONTRACT FOR DEFAULT.

5-4.1 General. If, before the Work is accepted, you:

- A. Become insolvent, assign your assets for the benefit of your creditors, are unable to pay your debts as they become due or are otherwise financially unable to complete the Work;
- B. Abandon the work by failing to report to the work site and diligently performing the Work to completion;
- C. Disregard written instructions from the Engineer or materially violate provisions of the Contract Documents;
- D. Fail to perform the Work according to the schedule approved by the Engineer;
- E. Disregard laws or regulations of any public body having jurisdiction or commit continuous or repeated violation of regulatory or statutory safety requirements, the City will consider you in default of the Contract.

Transmit notices and other written communications regarding default between you, the City and the surety according to 1-13.

In the event the City terminates this Contract for grounds later determined not to justify a termination for breach, the termination becomes a Termination of the Contract for Convenience pursuant to 5-5.

5-4.2 Notice to Cure. The City will issue a written notice to cure the default to you and to your surety. Begin satisfactory corrective actions within five (5) Working Days after receiving the notice.

5-4.3 Notice of Termination for Default. If you fail to begin satisfactory corrective action within five (5) Working Days after receiving the notice to cure or to diligently continue satisfactory and timely correction of the default, the City will find you in default of the Contract and the City:

- A. Will terminate your right to perform under the Contract by issuing a written notice of termination for default to you and to your Surety;
- B. May use any materials, equipment, tools or other facilities you furnished to secure and maintain the Work site; and
- C. May furnish labor, equipment and materials the City finds necessary to secure and maintain the Work site.

The provisions of this subsection are in addition to all other legal rights and remedies available to the City.

5-4.4 Surety Responsibilities. When receiving written notice of termination for default, the surety must immediately assume all your rights, obligations and liabilities under the Contract. If the surety fails to protect and maintain the Work site, the City may do so and may recover all costs incurred. The Surety must notify the City that it is assuming all your rights, obligations and liabilities under the Contract. The City will pay all money that is due, or would become due to you, to the Surety as the Work progresses, subject to the terms of the Contract.

Within 15 Working Days of receiving the written notice of termination for default, the Surety must give the City a written plan detailing the course of action it intends to take to remedy the default. The City will review the plan and notify the Surety if the plan is satisfactory. If the Surety does not submit a satisfactory plan, or if the Surety fails to maintain progress according to the plan the City accepts, the City may exclude, with 48 hours written notice, the Surety from the premises, take possession of all material and equipment and complete the Work in any way the City decides is appropriate. The City will charge its cost to complete the Work against the Surety and may deduct any monies due, or which would become due, the Surety. If the amounts due under the Contract are insufficient for completion, the Surety must pay the City, within 30 days after the City submits an invoice, all costs in excess of the remaining Contract Price.

5-4.5 Payment. The City will pay the Surety to complete the Work according to 8-3 minus the value of damages your acts caused the City.

5-5 TERMINATION OF THE CONTRACT FOR CONVENIENCE. The City reserves the right to terminate the Contract at any time if the Engineer determines termination is in the City's best interest.

If the City elects to terminate the Contract, the following govern the termination and your total compensation:

- A. The Engineer will issue a signed written notice, terminating the Contract. Upon termination, you are relieved of further responsibility for damage to the Work excluding materials as specified in 3-1.2, 6-14 of the Specifications and, except as otherwise directed in writing by the Engineer, you must:
1. Stop all work under the Contract except any you are specifically directed to complete;
 2. Perform work the Engineer believes necessary to secure the project for termination;
 3. Remove equipment and plant from the Work site;
 4. Protect materials from damage;
 5. Notify all subcontractors and suppliers that the Contract is terminated and that their contracts or orders are not to be performed unless the Engineer authorizes it in writing.
 6. Provide the Engineer an inventory of all materials previously produced, purchased or ordered from suppliers for use in the Work and not yet used in the Work including their storage location and other information the Engineer may request.
 7. Dispose of materials not yet used in the Work as directed by the Engineer. Provide the City good title to all materials the City purchased, including materials partially paid for as provided in 8-3.2, and with bills of sale or other documents of title for those materials.
 8. Subject to the Engineer's prior written approval, settle all outstanding liabilities and all claims arising out of subcontracts or orders for terminated materials. To the extent directed by the Engineer, assign all your right, title and interest under subcontracts or orders for materials terminated to the City.
 9. Give the Engineer documentation you are required to furnish under the Contract including, on projects where federal funds are involved, all documentation required under the federal

requirements in the Contract.

10. Take other actions directed by the Engineer.

- B. Accepting the Contract as specified here does not relieve you of responsibility for damage to materials. You remain responsible for damage to materials after the Notice of Termination is issued, except as follows:
1. Your responsibility for damage to materials partially paid for as provided in 9-3.2 and for materials the City furnished for but not used in the Work ends when the Engineer certifies that those materials are stored in the manner and at the locations the Engineer has directed.
 2. Your responsibility for damage to materials the City purchased after receiving the Notice of Termination ends when the City has taken title and delivery of the materials.

When the Engineer determines that you have completed the Work under the Contract you were directed to complete before termination and any other work that may have been ordered to secure the project for termination, the Engineer will formally accept the Contract and immediately after the Engineer's acceptance, you are not required to perform any further work.

- C. Terminating the Contract does not relieve the surety of its obligation for any just claims arising out of the work performed.
- D. Where the City terminates the Contract for its convenience and not your fault, the Engineer determines your total compensation based on the following:
1. The reasonable cost to you, without profit, for all work performed under the Contract including mobilization, demobilization and work done to secure the project for termination. In determining reasonable cost, the Engineer will deduct the cost of materials you keep, amounts realized by the sale of materials and for other appropriate credits against the cost of the Work. When, in the Engineer's opinion, the cost of a Contract item of work is excessively high due to costs incurred to remedy or replace defective or rejected work, the reasonable cost allowed will be the estimated reasonable cost of performing the work in compliance with the requirements of the Plans and Specifications. The City will not allow the excessive actual cost.
 2. Your reasonable allowance for profit on the cost of work performed as determined under part 1, above, if you establish to the Engineer's satisfaction that it is reasonably probable you would have made a profit had the Contract been completed. In no event will the profit allowed exceed 4 percent of the cost.
 3. Your reasonable cost to handle material returned to the vendor, delivered to the City or otherwise disposed of as directed by the Engineer.
 4. A reasonable allowance for your administrative costs to determine the amount payable due to termination of the Contract.

All your records and your subcontractors' records necessary to determine compensation in conformance with provisions in 5-5, must be open to inspection or audit by City representatives at all times after the Notice of Termination is issued and for a period of 3 years following.

After the City accepts the Work, the Engineer may make payments on interim estimates before issuing the final estimate in conformance with the provisions in 8-3.2 and 8-4 when, in the Engineer's opinion, the amount paid, together with all amounts previously paid or allowed, do not result in total compensation exceeding that to which you are entitled. All payments, including payment on the final estimate, are subject to deductions for prior payments and amounts, if any, retained under the provisions of the Contract.

PHYSICALLY INCLUDE THE SPECIFICATIONS IN 5-5 IN ALL SUBCONTRACTS.

5-6 DELAYS AND EXTENSIONS OF TIME.

5-6.1 General. Delays caused by unforeseen events beyond your control entitle you to an extension of the Contract Time as provided here, but you are not entitled to damages or additional payment due to these delays except as specified in 5-6.3. Unforeseen events may include war, government regulations, labor disputes, strikes, fires, floods, adverse weather or elements necessitating work stoppage, inability to obtain materials, labor or equipment, required extra work or other specific events as further described in the Specifications.

The City will not grant you an extension of time for a delay because you are not able to obtain materials unless you give the Engineer documentary proof. Provide the proof in a timely manner in accordance with the sequence of your operations and the approved construction schedule.

If events beyond your control cause delays other than those mentioned above, the Engineer may decide an extension of time is in the best interests of the City. You are not entitled to damages or additional payment due to these delays except as otherwise specified in 5-6.3.

If the cause of delays beyond your control is due solely to the City's action or inaction, the delays will entitle you to an extension of time per 5-6.2.

5-6.2 Extension of Time. The City may, from time to time, extend the time fixed to complete the Work. All applications for time extensions must be in writing filed with the City before the original time fixed in the Contract expires or as previously extended.

The City may extend the time after the time originally fixed in the Contract expires or as subsequently extended, and the extension granted begins on the expiration date. No time extension releases the sureties on any bond required under the Contract or affects forfeitures due to delay.

The City will not grant time extensions for delays not on the critical path.

5-6.3 Payment for Delays. Pursuant to § 7102 of the Public Contract Code, the City will compensate you for damages incurred due to delays for which the City is responsible. The Engineer will determine the actual costs. The City is not liable for damages you could have avoided by any reasonable means such as judicious handling of forces, equipment, or plant. The Engineer will determine damages you could have avoided.

5-6.4 Written Notice and Report. If you want payment for a delay specified in 5-6.3 or an extension of time, file a written request and report of cause with the Engineer within ten (10) Calendar Days after the delay begins. Make your request for payment or extension at least ten (10) Calendar Days before the specified completion date. If you fail to file these items within the times specified the City may refuse your request.

5-7 TIME OF COMPLETION.

5-7.1 General. Complete the Work within the time specified in the Contract or the Specifications. Complete each portion of the Work within the time specified in the Contract or the Specifications for that portion. Unless otherwise specified in the Contract or the Specifications, express the Contract Time of completion in Working Days.

5-7.2 Working Day. A Working Day is any day within the period between the date the Contract Time as specified in 5-1 starts and the date the Engineer accepts the Work, other than:

- A. Saturday
- B. Sunday
- C. Any day the City designates a holiday

- D. Any other day designated as a holiday in a Master Labor Agreement you enter into or that was entered into on your behalf as an eligible member of a contractor association,
- E. Any day you are prevented for cause from working at the beginning of the workday as specified in 5-6.1, or
- F. Any day you are prevented for cause from working during the first 5 hours with at least 60 percent of the normal work force as specified in 5-6.1.

5-7.3 Contract Time Accounting. The Engineer will make a daily determination of each Working Day to be charged against the Contract Time and will discuss this determination with you. You will get a Weekly Statement of Working Days showing the allowable number of Working Days of Contract time, as adjusted, at the beginning of the reporting period. The statement will also indicate the number of Working Days charged during the reporting period and the number of Contract Working Days remaining. If you do not agree with the statement, file a written protest within fifteen (15) days after receiving it that sets out the facts of the protest. Otherwise, the City assumes you accept the statement as is.

5-8 COMPLETION, ACCEPTANCE, AND WARRANTY.

5-8.1 Completion. When you consider the Work, or a designated portion of the Work, if specified in the Contract Documents is complete, submit a written request for inspection to the Engineer. By submitting the request, you certify that:

- A. You have reviewed the Contract Documents.
- B. Work is complete according to Contract Documents and is ready for inspection.
- C. Equipment and systems have been tested, adjusted/balanced and are fully operational.

Submit your request a minimum of five (5) Working Days before the requested inspection date. Allow sufficient time during the Contract to complete inspections and make any corrections. Each day beyond the time prescribed to complete the Contract is subject to assessment of liquidated damages according to 5-9.

If the City Representative's inspection finds the Work is not complete, the City Representative will notify you in a writing that lists the deficiencies observed. Remedy the listed deficiencies immediately and send a request for final inspection. If you do not remedy the deficiencies, the City may order, at its option, reinspection(s) of the work to identify any additional deficiencies. The City's costs for the reinspection(s) are subject to 5-8.2.

When the City confirms the Work is complete and closeout submittals as referred to in 5-8.3 provided, the City Representative will notify you of the date of completion on the Weekly Statement of Working Days.

5-8.2 Acceptance. Acceptance occurs after all the requirements in the Contract Documents are met. If, in the Engineer's judgment, you have fully performed the Contract, the Engineer will recommend accepting your performance of the Contract.

5-8.3 Warranty. Warrant the Work against defective materials and workmanship for a period of one (1) year. The warranty period starts on the date the Engineer determines the Work is complete.

The warranty period for specific items covered under manufacturers' or suppliers' warranties begins on the date the items are put into service at the direction of or as approved by the Engineer in writing.

Assign to the City in writing, warranties, express or implied, from subcontractors, manufacturers or suppliers of any tier, for the materials furnished and work performed. Deliver the warranties to the Engineer before your performance of the Contract is accepted.

After notice from the Engineer and within the time specified in the notice, replace or repair defective materials and workmanship to the Engineer's satisfaction. If you do not make the replacement or repairs within the time specified, the City may perform the work at your expense. If you do not reimburse the City for its actual costs, your surety is liable for them.

5-8.4 Reinspections. If completion of the Work requires reinspection(s) by the City because you did not make corrections after the initial inspection, the City may deduct the cost for reinspection(s) from your final payment. If the Engineer observes more than ten (10) deficiencies, reinspection is required.

Inspections initiated at the City's request are not subject to provisions of this Section.

5-8.5 Closeout Submittals.

Submit:

- A. Project Record Documents clearly marked with all changes to the Plans within thirty (30) Calendar Days of Final Acceptance
- B. Operation and Maintenance Data
- C. Warranties and Bonds
- D. Spare Parts and Maintenance Materials, as specified
- E. Evidence of Payment and Release of Stop Payment Notices
- F. Other data and materials the Contract Documents may require

5-9 LIQUIDATED DAMAGES. Liquidated damages are as specified in the Contract.

5-10 USE OF IMPROVEMENT DURING CONSTRUCTION. The City reserves the right to take over and use all or part of any completed facility or appurtenance. It will notify you in writing before taking this action. The City's action relieves you of responsibility for injury or damage to the completed portions of the improvement resulting from the public's use or from the action of the elements or from any other cause except your operations or negligence. You need not re-clean portions of the improvement before field acceptance except for cleanup necessary by your operations. Nothing in this subsection relieves you from full responsibility for correcting defective work or materials.

If the City takes over and uses all or part of a completed facility or appurtenance, it assumes responsibility and liability for injury to persons or property caused by the use, except for any injury to persons or property caused by any willful or negligent act or omission by you, your subcontractor, their officers, employees, or agents.

ARTICLE 6 – RESPONSIBILITIES OF THE CONTRACTOR

6-1 CONTRACTOR'S EQUIPMENT AND FACILITIES.

6-1.1 General. Furnish and maintain in good condition all equipment and facilities required to properly execute and inspect the Work. Provide and maintain enclosed toilets for employees doing the Work to use. Regularly pump out and maintain these accommodations in a neat and sanitary condition.

Render your machinery and equipment inoperable at all times except during construction. You are responsible for construction means, controls, techniques, sequences, procedures and construction safety.

6-1.1.1 Equipment. Stencil or stamp at a clearly visible location on each piece of equipment except hand tools, an identifying number and:

- A. On compacting equipment, its make, model number and empty gross weight that is either the manufacturer's rated weight or the scale weight.
- B. On meters and on the load-receiving element and indicators of each scale, the make, model, serial number and manufacturer's rated capacity.

Give the Engineer a list describing each piece of equipment and its identifying number before beginning the Work.

Upon request, submit manufacturer's information that designates portable vehicle scale capacities.

Your measuring devices must be tested and approved under California Test 109 in the City's presence or by any of the following:

- A. County Sealer of Weights and Measures
- B. Certified Scale Service City
- C. Division of Measurement Standards Official

6.2 LABOR.

6-2.1 General. You, your agents and employees are bound by and must comply with applicable provisions of the Labor Code and federal, state, and local labor laws.

Immediately remove and do not reemploy on the Work, any worker the Engineer finds to be incompetent, intemperate, troublesome, disorderly or otherwise objectionable or who fails to perform the Work properly and acceptably.

6-2.2 Prevailing Wages. Pursuant to §1773.2 of the Labor Code, the current prevailing rate of per diem wages at the time of the Bid as determined by the Director of the Department of Industrial Relations are on file at the office of the Engineer. Post a copy of these rates at the Work site. Pursuant to §1774 of the Labor Code, you and any subcontractors must pay not less than the specified prevailing rates of wages to workers employed under the Contract. On a federally funded Contract, you and any subcontractors must not pay less than the higher of these rates or the rates determined by the United States Department of Labor. Pursuant to §1775 of the Labor Code, you and any subcontractors forfeit, as a penalty to the City, the prescribed amounts per calendar day, or portion of it, for each worker paid less than the prevailing wage rates.

6-2.3 Payroll Records. Keep certified payroll records pursuant to §1776 of the Labor Code. You and all your subcontractors must give the City and the Labor Commissioner (Division of Labor Standards Enforcement), certified payroll records every Friday for the preceding week until the Notice of Completion is filed and recorded.

6-2.4 Hours of Labor. Pursuant to §1810 of the Labor Code, eight (8) hours of labor constitute a legal day's work. Pursuant to §1813 of the Labor Code, you and any subcontractors forfeit, as a penalty to the City, the prescribed amount per calendar day for each worker required or permitted to work more than eight (8) hours in any one (1) Calendar Day and forty (40) hours in any one (1) Calendar Week without being compensated according to §1815.

6-3 INSURANCE.

6-3.1 General. Provide and maintain insurance naming the City as an insured or additional insured with you regardless of any inconsistent statement in the policy or any subsequent endorsement whether liability is attributable to you or to the City. The insurance provisions do not limit your indemnity obligations contained in the Contract. Except as specified in 5-10, save, keep and hold harmless the City its officers, employees and agents from all damages, costs or expenses in law or in equity that arise to a person or property because of or while performing the Work, or which may be caused by a negligent act or omission by you, your employees, or a subcontractor. The City is not liable for any accident, loss or damage to the Work before completion except as specified in 5-10.

With the exception of workers' compensation insurance, an insurance company authorized by the Insurance Commissioner to transact business in the State of California must issue the policies you provide. The insurance company must have a policyholder rating of "A" or higher and a financial class VIII or higher as established by A.M. Best or a higher rating established by Moody's or Standard & Poor's.

Notify the City according to 1-13 within five (5) days of the date your insurance carrier notifies you of any changes to or cancellation of the policy.

All policies must be endorsed to state that coverage may not be suspended, voided, cancelled, reduced in coverage or in limits, non-renewed or materially changed for any reason, without thirty (30) days prior written notice from the insurer to the City by U.S. mail or by personal delivery, except for nonpayment of premiums, in which case ten (10) days prior notice must be provided.

In lieu of this endorsement, either:

- A. Submit a letter, signed by the insurance agent or broker, certifying that he/she will notify the City if coverage is suspended, voided, cancelled, reduced in coverage or in limits, non-renewed or materially changed for any reason without thirty (30) days prior written notice from the insurer to the City by U.S. mail or by personal delivery, except for nonpayment of premiums, in which case ten (10) days prior notice will be provided; or
- B. Submit evidence of payment in full of the insurance premium for the life of the policy.

The City project title or description MUST be included in the "Description of Operations" box on the certificate.

Certificate Holder:

City of Irvine
c/o EXIGIS Risk Management Services
P.O. Box 4668 - ECM #35050
New York, NY 10163-4668

The City's insurance certificate tracking services provider, EXIGIS, LLC, will send you an email with instructions for submitting insurance certificates and endorsements.

The cost to defend any claims against the City must not erode or take away from the specified limits of liability.

There will be no separate payment for insurance; include it in the Contract Price.

Without limiting your indemnification obligations, do not begin work until you obtain and maintain, at your sole cost and for the duration of this Contract, insurance coverage as provided below, against all claims for injuries against persons or damages to property that may arise from or in connection with performing the Work by you, your agents, representatives, employees and subcontractors. If you subcontract any portion of the Work in compliance with 1-3 of the Specifications, the contract between you and that subcontractor must require the subcontractor to maintain the same insurance policies you are required to maintain pursuant to 6-3.

Insurance policies are not compliant if they include any limiting provision or endorsement you have not submitted for approval in accordance with 6-3.

Your insurance must be "occurrence" rather than "claims made" insurance except for Professional Liability insurance, which may be for claims made and must apply separately to each insured against whom claim is made or suit is brought, except respecting the limits of the insurer's liability.

The insurance coverage required for General Liability, Automobile Liability and Contractor's Pollution Liability must contain the following provisions or provide the following by endorsement:

Name as additional insured the City of Irvine their elected officials, officers, employees, volunteers, boards and representatives shall be additional insureds with regard to liability and defense of suits or claims arising out of the performance of the Contract.

Additional Insured Endorsements shall not:

- A. Be limited to "Ongoing Operations"
- B. Exclude "Contractual Liability"
- C. Restrict coverage to your "Sole" liability
- D. Contain any other exclusion contrary to the Contract

This insurance must be primary and any other insurance, deductible or self-insurance available to the insured added by endorsement must be in excess of and not contribute to this insurance.

Immediately report all claims to your insurance carrier and acknowledge receipt within thirty (30) Calendar Days.

No officer, employee, or agent of the City, the Engineer, the City Representative or their consultants are personally responsible for any liability arising under or because of the Contract.

To the maximum extent permitted by law, hold harmless, indemnify, and defend the City of Irvine its representatives and each of its officers, employees, and agents from and against all actions, suits, claims, demands, judgments, attorney's fees, costs, damages to persons or property, losses, penalties, obligations, expenses or liabilities (here "claims" or "liabilities") that may be asserted or claimed by any person or entity arising from the willful or negligent acts, errors or omissions of you, your employees, agents, representatives or subcontractors in performing any tasks or services for or on behalf of the City, whether or not there is concurrent active or passive negligence on the part of the City and City Personnel, but excluding claims or liabilities arising from the active negligence or willful misconduct of the City or City Personnel. Additionally:

- A. Defend any action or actions filed in connection with these claims or liabilities and pay all costs and expenses including attorney's fees.

- B. Promptly pay any judgment rendered against the City or any City Personnel for these claims or liabilities.
- C. Promptly pay the City, if the City and any City Personnel is made a party to an action or proceeding for damages or other claims arising out of or in connection with your negligent performance or failure to perform your work or activities, all costs and expenses the City and City Personnel incurred in the action and reasonable attorney's fees and expert witness fees. The City may retain money due to you under the Contract as the City considers necessary until disposition of the actions or claims.

You must declare and the City must approve any deductibles or self-insured retentions before the City executes this Contract. Before beginning work, give the City, according to 6-3, written confirmation of the deductible for each insurance coverage required by this Contract or of no deductible.

6-3.2 General Liability Insurance. The policy must insure the City, its officers, employees and agents acting within the scope of their duties on the Work against any claims arising out of or in connection with the Work except as specified in 5-10. This policy must provide coverage for on-going and completed operations. The insurance certificate submitted to the City must state that your insurance is primary and that any other insurance held by the City is non-contributory.

General Liability, including premises, operations and mobile equipment, products and completed operations, broad form property damage including completed operations, explosion, collapse and underground hazards, contractual liability, personal injury, and independent contractors' liability: with a minimum limit of **Two Million Dollars (\$2,000,000)** for each occurrence (combined single limit for bodily injury and property damage). A minimum limit of **Two Million Dollars (\$2,000,000)** aggregate for products-completed operations and a minimum limit of **Four Million Dollars (\$4,000,000)** general aggregate. This general aggregate limit must apply separately to your work under this Contract.

Procure and submit evidence of insurance for Products-Completed Operations in accordance with 6-3 for at least three (3) years from the time all Work under this Contract is completed.

The policy or policies must be endorsed to provide that the insurer waives all rights of subrogation against the City and its respective elected officials, officers, employees, agents and representatives for losses paid under the terms of the policy or policies and which arise from work performed by the named insured for the City.

6-3.3 Workers' Compensation Insurance. Pursuant to §1860 and §3700 of the Labor Code, obtain, pay for and maintain in full force for the duration of the Contract, workers' compensation insurance. The insurance company must have a policy rating equal to or better than that of the California State Compensation Insurance Fund. The City, its officers, employees and agents, are not responsible for any claims in law or in equity occasioned by your failure to comply with this requirement.

Pursuant to §1860 and §1861 of the Labor Code, submit the following certification to the Engineer before the City executes the Contract:

"I am aware of the provisions of § 3700 of the Labor code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code and I will comply with those provisions before I begin performing the work of this Contract."

The policy or policies must be endorsed to provide that the insurer waives all rights of subrogation against the City and its respective elected officials, officers, employees, agents and representatives for losses paid under the term of the policy or policies and which arise from work performed by the named insured for the City.

Workers' Compensation and Employer's Liability Insurance: Workers' Compensation Insurance in an amount required by the laws of the State of California (Statutory Limits). Employer's Liability Insurance with a minimum limit of **One Million Dollars (\$1,000,000)** per occurrence.

If you have no employees requiring you to provide Workers' Compensation Insurance, certify that to City in writing before the City executes this Contract. The City and City Personnel are not responsible for any claims in law or in equity occasioned by your failure to comply with this section or with the provisions of law relating to Workers' Compensation.

If you are providing on-site staffing services, the Workers' Compensation insurance must include an Alternative Employers Endorsement.

6-3.4 Auto Liability Insurance. Give the City a certificate of insurance showing coverage of at least **One Million Dollars (\$1,000,000)** for bodily injury and property damage or a combined single limit. This policy shall be "any auto" or for "all autos either owned, hired, or non-owned."

6-3.5 Contractor's Pollution Liability. Contractor's Pollution Liability Insurance covering all your operations including onsite and offsite coverage for bodily injury, property damage, defense costs, cleanup costs and coverage for offsite disposal facilities with minimum limits of **One Million Dollars (\$1,000,000)** for each loss and **Two Million Dollars (\$2,000,000)** in the aggregate.

Before beginning work, give the City the names and locations of disposal facilities for the City's approval.

6-3.8 Self-Insurance. Self-insurance is subject to the City's review and prior approval. If you use any form of self-insurance, submit:

- A. Notice of election to self-insure
- B. Coverage(s) for which self-insurance applies
- C. The amount of self-insurance
- D. Declaration under penalty of perjury by a certified public accountant certifying the accountant has applied Generally Accepted Accounting Principles guidelines and you have sufficient funds or other resources to cover the self-insurance amounts
- E. Copy of your commercial general liability policy and excess policy, including the declarations page, all amendments, riders, endorsements and other modifications in effect when the Contract is executed, for amounts not covered by self-insurance.

Self-insurance programs and self-insured retentions in insurance policies are subject to a separate annual review and approval by the City of evidence of your financial capacity to respond. Additionally, self-insurance programs or retentions must provide the City with at least the same protection from liability and defense of suits as that first-dollar insurance would provide.

6-4 PERMITS AND LICENSES. Except as provided in the Specifications, obtain all permits and licenses, pay all charges and fees and give all notices necessary and incidental to the lawful performance of the Work. Get these permits and licenses in enough time to prevent Work delays. Keep a copy of all permits at the Site. Give the City copies of permits and licenses one (1) Working Day after obtaining them. Comply with all rules and regulations included in the permits. If you do not conform to these rules and regulations, the City may perform work necessary to conform to them and deduct the cost of the work from any monies due or to become due to you.

You and all subcontractors must obtain within five (5) Calendar Days of executing the Contract, a current City of Irvine Business License and maintain it for the term of the Contract.

If the City obtained permits, licenses or other authorizations applicable to the Work, obtain a rider, pay all fees and comply with the provisions of those permits, licenses and other authorizations.

6-5 CONTRACTOR'S REPRESENTATIVE. Before starting the Work, designate in writing a representative with complete authority to act for you. You may designate an alternate representative as well. This authorized representative must be present at the Work site at all times while Work is in progress. When Work is not in progress and during periods when Work is suspended, make arrangements acceptable to the Engineer for any emergency work that may be required. The City regards any order or communication given to this representative as given to you. A joint venture must designate only one representative and alternate. In the absence of you or your representative, the Engineer may give instructions or directions to the superintendent or person in charge of the specific work to which the order applies. This order must be complied with promptly and referred to you or to your representative.

Whenever you or your authorized representative is absent on any particular part of the Work where direction is necessary, the City Representative will give the direction to the superintendent or supervisor in charge of the particular work who must obey the orders given.

The City reserves the right to approve your Superintendent. Once approved, the Superintendent must remain on the project for the duration of the project so long as he is in your employ.

To communicate with the City, your representative, superintendent or person in charge of specific work must speak, read and write the English language.

6-6 COOPERATION AND COLLATERAL WORK. Determine the nature and extent of any simultaneous, collateral and essential work by others. The City, its workers and contractors and others have the right to operate within or adjacent to the Work during its performance.

The City, you and the workers of contractors, and others must coordinate operations and cooperate to minimize interference.

Your bid must include all costs involved to coordinate your work with others. You are not entitled to additional compensation from the City for damages resulting from such simultaneous, collateral and essential work. If necessary to avoid or minimize this damage or delay, redeploy your work force to other parts of the Work.

Nothing in the Contract grants you exclusive occupancy of the project site. Determine to your own satisfaction the scope of the project and the nature of any other contracts the City awarded or may award in constructing the project, so you perform this Contract in light of these other constraints, if any.

Do not hinder or delay any other contractor working on or adjacent to the project. If performing any project contract is likely to interfere with the simultaneous performance of another contract or contracts, the Engineer will decide which contractor must cease work temporarily and which contractor must continue or whether work under the contracts can be coordinated so that the contractors may proceed simultaneously. On all questions concerning conflicting interests of contractors performing related work, the Engineer's decision is binding on the contractors concerned. The City, the Engineer, the City Representative and their officers, employees and agents are not responsible for damages you suffer or extra costs you incur that result directly or indirectly from performing or attempting to perform any other contract or contracts on the project or from a decision or omission of the Engineer regarding the order of precedence in performing the contracts.

If, because of your negligent acts, any other contractor or subcontractor suffers loss or damage on the Work, settle with the other contractor or subcontractor by agreement or arbitration if the other contractor or

subcontractor is agreeable. If the other contractor or subcontractor asserts any claim against the City, the Engineer, the City Representative or their consultants because of damage allegedly sustained, the City will notify you. To the maximum extent permitted by law, all your obligations in 6-3.2 apply to the asserted claims or liabilities against the City, the Engineer, the City Representative and each of their officers, employees and agents.

6-6.1 Coordination. Work by other contractors, utility companies and City forces will be underway adjacent to or within the limits of this project during the Work.

Coordinate your operations with the operations of other contractors that may affect adjacent projects including, but not limited to, those identified in this section.

6-7 WORK SITE MAINTENANCE.

6-7.1 General. Throughout all phases of construction, including suspension of the Work, until acceptance per 5-8, keep the Work site clean and free of rubbish and debris. Store Work site rubbish and debris in roll-off, enclosed containers before disposal; do not stockpile it.

Provide a self-loading, motorized street sweeper equipped with a functioning water spray system to clean all paved areas within the Work site and all paved haul routes at least once each Working Day.

Ensure there are no spills along haul routes. Remove any spills immediately and clean the area.

If you do not keep the Work site free of rubbish and debris, the Engineer may suspend the Work per 5-3 until you correct the condition.

Section 6-7 includes specifications for performing Work site maintenance including spill prevention and control, material management, waste management, water pollution control and non-storm water management.

Comply with City of Irvine Resolution No. 07-18, which establishes requirements for recycling and diverting construction and demolition waste.

Implement effective handling, storage, use and disposal practices to control material pollution and manage waste and non-storm water at the Work site before they enter storm drain systems and receiving waters.

Linear sediment barriers must comply with 6-7.6.2.

6-7.1.1 Construction Cleaning.

- A. Initiate and maintain a daily program to prevent debris accumulation on-site and along access roads and haul routes. Keep areas under your control free of waste materials, debris, weeds 6" high and rubbish. Keep the site clean and orderly.
- B. Provide suitable covered containers for debris and rubbish. Dispose of accumulated extraneous materials, prohibit overloading trucks to prevent spills on access and haul routes and inspect haul routes daily to enforce these requirements.
- C. Supply self-loading, motorized street sweepers equipped with a functioning water spray system as part of your daily program.
- D. Schedule, at a minimum, weekly debris collection and disposal. Provide additional collections and disposals whenever the weekly schedule does not prevent accumulation.

Remove debris from closed or remote spaces before closing the space, control cleaning to minimize dust and other particulates and immediately remove clay and earth on the paved surface of the roadway. Remove by hand scraping, washing, sweeping and other method(s) that will leave a clean, non-skid surface without impairing, injuring or loosening the surface.

Remove waste materials, debris, vegetation, other rubbish and non-recyclable materials as the Contract Documents require and dispose of them off-site in an approved disposal site or recycling center.

Unless otherwise specified, dispose of all concrete, asphalt, aggregate or sand base material, cement block, trees, shrubs, bushes and all other recyclable material generated during cleaning, demolition, clearing and grubbing or other phases of the Work at appropriate recycling centers. Remove reinforcing steel, wood or other harmful materials as required by the recycling center accepting the recycled materials. Supply proof of disposal at a recycling center that includes verification of tonnage by certified weigh masters tickets. If weigh masters tickets are not feasible, you and the City Representative must estimate the tonnage before disposing of it at the recycling centers.

Known recycling centers:

Ewles Materials
16081 Construction Circle West
Irvine

Use water to control dust for the life of the Contract as required by either job conditions or the City Representative. Do not use chemical agents without the City's prior written consent. You are solely responsible for safety problems, accidents or any other complications or claims arising from inadequate dust control.

The City will not make a separate payment for work performed or material used to control dust resulting from your performance of the Work or by public traffic either in or outside the right of way. Include full compensation for dust control in the price paid for the various items of work involved.

The City will not make a separate payment for any work performed or material used to clean the project. Include full compensation for cleaning in the price paid for the various items of work involved.

6-7.1.2 Final Cleaning. Clean the Work site before inspection when the Work is complete, using materials that are not hazardous to health or property and that will not damage surfaces. Remove debris from and otherwise clean exposed-to-view surfaces, remove temporary protection and labels not required to remain, clean finishes of foreign substances and remove waste, debris and surplus materials from site. Clean grounds, remove stains, spills and foreign substances from paved areas and sweep them clean. Clean other exterior surfaces and, where applicable:

- A. Clean transparent and glossy materials to a polished condition; remove foreign substances. Polish reflective surfaces to a clear shine.
- B. Vacuum carpeted and similar soft surfaces.
- C. Clean resilient and hard surface floors.
- D. Clean equipment surfaces; remove excess lubrication.
- E. Clean plumbing fixtures to a sanitary condition.
- F. Clean permanent filters of ventilating equipment and replace disposable filters of units operated during construction; clean ducts, blowers and coils when operating units without filters during construction.
- G. Clean light fixtures and lamps.
- H. Remove waste, foreign matter and debris from roofs, gutters, areaways and drainage systems.

6-7.2 Air Pollution Control. Do not release smoke, dust, equipment exhaust or other air contaminants into the air in quantities that violate any federal, state or local regulations. Abate dust nuisance by

cleaning, sweeping and spraying with water or other means if necessary. Using water must conform to 6-7.6.

6-7.3 Noise Control. Control noise generated by your operations as specified in the City Municipal Code, Division 8, Chapter 2 (https://www.municode.com/library/ca/irvine/codes/code_of_ordinances?nodeId=TIT6PUWO_DIV8PO).

6-7.4 Storage of Equipment and Materials.

6-7.4.1 General. Remove materials and equipment from the Work site as soon as they are no longer needed. Before the Engineer's inspection for acceptance, clear the Work site of equipment, unused materials and rubbish to present a clean and neat appearance.

Remove excess excavated material from the Work site immediately.

Remove forms and form lumber from the Work site as soon as possible after stripping.

6-7.4.2 Storage in Public Streets. Do not store construction materials and equipment in streets, roads or highways.

Do not store excavated material, except that used as backfill in the adjacent trench, in public streets unless the Engineer specifies or approves. Remove all excess material from the Work site immediately after placing the backfill.

6-7.4.3 Material Management.

6-7.4.3.1 General. Minimize or eliminate discharging material into the air, storm drain systems and receiving waters while receiving, using, or storing the following materials:

- A. Hazardous chemicals including acids, lime, glues, adhesives, paints, solvents and curing compounds
- B. Soil stabilizers and binders
- C. Fertilizers
- D. Detergents
- E. Plaster
- F. Petroleum materials, including fuel, oil, and grease
- G. Asphalt and concrete components
- H. Pesticides and herbicides

Your employees trained in emergency spill cleanup procedures must be present when hazardous materials or chemicals are unloaded.

Where possible, use less hazardous materials.

The following activities must be performed at least 100 feet from concentrated storm water flows, drainage courses and inlets within the floodplain and at least 50 feet if outside the floodplain unless otherwise authorized:

- A. Stockpiling materials
- B. Storing pile-driving equipment and liquid waste containers
- C. Washing vehicles and equipment in outside areas
- D. Fueling and maintaining vehicles and equipment

6-7.4.3.2 Material Storage. If you store materials:

- A. Store liquids, petroleum materials and substances listed in 40 CFR 110, 117, and 302, in secondary containment facilities specified by USDOT for storing hazardous materials.

- B. Ensure that secondary containment facilities are impervious to the materials stored there for a minimum contact time of 72 hours.
- C. Cover and adequately ventilate secondary containment facilities during nonworking days and when rain is forecasted.
- D. Keep secondary containment facilities free of accumulated rainwater or spills. After rain or in the event of spills or leaks, collect the accumulated liquid and place it in drums within 24 hours. Handle the liquid as hazardous waste according to subsection 6-7 of the General Conditions.
- E. Store incompatible materials like chlorine and ammonia, in different secondary containment facilities.
- F. Store materials in their original containers with the original material labels maintained in legible condition. Immediately replace damaged or illegible labels.
- G. Ensure that secondary containment facilities can contain precipitation from a 24-hour-long, 25-year storm, plus 10 percent of the aggregate volume of all containers or the entire volume of the largest container within the facility, whichever is greater.
- H. Store bagged or boxed material on pallets. Protect bagged or boxed material from wind and rain during nonworking days and whenever rain is forecasted.
- I. Provide enough separation between stored containers to allow for spill cleanup or emergency response access. Storage areas must be kept clean, well-organized and equipped with cleanup supplies appropriate for the materials stored.
- J. Repair or replace perimeter controls, containment structures, covers and liners when necessary. Inspect storage areas before and after rain and at least weekly during other times.

6-7.4.3.3 Stockpile Management. Minimize stockpiling materials at the job site.

Implement water pollution control practices within 72 hours of stockpiling material or before a forecasted storm event, whichever occurs first. If using stockpiles, do not allow soil, sediment or other debris to enter storm drains, open drains and watercourses.

Active and inactive soil stockpiles must be:

- A. Covered with soil stabilizing material or a temporary cover
- B. Surrounded with a linear sediment barrier

Stockpiles of asphalt concrete and Portland cement concrete rubble, hot mixed asphalt and aggregate base must be:

- A. Covered with a temporary cover
- B. Surrounded with a linear sediment barrier

Stockpiles of pressure-treated wood must be:

- A. Placed on pallets
- B. Covered with impermeable material

Stockpiles of cold mix asphalt concrete must be:

- A. Placed on an impervious surface

- B. Covered with an impermeable material
- C. Protected from storm water run-on and runoff

Control wind erosion year round.

Repair or replace linear sediment barriers and covers as needed to keep them functioning properly. When sediment accumulates to 1/3 of the linear sediment barrier height, remove the accumulated sediment.

6-7.5 Sanitary Sewers.

6-7.5.1 General. Do not interrupt the flow of sewage. If you disrupt the operation of existing sanitary sewer facilities or if disruption is necessary to perform the Work, bypass the sewage flow around the Work. Do not transport sewage in closed conduits; dispose of it in a sanitary sewer system. Do not cover sewage with backfill or allow it to flow in trenches.

Whenever the Plans or Specifications require sewage bypass and pumping or you elect to perform it, submit, per 1-6, a Working Drawing conforming to 6-7.5.2, detailing your proposed sewage bypass and pumping plan.

6-7.5.2 Sewage Bypass and Pumping Plan. The plan must indicate the locations and capacities of all pumps, sumps, suction and discharge lines. Equipment and piping must be of a size to handle the peak flow of the section of sewer line bypassed and pumped. Equipment and piping must conform to 6-9 and to the Plans. When bypass piping crosses areas subject to traffic loads, construct the piping in adequately covered trenches protected from traffic damage. If the Engineer approves, you may use lay-flat hose or aluminum piping with an adequate casing and traffic plates. Bypass pump suction and discharge lines that extend into manholes must be rigid hose or hard pipe. Do not allow lay-flat hose to extend into manholes. Provide a backup bypass pumping system in case of malfunction. The backup bypass system must provide 100 percent standby capability and be in place and ready for immediate use. Each standby pump must be a complete unit with its own suction and discharge piping. In addition to the backup system, furnish and operate vacuum trucks when the Plans or Specifications require them.

6-7.5.3 Spill Prevention and Emergency Response Plan. Prepare and submit per 1-6, a spill prevention and emergency response plan that addresses using measures to prevent sewage spills, procedures for spill control and containment, notifications, emergency response, cleanup and spill and damage reporting.

The plan must account for all storm drain systems and watercourses within the vicinity of the Work that a sewage spill could affect. Identify catch basins that could receive spilled sewage. Unless otherwise specified, seal these catch basins before operating the bypass and pumping system. Remove all material used to seal the catch basins when the bypass and pumping system operations are complete.

Contain any sewage spill, prevent any sewage from reaching a watercourse, recover and legally dispose of spilled sewage, pay any fines or penalties related to the sewage spill imposed on the City and you by jurisdictional regulatory agencies and any other expenses or liabilities related to the sewage spill.

6-7.6 Water Pollution Control.

6-7.6.1 General. Conform to all applicable local, state and federal regulations and laws pertaining to water pollution control. Conduct and schedule your operations and follow and implement best management practices (BMPs) to prevent water pollution and conform to the following requirements:

- A. Do not discharge sediments into a storm drain system or receiving waters.
- B. Contain sediments generated on the Work site using appropriate BMPs.

- C. Do not allow wind or runoff to discharge construction-related materials, waste, spill or residue from the Work site into streets, drainage facilities, receiving waters or adjacent properties.
- D. Contain non-storm water runoff from equipment, vehicle washing or any other activity within the Work site using appropriate BMPs.
- E. Prevent erosion by covering, planting or otherwise protecting erosion susceptible slopes in a way that prevents Work site discharge.

6-7.6.2 Best Management Practices (BMPs). Implement and maintain BMPs relevant to the Work, and as required by the Plans or Specifications.

For the duration of the Contract, install, construct, inspect, maintain, remove and dispose of BMPs for wind erosion control, tracking control, erosion and sediment control, non-storm water control and waste management and materials pollution control. Unless the Engineer directs otherwise, implement and maintain BMPs during any temporary Work suspension.

6-7.6.3 Storm Water Pollution Prevention Plan (SWPPP). When specified in the Special Conditions or required by a jurisdictional regulatory agency, prepare and submit per 1-6, a SWPPP that conforms to requirements in the Specifications and of the jurisdictional regulatory agency. The City will file the Notice of Intent.

6-7.6.4 Payment. Unless otherwise specified, include payment to implement and maintain BMPs in the various items of work; no additional compensation is allowed.

6-8 PROTECTION AND RESTORATION OF EXISTING IMPROVEMENTS. Repair or replace at your expense, material shown on the Plans or designated in the Specifications to be salvaged or used in reconstructed work that your operations have damaged or destroyed.

Protect public and private property adjacent to the Work and exercise due caution to avoid damaging it.

Repair or replace all existing improvements within the right of way not designated for removal (e.g., curbs, sidewalks, driveways, fences, walls, signs, utility installations, pavement, structures, etc.), which are damaged or removed because of your operations. When you must remove a portion of a sprinkler system within the right of way, cap the remaining lines.

Repairs and replacements must be at least equal to existing improvements and must match them in finish and dimension.

Protect trees, lawns and shrubbery left in place from damage or injury. If damaged or removed due to your operations, restore or replace them in as close to the original condition and location as is reasonably possible. Reseed and cover lawns with suitable mulch.

Give reasonable notice to occupants or owners of adjacent property to allow them to salvage or relocate plants, trees, fences, sprinklers and other improvements within the right of way that are designated for removal and would be destroyed because of the Work.

Include all your costs to protect, remove and restore existing improvements in the various items of work; no additional compensation is allowed.

6-8.1 Preservation of Property. Exercise care to avoid injuring existing improvements or facilities, utility facilities, adjacent property and trees and shrubbery left in place.

Repair all damage you cause to existing improvements to the Engineer's satisfaction. Where you must repair sidewalks, curbs or gutters make the repairs by removing and replacing the damaged section back to the nearest scoring lines.

Protect from injury, trees and shrubbery left in place and pole lines, fences, signs, survey markers and monuments, buildings and structures, conduits, pipelines under or above ground, sewer and waterlines, all highway or street facilities and any other improvements of facilities within or adjacent to the Work, and provide and install safeguards to protect these objects from damage. If you damage objects that are part of the work performed by your operation, replace or restore them at your expense to a condition as good as when you entered the Work or as the Plans and Specifications require.

You are not relieved of your responsibility under this article just because a pipe or other underground facility is not on the Plans. It is your responsibility to discover underground improvement or facilities that your operations may damage.

In addition to any legal requirements, shore up, brace, underpin and protect as necessary all foundations and other parts of existing structures including structures adjacent to and adjoining the Work site which are in any way affected by excavations or other operations connected with the Work.

Give notice to any adjacent or adjoining landowner or other party before beginning the Work whenever notice is required either from the City or from you.

6-8.2 Video Recording and Photographing Pre-existing Conditions. Video record and photograph pre-existing conditions at the project site before any construction activities including but not limited to:

- A. Property markers
- B. Right of way and easement conditions
- C. Utility markings and USA markings
- D. Existing property damages
- E. Survey conditions
- F. Pavement conditions, markings, and striping
- G. Adjacent property conditions
- H. Sidewalk, curb, and gutter conditions
- I. Safety conditions
- J. Unusual conditions or equipment
- K. Interior and exterior surfaces
- L. Equipment condition (HVAC, electrical, fire, etc.)
- M. Existing landscape conditions, including vegetation and irrigation, along the project limit.

Submit your recordings/photographs on CD, DVD or USB media to the Engineer no later than five (5) Working Days after the Notice to Proceed is issued.

Include payment for video recording and photographing services in the various items of work; no additional compensation is allowed.

6-9 SAFETY

6-9.1 Work Site Safety.

6-9.1.1 General. Provide safety measures necessary to protect the public and workers within or near the Work site. Ensure your operations do not create safety hazards.

Provide safety equipment, material and assistance to City Representatives so they may inspect all phases of the Work.

When removing asbestos, implement the requirements of the CCR Title 8, Div. 1, Chapter 4, Subchapter 4 and Subchapter 7.

6-9.1.2 Work Site Safety Official. Designate in writing a “Project Safety Official” who is at the Work at all times and who is thoroughly familiar with your Injury and Illness Prevention Program (IIPP) and Code of Safe Practices. The Project Safety Official must be available at all times to abate potential safety hazards and must be authorized to and responsible for shutting down an unsafe operation if necessary.

Failure to provide the required Work Site Safety Official is grounds for the City to stop all Work and operations at no cost to the City until you comply.

6-9.1.3 Emergencies. Unusual conditions may arise on the Work that require immediate and unusual provisions to protect the public from danger or loss or damage to life and property due directly or indirectly to the Work. It is your responsibility to provide this protection.

Take steps to protect the public from danger or damage, or loss of life or property, which would result if your work interrupts or contaminates or causes the public water supply, irrigation or other public service to fail or your partly completed work fails.

When the Engineer determines an emergency exists that you could have prevented but did not and your construction may damage the public or utilities or adjacent structures or property as a result, the Engineer may take immediate steps to protect public or private, personal or property interests, or to prevent the loss of human life by having material furnished and work done that the City Representative believes is necessary.

You bear the cost of the labor, material and repair costs determined necessary. If you do not pay them when presented with bills, certified by the City Representative, the City will pay them and deduct that amount from any amounts due, or which may become due to you. The City's failure to take precautionary measures does not relieve you of your full responsibility for public safety.

The foregoing is in addition to and not a limitation of any other rights or remedies available to the City.

6-9.2 Safety Orders.

6-9.2.1 General. Have copies or suitable extracts of Construction Safety Orders and General Industry Safety Orders issued by the State Division of Industrial Safety at the Work site.

Give the Engineer, as a condition of obtaining City issued permits and before excavating, a permit from the Division of Occupational Safety and Health pursuant to Chapter 6 beginning with § 6500 of Part 1 of Division 5 of the Labor Code and a detailed plan showing the design of shoring, bracing, sloping or other provisions to protect workers from caving ground while excavating any trench(es) five (5) or more feet deep. A registered civil or structural engineer must prepare the plan. As a part of the plan, include a notice stating that the registered civil or structural engineer certifies that the plan complies with the CAL/OSHA Construction Safety Orders. Give a copy of the plan and the permit to the Engineer.

In accordance with generally accepted construction practices, you are solely and completely responsible for job site conditions, including the safety of all persons and property while performing the Work and you must comply with all local, county, state and federal laws, rules, regulations and orders relating to safety of the public and workers.

Hold harmless, indemnify and defend the City, the Engineer, City Representatives and each of their officers, employees and agents from civil or criminal penalties that result from your failure to comply with

applicable safety laws, rules, regulations and orders. To the maximum extent permitted by law, your obligations in 6-3.2 apply in the event of a failure to comply with applicable safety laws, rules, regulations or orders.

The duty, if any, of the City Representative to review construction or to inspect your performance does not include review or inspection of the adequacy of your safety measures in, on or near the construction site.

6-9.2.2 Shoring Plan. Before excavating any trench 5 feet or more in depth, submit according to 1-6, a detailed Working Drawing (shoring plan) showing shoring design, bracing, sloping, or other provisions used for the workers' protection. If the shoring plan varies from shoring system standards, the shoring plan must be prepared by a California registered Structural or Civil Engineer. The shoring plan must accommodate existing underground utilities. Do not start excavation until the Engineer accepts the shoring plan and you have a permit from the State Division of Industrial Safety. Give the Engineer a copy of this permit according to 1-6. If you do not submit a shoring plan or do not comply with an accepted shoring plan you must suspend work at the affected location(s). The suspended work will not support a claim for Extra Work and you will not receive additional compensation or Contract Time.

6-9.2.3 Payment. Include payment for shoring in the Bid item provided.

Payment for complying with the provisions of safety orders and all other laws, ordinances and regulations is considered included in the various items of work and no additional compensation will be allowed.

6-9.3 Confined Spaces.

6-9.3.1 Confined Space Entry Program (CSEP). Implement, administer and maintain a CSEP in accordance with CCR, Title 8, § 5156, 5157 and 5158.

Before starting the Work, prepare and submit a CSEP according to 1-6. The CSEP must address all potential physical and environmental hazards and contain procedures to ensure safe entry into confined spaces for reasons including:

- A. Training personnel
- B. Purging and cleaning the space of materials and residue
- C. Potential isolation and control of energy and material inflow
- D. Controlled access to the space
- E. Atmospheric testing of the space
- F. Ventilating the space
- G. Special hazards consideration
- H. Personal protective equipment
- I. Rescue plan provisions

The submittal must include the names of your personnel, including each subcontractor's personnel assigned to the Work that will have CSEP responsibilities, their CSEP training and their specific assignment and responsibility for carrying out the CSEP.

6-9.3.2 Permit-Required Confined Spaces. Entry into permit-required confined spaces as defined in CCR, Title 8, § 5157, may be required as part of the Work. Consider manholes, tanks, vaults, pipelines, excavations, or other enclosed or partially enclosed spaces as permit-required confined spaces until the pre-entry procedures prove otherwise. Implement a permit-required CSEP before doing any work in a permit-required confined space. Make a copy of the permit available for your and the Engineer's review at the Work site at all times.

6-9.3.3 Payment. Include payment for the CSEP in the various items of work; no additional compensation is allowed.

6-9.4 Security and Protective Devices.

6-9.4.1 General. Security and protective devices consist of fencing, steel plates or other devices specified to protect open excavations.

6-9.4.2 Security Fencing. Completely fence open excavations. Security fencing must remain in place unless workers are present and construction is in progress then you must provide equivalent security.

6-9.4.3 Steel Plate Covers. Provide steel plate covers necessary to protect against accidental entry into openings, trenches and excavations.

Protect transverse or longitudinal cuts, voids, trenches, holes and excavations in the right of way that are not completed in one (1) Working Day with adequately designed barricades and structural steel plates (plates) that support legal vehicle loads to maintain unobstructed traffic flow.

Secure in advance the Engineer's approval before using any bridging on the Work.

Adequately shore trenches to support bridging and traffic loads.

Design plates for HS 20-44 truck loading according to the Caltrans Bridge Design Specifications Manual.

Refer to Table 6-9.4.3(A), below, for minimum plate thicknesses:

Table 6-9.4.3(A) - Trench Width/Minimum Plate Thickness

| Trench Width | Minimum Plate Thickness |
|--------------|-------------------------|
| 10" | 1/2" |
| 1'-11" | 3/4" |
| 2'-7" | 7/8" |
| 3'-5" | 1" |
| 5'-3" | 1 1/4" |

For spans greater than 5' 3", give the Engineer a structural design prepared by a California Registered Civil Engineer.

The surface of the plates must be skid-resistant with a nominal Coefficient Of Friction (COF) of 0.35 as determined by California Test Method 342.

Plates must extend at least 12" beyond trench edges and must provide complete coverage that protects any person, bicycle, motorcycle or motor vehicle from injury or damage from separations or gaps because the plates move. Install and secure plates to prevent movement or displacement using adjustable cleats, shims, welding or other devices in a way that minimizes noise. Install plates as follows:

Install plates by milling the pavement to a depth equal to the thickness of the plate and to a width and length equal to those of the plate.

If the Engineer agrees, you may submit an alternate installation method that accords with 1-6, "Submittals," for the Engineer's acceptance.

Maintain the plates and shoring or any other approved device used to secure the plates. If notified by the City Representative, City Code Enforcement or the Irvine Police Department that a plate needs repair because of plate movement, noise, anchors and asphalt ramps, immediately mobilize necessary personnel and equipment. If you do not respond to the emergency request within 2 hours, the City will perform the repairs and invoice you the actual cost including overhead, or \$500 per incident, whichever is greater.

When you remove plates, repair any damage to the pavement with a fine graded asphalt concrete mix or slurry seal to the Engineer's satisfaction.

Include payment for steel plate covers in the various items of work; no additional compensation is allowed.

6-10 PATENT FEES AND ROYALTIES. Assume all costs to use patented materials, equipment, devices or processes on or in the Work and hold harmless, indemnify and defend the City, the Engineer, the City Representative and each of their officers, employees and agents from all claims, suits or actions resulting from your use of patented materials, equipment devices or processes. To the maximum extent permitted by law, your obligations in 6-3.2 apply in the case of these claims, suits or actions.

6-11 LAWS TO OBSERVE. Stay informed about and report to the City Representative, all existing and future state and national laws and county and municipal ordinances and regulations that affect persons doing the Work, materials used in the Work or performing the Work and of all orders and decrees of bodies or tribunals with jurisdiction or authority over the Plans, Specifications or Contract.

Comply with and require your agents, employees and subcontractors to comply with all existing and future laws, ordinances, regulations, orders and decrees even if not in the Specifications or on the Plans. Hold harmless, indemnify and defend the City, the Engineer, the City Representative and each of their officers, employees and agents against any claim or liability arising from or based on violation of any law, ordinance, regulation, order or decree whether by itself, its employees, its agents or its subcontractors. To the extent permitted by law, all your obligations in 6-3.2 apply in the case of any claim or liability.

Comply with all applicable federal laws, including those set forth in "Federal Requirements" of the Special Conditions.

6-12 ANTITRUST CLAIMS. Pursuant to §7103.5 of the Public Contract Code:

"In entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the contractor or subcontractor offers and agrees to assign to the awarding body all rights, title, and interest in and to all causes of action it may have under § 4 of the Clayton Act (15 U.S.C. Sec 15) or Cartwright Act (Chapter 2 [commencing with § 16700] of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works contract or subcontract. The assignment shall be made and become effective at the time the awarding body tenders final payment to the contractor, without further acknowledgment by the parties."

6-12.1 Property Rights in Materials. Once you attach materials to the Work or the soil or after the City pays you for materials delivered to the Work site or stored under the City's control, you have no property right in them.

6-12.2 Warranty of Title. Do not purchase any materials, supplies or equipment for the Work subject to a chattel mortgage or under a conditional sale contract or other agreement by which the seller or supplier retains an interest in all or any part. Warrant clear title to all materials, supplies and equipment installed and incorporated in the Work. When all Work is complete, deliver the premises and all improvements and appurtenances you construct or place, to the City free of claims, liens, encumbrances or charges. Confirm that neither you nor any persons, firm or corporation furnishing material or labor for work the Contract covers has a lien on the premises or any improvement or appurtenance. This does not prevent you from installing metering devices or other equipment of utility companies or of municipalities who commonly retain title to the device or equipment. Nothing in this article defeats or impairs the right of persons furnishing materials or labor under your bond for their protection, or any right under any law permitting persons to look to funds due you from the City.

Insert the provisions of 6-12.2 in all subcontracts and material contracts and give notice of its provision to all persons furnishing materials for the work when there is no formal contract for the materials.

6-13 CONTRACTOR'S RESPONSIBILITY FOR THE WORK. Until the Work is accepted, you are responsible for care of the Work and of the materials used there including materials for which you have received partial payment or materials furnished by the City. You bear the risk of injury, loss or damage to any part of the Work from the elements or from any other cause arising from either the execution or the non-execution of the Work.

At your expense, rebuild, repair, and make good all injuries, losses or damages to the Work or the material from any cause before it is complete and accepted. Where necessary to protect the work or materials from damage, provide at your expense suitable drainage and build temporary structures necessary to protect the work or materials from damage. Suspension of the Work does not relieve you of your responsibility for the work and materials specified here. If ordered by the City Representative, properly store at your expense, materials partially paid for or furnished by the City. Your storage is on the City's behalf and the City is at all times entitled to possess the materials. Promptly return them to the Work site when requested. Do not dispose of any of the stored materials except on the City's written authorization.

In an emergency affecting the safety of life or property, including adjoining property, act at your discretion as though instructed by the City, to prevent the threatened loss or injury.

6-14 PROJECT RECORD DOCUMENTS.

6-14.1 Maintenance of Documents and Samples. Maintain one record copy of:

- A. Contract Drawings
- B. Specifications
- C. Addenda
- D. Change Orders and Other Contract Modifications
- E. Reviewed Shop Drawings, Product Data, and Samples
- F. Field Test Records
- G. Construction Schedules
- H. Manufacturer's Certificates

Maintain documents in clean, dry, legible condition; do not use them for construction purposes.

Keep Record Documents and samples accessible to the City Representative for inspection. The Engineer will not approve applications for partial payment if Record Documents are not current. The City Representative must verify this before submitting each Application for Payment.

6-14.2 Recording. Record changes to the Plans and discoveries of buried objects at the Work on Record Documents with red ballpoint pen. Label each Document "PROJECT RECORD" in large printed letters and record information concurrently with construction progress. Do not conceal any work until the required information is recorded and legibly mark each item on the Contract Drawings and Shop Drawings to record actual construction, including:

- A. Measured depths of elements in relation to a fixed datum point
- B. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements
- C. Measured locations of internal utilities and appurtenances concealed in construction, referenced to

visible and accessible construction features

- D. Field changes of dimension and detail
- E. Changes made by Contract modifications
- F. Details not on original Contract Drawings
- G. Previously unknown buried objects

Legibly mark each item to record actual construction, including:

- A. Manufacturer, trade name, and catalog number of each product installed, particularly optional and substitute items
- B. Changes made by Addenda or modifications

Maintain other documents per the requirements of individual Specifications sections.

6-14.3 Submittals. At Contract closeout, deliver Record Documents and samples per 6-14.1. The Engineer will not approve your request for final payment until you deliver all Record Documents.

Send submittals with a cover letter signed by you or by your authorized representative listing the date, project title and number, and number and title of each Record Document.

6-15 AUDIT AND ACCESS TO RECORDS.

- A. Maintain all books, records, documents and other evidence directly pertinent to performing the Work according to generally accepted accounting principles and practices consistently applied. Maintain all financial information and data you used to prepare or support any cost submission, including your original bid, required for this Contract or any Change Order, claim or other request for equitable adjustment and a copy of the cost summary or information submitted to the City. The Engineer must have access, with twenty four hours advance written notice, at all times during normal business hours, to all books, records, documents, financial information and other evidence to inspect, audit, and copy. Provide, at no cost to the City, proper facilities for this.
- B. Apply the provisions of this section applicable to all Change Orders, claims or other requests for equitable adjustment affecting the Contract Time or price. Physically include the provisions of this section in all subcontracts and material supply contracts or purchase orders at any tier. The provisions of this section apply to all subcontracts at any tier in excess of \$10,000 and to all Change Orders, claims and other requests for equitable adjustment related to project performance.
- C. Audits conducted under this section must accord with generally accepted auditing standards and the established procedures and guidelines of the reviewing or auditing agency.
- D. Release all information discovered and reports prepared after accessing records under the provisions of this section to the City and to other affected agencies.
- E. Maintain and make available during performance of the Work and for three years after final payment or until final settlement of all disputes, claims or litigation, whichever occurs later, records under the provisions of this Section. In addition, maintain and make available, records relevant to the Contract, to any Change Order, dispute, litigation, settlement of any claim arising out of performance, or cost or items to which an audit exception has been taken until final payment or final resolution of the dispute, litigation, claim or exception, whichever occurs later.
- F. This section applies to all financial records and all Change Orders and claims. It also applies to all records pertaining to all contracts, Change Orders and Contract Amendments:
 - 1. To the extent the records pertain directly to Contract performance;

2. Where there is any indication that fraud, gross abuse or corruption may be involved;
 3. Where the Contract is terminated for default or convenience.
- G. Access to records is not limited to the required retention periods. The City's Authorized Representatives must have access to records at any reasonable time for as long as the records are maintained.

6-16 DAILY RECORDS.

- A. Prepare and maintain Daily Inspection Records to document progress of the Work daily. Daily records must include a daily accounting of all labor and all equipment on the site for you and for all subcontractors at any tier. Daily records must clearly distinguish work performed under a Change Order, base scope work and disputed work.
- B. If any labor or equipment is idled solely because of City actions or inactions, the daily records must include which laborers and equipment were idled and for how long. If specific work activities stopped solely because of City actions or inactions and you reassigned labor and equipment to other activities, the daily records must clearly document the activities stopped and where labor and equipment was redirected.
- C. Copy and give the Daily records to the City Representative at the end of every Work Day or at the beginning of the following Work Day.

ARTICLE 7 – FACILITIES FOR CITY PERSONNEL

7-1 GENERAL. Facilities provided for City personnel must be at suitable locations approved by the Engineer and must be in a lockable room, building, or trailer provided for this purpose.

Facilities must conform to the applicable codes, ordinances and regulations of the local jurisdiction, the State of California and to current practice. The interior must be paneled or suitably lined to provide a facility with a good appearance.

Before installing the field office, discuss with the City Representative location, access and related facilities. The facilities must be structurally sound, weather tight and with floors raised above ground.

At your option, portable or mobile buildings may be used. When mobile homes are used, modify them for office use. Do not use mobile homes as living quarters.

Pay fees and charges for applications, permits and building inspections.

Fill and grade the site for temporary structures to provide surface drainage. Construct the temporary field office on a proper foundation and provide utility service connections. If used, secure portable or mobile buildings. Provide steps and landings at entrance doors.

With the City Representative's approval, remove the temporary field office and its contents and services when no longer needed. Remove foundations and debris, restore the site to the original elevations and clean the area.

Provide while in use, janitorial and other maintenance services to all facilities provided. Maintenance services include supplying appropriate paper products and dispensers, trash receptacles you empty weekly or sooner, if required. Remove the emptied trash from the Work site.

Include all costs to furnish, maintain, service and remove these Work site facilities in other Bid items.

The City will not approve the first progress payment until all facilities are in place and comply fully with the Specifications.

7-2 FIELD OFFICE FACILITIES. The City Representative's office must be a separate space for the City's sole use and have a lockable entrance door and two (2) keys.

Provide interior desk and table lighting and exterior lighting at the entrance door.

The office must have a minimum floor space of 175 sqft, at least one door and a window area of not less than 22 sqft. All doors and windows must have screens.

Provide the following furniture: one plan table, one standard 5 foot long double-pedestal desk with a drawer suitable for holding files, two chairs, one drafting stool and one plan rack.

Provide electric power including a minimum of four duplex convenience outlets. Illuminate office tables and desk. Install an outdoor lighting fixture with a 300-watt bulb.

Provide heating and air conditioning of sufficient capacity at no charge to the City. Provide drinking water in the office and integral sanitary facilities directly adjoining. Sanitary facilities must include a toilet and wash basin with hot and cold running water.

Provide extended area, non-coin-operated telephone service in the office that includes an extension cord long enough to serve the plan table and the desk.

7-3 REMOVAL OF FACILITIES. Remove field offices, laboratories and bathhouse facilities at the Work site when the Work is complete. The buildings and equipment you furnish at the Work site under this subsection remain your property.

7-4 BASIS OF PAYMENT. Include all costs incurred in furnishing, maintaining, servicing and removing field offices laboratories or bathhouse facilities required at the Work site in the Bid item for furnishing them. If the Plans require the facilities and no Bid item is in the Proposal, include the costs in other Bid items. Plant owners are responsible for costs incurred with offices and laboratories at their plants.

ARTICLE 8 – MEASUREMENT AND PAYMENT

8-1 MEASUREMENT OF QUANTITIES FOR UNIT PRICE WORK.

8-1.1 General. Unless otherwise specified, the City will determine quantities of work from measurements or dimensions in horizontal planes. However, it will consider linear quantities of pipe, piling, fencing and timber as being the true length measured along the longitudinal axis.

Unless otherwise provided in the Specifications, volumetric quantities are the product of the mean area of vertical or horizontal sections and the intervening horizontal or vertical dimension. The planimeter is a precision instrument suitable for measuring all areas.

The Engineer must approve the Schedule of Values, the Construction Schedule and the Contract required submittals before making the initial progress payment.

The Engineer must receive the monthly revised Construction Progress Schedule before making a subsequent progress payment

8-1.2 Measurement Methods. Measure materials and items of work paid based on measurement, according to methods stipulated in the particular sections involved.

8-1.3 Certified Weights. For a payment based on weight, weigh using certified platform scales or, when approved by the Engineer, on a completely automated weighing and recording system. Give the Engineer duplicate licensed weighmaster's certificates showing actual net weights. The City will accept the certificates as evidence of weights delivered.

8-2 LUMP SUM WORK. The City will pay for items whose quantities are indicated "Lump Sum," "LS," or "Job," at the price indicated in the Bid. That payment constitutes full compensation for the items of work and all work appurtenant to it.

8-2.1 Detailed Schedule. Give the City a cost break-down for all Contract lump sum items. Within fifteen (15) Calendar Days after award of Contract, give the Engineer cost break-down tables to review. The Engineer will approve the cost break-down tables in writing before making any partial payment for the applicable items.

Determine the quantities required to complete the Work shown on the Plans and include the quantities and their values in the cost break-downs you give the Engineer for approval. You are responsible for the accuracy of the quantities and values in your cost break-downs.

The total of the amounts for the line items of work in each cost break-down table for each lump sum item must equal the contract lump sum price bid. Include overhead and profit in each individual line item of work you list.

The City will not adjust compensation in contract lump sum prices because of differences between quantities shown in your cost break-downs and quantities required to complete the Work as shown on the Plans and as detailed in the Specifications.

The City will use individual line item values in the approved cost break-down tables to determine partial payments during the progress of the Work and as the basis for calculating a compensation adjustment for contract lump sum items because of changes in line items of work the Engineer ordered. When the total ordered changes to line items of work increases or decreases the lump sum price bid by more than 25 percent, the compensation adjustment for the applicable lump sum item will be determined as specified for increases and decreases in the total pay quantity of an item of work in Article 2 of the General Conditions.

8-3 PAYMENT.

8-3.1 General. The quantities listed in the Proposal do not govern final payment. The City will pay you only for actual quantities of Contract items constructed according to the Contract Documents. When the Work is complete, if the actual quantities show either an increase or decrease from the quantities in the Proposal, Contract Unit Prices will prevail except as specified in 2-2.2.

The unit and lump sum prices paid are full compensation for the items of work and all appurtenant work including furnishing all materials, labor, equipment, tools and incidentals.

The City considered the cost of work items not in the "Schedule of Work and Prices" in the Bidders Proposal as included in the cost of the other work that is listed and no additional compensation is allowed.

When an item of work is designated as (F) in the "Schedule of Work and Prices," the estimated quantity for that work item is the final pay quantity unless the Engineer revises any dimensions of the item, or the item or a portion of it is eliminated. If the Engineer revises the dimensions of any portion of the item and the revisions result in an increase or decrease in the estimated quantity of that work item, the final pay quantity for the item will be revised in the amount represented by the changes in the dimensions. If a final pay item is eliminated, the estimated quantity for the item will be eliminated. If a portion of a final pay item is eliminated, the final pay quantity will be revised in the amount represented by the eliminated portion of the item of work.

Consider the estimated quantity for each item of work designated as (F) in the "Schedule of Work and Prices" as approximate only; no guarantee is made that the quantity which can be determined by computations, based on the details and dimensions shown on the Plans, will equal the estimated quantity. No allowance will be made if the quantity based on computations does not equal the estimated quantity.

In case of discrepancy between the quantity shown in the "Schedule of Work and Prices" for a final pay item and the quantity or summation of quantities for the same item shown on the Plans, payment will be based on the quantity shown in the "Schedule of Work and Prices."

The City will not pay you for materials wasted or disposed of in a manner not called for in the Contract. This includes rejected material not unloaded, material rejected after it has been placed, and material placed outside the Plan lines. The City will not compensate you for disposing of rejected or excess material.

The City will pay for work performed or materials furnished under an Assessment Act Contract as provided in particular proceedings or legislative act under which the contract was awarded. Whenever, at your request, the City performs any portion of the Work, you are responsible for the cost, which may be deducted from any amount due or becoming due from the City.

When immediate action is required to prevent injury, death, or property damage and you do not take and are not reasonably expected to take precautions which are your responsibility, the City may, after a reasonable attempt to notify you, have precautions taken and charge their cost to you, or may deduct their cost from any amount due or becoming due from the City. Do not construe the City's action or inaction under these circumstances as relieving you or your surety from liability.

Payment does not relieve you of your Contractual obligations. Do not construe payment as acceptance of any of the Work or as the transfer of ownership of any equipment or materials to the City. You retain ownership and are obligated to store any fully or partially completed work or structure for which payment has been made or to replace any materials or equipment you are required to provide under the Contract which may be damaged, lost, stolen or otherwise degraded in any way before the Work is accepted, except as specified in 6-9.

No payment affects warranty periods.

If the City receives, within the time fixed by law, a properly executed notice to stop payment because you failed to pay for labor or materials used in the Work, it will withhold all money due you for the labor or materials according to applicable laws.

Sixty (60) days after the date the City accepts the Work or as prescribed by law, the City will pay the amount deducted from the final estimate it retained except amounts required by law to be withheld by properly executed and filed notices to stop payment, or as authorized by the Contract to be retained longer.

8-3.1.1 Application for Payment. Use the City of Irvine Certified Invoice for Progress Payment Form furnished to you.

Type the required information and follow the schedule of work and bid prices in your accepted Bidder's proposal for unit price contract. Use data on the accepted Schedule of Values for lump sum work. Provide a dollar value in each column for each line item for the portion of work performed and list each authorized Change Order number and dollar amount and the adjusted Contract Price. Have an authorized officer sign the application to certify it. After getting the City Representative's concurrence on the invoice amount, submit the invoice for payment.

Under a transmittal letter, submit the original and one (1) copy of each Application for Payment as stipulated in 8-3.2. Include the submittal date, project title and number, and submit the updated Progress Schedule with the Application for verification of progress. The City will reject any incomplete payment application.

Submit data supporting any line item amounts the Engineer questions.

Provide one copy of the data with a cover letter for each copy of the data submitted and show the application number and date, and line item by number and description.

Sign each Application for Payment and certify to the City that:

- A. The data supporting the Application for Payment is accurate and the Work has progressed to the point indicated;
- B. To the best your knowledge and belief, the Work accords with the Contract Documents;
- C. You are entitled to payment in the amount certified; and
- D. You have paid all sums the City paid you to reimburse subcontractor work to the subcontractors performing the work without any retention, withholding or back charge.

8-3.2 Progress Payments.

8-3.2.1 Conditions to Progress Payments. Submit your Application for Payment to the Engineer using City of Irvine Certified Invoice for Progress Payment Form, once a month. Submit invoices within fifteen (15) days from the end of each month. This estimate must include the value of the total amount of the work you complete during the calendar month preceding that in which the estimate is made.

Without limitation to any other provisions of the Contract Documents, the following precede a proper submission and the Engineer's approval of each Application for Payment:

- A. Submit the detailed Schedule per 8-2.1;
- B. Submit the certification required in 8-3.1.1;
- C. Submit conditional releases of stop notices, if any, and bond rights upon progress payment, complying with California Civil Code § 8132, for all Work performed during the time covered by the current Application for Payment, which you, your subcontractors of every tier, and all

material suppliers to each sign, and forms of unconditional release of stop notice and bond rights upon progress payment, complying with California Civil Code § 8134, for all Work performed during the time covered by the previous Application for Payment that you, your subcontractors of every tier and all material suppliers each sign;

- D. Maintain Record Drawings as required by the Contract Documents;
- E. Submit monthly and daily reports as required by the Contract Documents;
- F. Submit scheduling information and update the Construction Schedule as required by the Contract Documents regarding preparing or updating schedule information;
- G. Submit certified payroll records as required by the Contract Documents;
- H. Comply with all requirements for submitting documents or performing conditions that, by the terms of the Contract Documents, constitute conditions to your right to receive payment for Work performed.

8-3.2.2 Payments by City. Pursuant to California Public Contract Code § 20104.50, the City will pay an undisputed, properly submitted Application for Payment within thirty (30) days after the Engineer receives it, based on 90 percent of its value determined pursuant to 8-2.1:

- A. The portion of the Work permanently installed;
- B. Plus the value of materials delivered on the ground or in storage as approved by City pursuant to 8-3.8;
- C. Less the aggregate of previous payments; and
- D. Less any other withholdings authorized by the Contract Documents.

8-3.2.3 Rejection by City. The City will return any Application for Payment it disputes or determines is improper and unsuitable for payment not more than seven (7) days after receiving it, together with a written explanation of why the payment request was rejected. The City's failure to either timely reject an Application for Payment or specify grounds for rejection does not waive of any of its rights. Correct and resubmit rejected Applications for Payment within seven (7) days after receiving them.

8-3.3 Final Payment.

8-3.3.1 Retention.

Pursuant to 8-2.1, the City will also withhold, in addition to withholding permitted by 8.37, a sum equal to 5 percent of all sums otherwise due you as progress payments from each progress payment ("Retention") and hold it until it is due as described here.

8-3.3.2 Conditions to Final Payment. Submit your Application for Final Payment using the City of Irvine Certified Invoice for Progress Payment Form, before you request a final inspection of the Work according to 5-8. Include with the Application for Final Payment the following:

- A. An affidavit that payrolls, materials and equipment bills and other project debts for which the City or the City's property or funds might be liable, have been paid or satisfied;
- B. Your certification required by 8-3.1;
- C. Surety's consent to Final Payment;
- D. A certificate evidencing that the insurance required by the Contract Documents is in force;
- E. Conditional Waiver and Release Upon Final Payment in the form required by California Civil Code § 8136, executed by you, all subcontractors of every tier and all material suppliers, covering the final payment period;

- F. Unconditional Waiver and Release Upon Progress Payment in the form required by California Civil Code § 8134, executed by you, all subcontractors of every tier and all material suppliers of each, covering the previous payment period;
- G. All Record Documents including, without limitation, complete and accurate record drawings which you kept up to date during performance of the Work;
- H. Documentation that you have inspected, tested and adjusted the performance of every system or facility of the Work to ensure that it complies with the terms of the Contract Documents;
- I. Four (4) copies of all warranties from vendors and subcontractors, operation and maintenance manuals, instructions and related agreements and equipment certifications and similar documents;
- J. Releases of rights and claims relating to patents and trademarks required by the Contract Documents; and
- K. Any other documents or information required by the Contract Documents as a condition of Final Payment or Final Completion.

8-3.3.3 Retention Release. Pursuant to Public Contract Code § 7107, within sixty (60) days after the City delivers the Notice of Completion, it will release the Final Payment, including Retention withheld, subject to the City's right to withhold 150% of any disputed amounts.

8-3.3.4 Disputed Amounts. Pursuant to California Public Contract Code § 7107, the City may deduct and withhold from the Final Payment due under 8-3.3.3, up to 150% of any disputed amounts including amounts to protect the City against any loss caused or threatened as a result of your failure to perform all obligations required as a condition of Completion and Final Payment. Alternatively, the City may elect, in its sole discretion, to accept the Work without correction or completion and adjust the Contract Price pursuant to the Contract Documents.

8-3.3.5 Acceptance of Final Payment. Accepting Final Payment constitutes a waiver of all your rights against the City to recover any loss excepting only those Claims you submitted as required by the Contract Documents before or at the time of Final Payment.

8-3.4 Miscellaneous.

8-3.4.1 Joint Payment. The City has the right, if it deems necessary in its sole discretion, to issue joint checks payable to you and to any subcontractor(s) of any tier. The joint check payees are solely responsible to allocate and disburse the joint payment funds. A payee's endorsement of the check constitutes its receipt of payee's payment. No joint check creates a contract between the City and a subcontractor of any tier, or any obligation from the City to a subcontractor or any third party rights against the City or the Engineer.

8-3.4.2 Withholding/Duty to Proceed. Paying, withholding or retaining all or part of a payment you claim is due to you does not relieve you of your obligations under the Contract Documents. Continue to perform the Work diligently regardless of the City's payment, withholding or retention of any payment. The City's good faith partial payment, withholding or retention of any disputed part of a payment, whether correctly or incorrectly asserted, is not a breach of the Contract Documents and is not grounds for an adjustment of the Contract Price or Contract Time.

8-3.4.3 No Acceptance. The City's payment or its partial or entire use of the Work does not constitute approval or acceptance of all or any portion of the Work.

8-3.4.4 Contractor Payment Warranty. Submitting an Application for Payment constitutes your warranty that:

- A. Title to Work covered by an Application for Payment passes to the City either by integration into the construction or on receipt of your payment, whichever occurs first; and
- B. Work covered by previous Applications for Payment are free and clear of liens, stop notices, claims, security interests or encumbrances you or any other person imposes.

8-3.4.5 Corrections. An inaccuracy or error in any Application for Payment does not release you from the error or from losses arising from the Work or from any obligation imposed by the Contract Documents. The City retains the right to subsequently correct any error made in any previously approved Application for Payment or progress payment issued by adjusting subsequent payments.

8-3.5 Payments By Contractor. Do not include in your Applications for Payment sums for any subcontractor's portion of the Work you do not intend to pay to that subcontractor. When you receive the City's payment, pay the subcontractor performing Work on the Project out of that payment for the portion of the Work the subcontractor is entitled to according to the terms of its contract with you and with applicable laws including, without limitation, California Public Contract Code § 7107.

Notwithstanding any City withholding pursuant to the terms of the Contract Documents, you remain responsible for promptly satisfying from your own funds, sums due all subcontractors who have performed Work included in your Application for Payment. Require each subcontractor, by appropriate agreement, to pay its subcontractors and material suppliers in a similar manner. The City is not obligated to pay or to be responsible in any way for paying a subcontractor of any tier or material supplier.

8-3.6 Payment Withheld.

8-3.6.1 Withholding by City. In addition to any other amounts the City may have the right to retain under the Contract Documents, it may withhold a sufficient amount of any payment otherwise due you as the City, in its sole discretion, determines is necessary to cover actual or threatened loss due to any of the following:

- A. Third-Party Claims. Third-party claims or stop notices filed or reasonable evidence indicating the probable filing of claims or stop notices;
- B. Defective Work. Defective Work not remedied;
- C. Nonpayment. Failure to make proper payments to your subcontractors for services, labor, materials or equipment;
- D. Inability to Complete. Reasonable doubt that the Work can be completed for the unpaid balance of the Contract Sum or within the Contract Time;
- E. Violation of Applicable Laws. Failure or failure of your subcontractors to comply with applicable laws or lawful orders of governmental authorities;
- F. Penalty. Any claim or penalty asserted against the City because you failed to comply with applicable laws or lawful orders of governmental authorities including, without limitation, labor laws;
- G. Failure to Meet Contract Time. Any damages which may accrue because you failed to meet the Construction Schedule or to perform within the Contract Time;
- H. Setoff. Any reason specified elsewhere in the Contract Documents as grounds for a withholding offset or set off or that would legally entitle the City to a set-off or recoupment;

- I. Consultant Services. Additional professional, consultant or inspection services required because you failed to comply with the Contract Documents;
- J. Liquidated Damages. Liquidated damages assessed against you;
- K. Materials. Materials the City ordered pursuant to the Contract Documents;
- L. Damages. Loss you, or a subcontractor to the City, or separate contractors, or any other person or entity under contract to the City caused;
- M. Clean Up. Clean up the City performed that is chargeable to you pursuant to the Contract Documents;
- N. Employee Benefits. Failure to pay contributions due to employee benefits funds pursuant to any applicable collective bargaining agreement or trust agreement;.
- O. Required Documents. Failure to submit on a timely basis, proper and sufficient documentation required by the Contract Documents including, without limitation, Construction Schedule updates, 'look ahead' schedules, Submittals, Schedules of Values, information on Subcontractors, Change Orders, certifications and other required reports or documentation;
- P. Other Breach. A breach of any obligation or provision of the Contract Documents.

8-3.6.2 Release of Withholding. If the City determines, in its sole discretion, that you have removed the above-mentioned grounds for withholding and have paid, credited or otherwise satisfied all losses incurred or threatened, the City will pay you the amounts withheld because of them.

8-3.6.3 Application of Withholding. The City may apply sums withheld pursuant to 8-3.6.1 to pay any loss or threatened loss the City determines, in its sole discretion, is appropriate. It may make these payments without a prior judicial determination of its actual rights regarding the loss. You agree and designate the City as your agent for this purpose and agree that these payments are payments made to you by the City under the Contract. The City is not liable to you for these payments made in good faith. The City will give you an accounting of funds paid on your behalf. Alternatively, the City, in its sole discretion, may exercise its right to adjust the Contract Price as provided in the Contract Documents.

8-3.6.4 Continuous Performance. If the City pays the undisputed portion, if any, of funds withheld in good faith, you must continue to perform the Work without interruption while any disputes or disagreements with the City are pending.

8-3.7 Substitution of Securities. At your request, the City will pay funds withheld from progress payments pursuant to the requirements of Public Contract Code § 22300, if you deposit in escrow with a bank acceptable to the City, securities eligible for the investment of state funds under Government Code § 16430, or bank or savings and loan certificates of deposit, on the following conditions:

- A. Pay the City and the Escrow Agent for the escrow deposit.
- B. The value of securities or certificates of deposit placed in escrow is at least equivalent to the retention amounts owed you pursuant to this section.
- C. You enter into an escrow agreement satisfactory to the City that includes provisions governing, among other things;
 - 1. Value of securities deposited;
 - 2. Powers of attorney or other documents required to transfer the securities deposited;
 - 3. Cash conversion to fund defaults including but not limited to, terminating your control over the

Work, stop notices legally filed, liquidated damages assessed or other amounts retained under the Contract ;

4. Decreased value of securities on deposit; and
5. Termination of escrow when the Contract is complete.

D. Obtain the surety's written consent to the agreement.

8-3.8 Delivered Materials. The City may make, at its discretion, payments for materials or equipment not incorporated into the Work but delivered on the ground at the site that you stored there or stored off-site under the City's control. The City will only consider these payments if you submit satisfactory evidence that you have title to the material or equipment, that the material or equipment will be used in the Work and that the material is satisfactorily stored, protected and insured and other procedures are in place, acceptable to the City, to protect the City's interests. To consider this payment, materials or equipment stored off-site must, in addition to the above requirements and unless otherwise specifically approved by the City in writing, be stored in a bonded warehouse, fully insured, and available to the City for inspection. The City has sole discretion to determine the amount of material and equipment stored on the site at any given time.

8-3.9 Mobilization

8-3.9.1 General. Mobilization is preliminary work and operations that include but are not limited to, those necessary to move personnel, equipment, materials and incidentals to the Work site for the Work and for all other necessary work and operations or costs incurred including bonds, insurance and financing before beginning work on Contract items.

Mobilization also includes the cost, time and labor to move necessary construction equipment to and from the job site, supervisory time on the job by your personnel to keep the site safe and all other related work required for all non-working days during construction. Secure adequate storage for equipment and materials.

Have as your agent, a competent English speaking superintendent who can read and thoroughly understand the plans, specifications, other related documents and directions from the City's Representative on-site at all times.

8-3.9.2 Measurement and Payment. Mobilization is eligible for partial payment if the Contract includes a bid item for it. Payment for mobilization is at the Lump-Sum (LS) price bid and includes obtaining and paying for all permits and business licenses as required by the City, state and other agencies. The City will waive its permit fee. Comply with the requirements specified by each license or permit. The City will not pay for mobilization until you submit a Construction Schedule that has been reviewed and accepted and is current. The City will make progress payments for this item according to the percent of the project completed and will include mobilization and administration costs for the entire contract period including the construction schedule required in these Specifications. The City will make payments based on the following:

- A. When the monthly partial payment estimate of the amount earned, not including the amount earned for mobilization, is 5 percent or more of the original contract amount, 50 percent of the contract item price for mobilization or 5 percent of the original contract amount, whichever is less, will be included in the estimate for payment.
- B. When the monthly partial payment estimate of the amount earned, not including the amount earned for mobilization, is 10 percent or more of the original contract amount, the total amount earned for mobilization is 75 percent of the mobilization contract item price or 7.5 percent of the original contract amount, whichever is less, will be included in the estimate for payment.
- C. When the monthly partial payment estimate of the amount earned, not including the amount

earned for mobilization, is 20 percent or more of the original contract amount, the total amount earned for mobilization is 95 percent of the mobilization contract item price or 9.5 percent of the original contract amount, whichever is less, will be included in the estimate for payment.

- D. When the monthly partial payment estimate of the amount earned, not including the amount earned for mobilization, is 50 percent or more of the original contract amount, the total amount earned for mobilization is 100 percent of the mobilization contract item price or 10 percent of the original contract amount, whichever is less, will be included in the estimate for payment.
- E. When all the Work is complete, the City will pay any amount bid for mobilization exceeding 10 percent of the original contract amount.

8-4 DEFECT ASSESSMENT

- A. Replace Work or portions of the Work not conforming to specified requirements.
- B. If, in the Engineer's opinion, it is not practical to remove and replace the Work, the Engineer will specify one of the following remedies:
 - 1. The defective Work may remain but the unit price will be adjusted;
 - 2. The defective Work will be partially repaired at the Engineer's instructions and the unit price will be adjusted;
- C. Individual Specification sections may modify these options or may require a specific formula or percentage price reduction.
- D. The Engineer's authority to assess the defect and make a payment adjustment is final.

8-5 PROMPT PAYMENT. In addition to requirements specified elsewhere, the following also apply: Subsection (f) of § 20104.50 of the Public Contract Code, Article 1.7 of Part 3 of Division 2. Timely progress payments; legislative intent; interest; payment requests:

- A. It is the intent of the Legislature in enacting this section to require all local governments to pay their contractors on time so that these contractors can meet their obligations. In requiring local governments to pay promptly, the Legislature finds that prompt payment of outstanding receipts is not merely a municipal affair, but is a matter of statewide concern.
- B. It is the intent of the Legislature in enacting this article to regulate public policy relating to prompt payment of local governments' outstanding receipts. The Legislature finds that all government officials, including those in local government, must set a standard of prompt payment that any business in the private sector that may contract for services should look to for guidance.
- C. Any local agency failing to make any progress payment within 30 days after receiving an undisputed and properly submitted payment request from a contractor on a construction contract must pay interest to the contractor equivalent to the legal rate in subdivision (a) of § 685.010 of the Code of Civil Procedure.
- D. Upon receiving a payment request, each local agency must comply with both of the following:
 - 1. The local agency must review each payment request as soon as possible after receipt to determine whether the payment request is proper payment request.
 - 2. The local agency must return to the contractor as soon as possible but not later than seven days after receipt, any payment request determined not to be a proper payment request. A document setting out why the payment request is not proper must accompany any request returned pursuant to this paragraph.

- E. The number of days available to a local agency to make a payment without incurring interest under this section is reduced by the number of days by which it exceeds the seven-day return requirement in paragraph (2) of subsection (c).
- F. For purposes of this article:
 - 1. A “local agency” includes, but is not limited to, a city, including a charter city, a county, a city and county and any public entity subject to this part.
 - 2. A “progress payment” includes all payments due contractors, except that portion of the final payment designated by the contract as retention.
 - 3. A payment request is properly executed if funds are available to pay it and payment is not delayed by an audit inquiry by the local agency’s financial officer.
- G. Each local agency must require that this article, or a summary of it, is included in the terms of any contract subject to this article.

8-6 CLAIMS. Any claims you submit against the City for Work covered by this Contract for \$375,000 or less is subject to the procedures specified in Public Contract Code § 20104, *et seq.*

8-6.1 Claims Submission and Documentation.

- A. You may submit a claim concerning a matter properly noticed according to the requirements of this Contract.
- B. Furnish all claim documentation as specified here no later than thirty (30) days after the event or condition causing the claim has been resolved. If you do not furnish the required claim documentation within this time, you waive your right to compensation for the claim.
- C. Furnish three (3) certified copies of the required claim documentation. The documentation must be complete when furnished. The City will evaluate your claim based on City project records and the documentation you provide.
- D. Claim documentation must conform to Generally Accepted Accounting Principles and be in the following format:
 - 1. General Introduction
 - 2. General Background Discussion
 - 3. Issues
 - 4. Index of Issues (listed numerically)
 - 5. For each issue (begin each issue on a new page)
 - a. Background
 - b. Chronology
 - c. Your position (why you believe the City is liable)
 - d. Supporting documentation of merit or entitlement
 - e. Supporting documentation of damages
 - 6. All critical path method schedules, both as-planned, monthly updates, schedule revisions, and as-built together with computer disks of all schedules related to the claim.
 - 7. Productivity Exhibits, if appropriate
 - 8. Summary of Issues and Damages
- E. City by reference, photocopy or explanation, supporting documentation relevant to each issue. Supporting documentation may include, but is not be limited to, general conditions, general requirements, technical specifications, drawings, correspondence, conference notes, shop drawings and submittals, shop drawing logs, survey books, inspection reports, delivery schedules, test reports, daily reports, subcontracts, fragmentary CPM schedules or time impact

analyses, photographs, technical reports, requests for information, field instructions and all other related records that support your claim.

- F. Cite, photocopy or explain supporting documentation of damages for each issue. Supporting documentation may include, but shall not be limited to, all documents related to preparing and submitting the bid, certified, detailed labor records including labor distribution reports, material and equipment procurement records, construction equipment ownership cost or rental records, subcontractor or vendor files and cost records, service cost records, purchase orders, invoices, project as-planned and as-built cost records, general ledger records, variance reports, accounting adjustment records and any other accounting materials that support your claim.
- G. Have each copy of the claim documentation certified by a responsible office of yours according to the requirements of the Contract Documents.
- H. If you cannot support any part of the claim and it is determined that this inability is due to the falsity of the certification or misrepresentation of fact or fraud on your part, you are liable to the City as provided under California Government Code § 12650 *et. seq.*
- I. Your claims must be accompanied by a notarized certificate containing the following language: Under the penalty of law for perjury or falsification and with specific reference to the California False Claims Act, Government code § 12650 *et. seq.*, the undersigned,

(Name) _____

(Title) _____

(Company) _____

hereby certifies that the claim for the additional compensation and time, if any, made here for the work on this Contract is a true statement of the actual costs incurred and time sought, and is fully documented and supported under the Contract between the parties.

Dated _____

Signature _____

Subscribed and sworn before me this _____ day

of _____

Notary Public

My Commissions expires _____

Failing to submit the notarized certificate is cause for denying the claim.

SECTION 01 10 00 - SUMMARY

PART 1 GENERAL

1.01 PROJECT

- A. Project Name: ADA Facility Improvements, Operations Support Facility-Building 1.
- B. Owner's Name: City of Irvine.
- C. Project Manager's Name: Eric Gruber
- D. Design Firm's Name: Ware Malcomb
- E. The Project consists of the construction of Interior accessibility improvements to the men's and women's restrooms within Building 1, exterior accessibility upgrades to the building entrances, sidewalks, access ramps, and handrails, along with various signs and striping for accessibility compliance.

1.02 CONTRACT DESCRIPTION

- A. Contract Type: A single prime contract.

1.03 DESCRIPTION OF ALTERATIONS WORK

- A. Scope of demolition and removal work is shown on Plans and Specifications.
- B. Scope of alterations work is shown on Plans.
- C. Renovate the following areas, complete including operational mechanical and electrical work and finishes:
 - 1. Public Access Restrooms
 - 2. Exterior Accessibility Areas
- D. Plumbing: Alter existing system and add new construction, keeping existing in operation.
- E. HVAC: Alter existing system and add new construction, keeping existing in operation.
- F. Electrical Power and Lighting: Alter existing system and add new construction, keeping existing in operation.

1.04 WORK BY CITY-NOT APPLICABLE

1.05 FUTURE WORK – NOT APPLICABLE

1.06 CITY OCCUPANCY

- A. City intends to continue to occupy adjacent portions of the existing building during the entire construction period.
- B. Cooperate with City to minimize conflict and to facilitate City's operations.
- C. Schedule the Work to accommodate City occupancy.
- D. Interior improvements must be constructed during after-hours of City's operations.
- E. Exterior Improvements can be constructed during normal business hours.
- F. Full Owner Occupancy: Owner will occupy site and existing building during entire construction period. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's day-to-day operations. Maintain existing exits, unless otherwise indicated.
 - 1. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and authorities having jurisdiction.
- G. Provide not less than 72 hours' notice to Owner of activities that will affect Owner's operations.

1.07 CONTRACTOR USE OF SITE AND PREMISES

- A. General: Contractor shall have limited use of premises for construction operations as indicated on Drawings by the Contract limits
- B. Use of Site: Limit use of premises to work in areas indicated. Do not disturb portions of site beyond areas in which the Work is indicated.

1. Limits: Confine construction operations to areas designated.
2. Owner Occupancy: Allow for Owner occupancy of site and use by the public.
3. Driveways and Entrances: Keep driveways and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials, unless with written approval by the City.
 - a. Schedule deliveries to minimize use of driveways and entrances.
 - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
- C. Use of Existing Building: Maintain existing building in a weather-tight condition throughout construction period. Repair damage caused by construction operations. Protect building and its occupants during construction period.
- D. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:
 1. Notify Owner not less than two days in advance of proposed utility interruptions.
 2. Do not proceed with utility interruptions without Owner's written permission.
- E. Time Restrictions:
 1. Limit conduct of the interior rehabilitation to after-hours of City's operations.

1.08 WORK SEQUENCE

- A. Construct Work in stages during the construction period:
 1. Stage 1: Interior improvements shall be performed during after-hours of City's operations.
 2. Stage 2: Exterior Improvements shall be performed during normal business hours.
- B. Coordinate construction schedule and operations with City.
- C. Coordinate construction schedule and operations with Engineer.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01 35 53 - SECURITY PROCEDURES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Security measures including formal security program, entry control, personnel identification, guard service, and miscellaneous restrictions.

1.02 RELATED REQUIREMENTS

- A. Section 01 10 00 - Summary: use of premises and occupancy.
- B. Section 01 50 00 - Temporary Facilities and Controls: Temporary lighting.

1.03 SECURITY PROGRAM

- A. Protect Work , existing premises and Owner's operations from theft, vandalism, and unauthorized entry.
- B. Initiate program at project mobilization.
- C. Initiate program in coordination with Owner's existing security system at project mobilization.
- D. Maintain program throughout construction period until Owner occupancy.
- E. Maintain program throughout construction period until Owner acceptance precludes the need for Contractor security.
- F. Maintain program throughout construction period until directed by Engineer.

1.04 ENTRY CONTROL

- A. Restrict entrance of persons and vehicles into Project site and existing facilities.
- B. Allow entrance only to authorized persons with proper identification.
- C. Maintain log of workers and visitors, make available to Owner on request.
- D. Owner will control entrance of persons and vehicles related to Owner's operations.
- E. Contractor shall control entrance of persons and vehicles related to Owner's operations.
- F. Coordinate access of Owner's personnel to site in coordination with Owner's security forces.

1.05 CONTRACTOR BACKGROUND CHECK REQUIREMENTS - (NOT APPLICABLE)

Prior to commencing services, Contractor workers are required to successfully pass a California Department of Justice Live Scan Fingerprinting background check ("Live Scan") performed by the City of Irvine Police Department. The Contractor shall be responsible for obtaining the Live Scan for its workers prior to performing work and shall bear the cost thereof. The City's Human Resources staff will coordinate the scheduling of the Live Scan. On the day of the Live Scan, the worker must obtain an application form from the City of Irvine Human Resources Division (located on the third floor of the Civic Center). Upon completion of the application form, the worker will be directed to the Police Department, where the Live Scan will be performed. The worker must possess a photo ID such as a Driver's License at the time of the Live Scan. Also at the time of the Live Scan, payment must be made to the Police Department via cash or check made payable to "The City of Irvine." The cost of the Live Scan is approximately \$51. Credit cards are not accepted. The Police Department will provide the City's Human Resources Division with the results of the Live Scan. Human Resources staff will then notify the Contractor and City Representative of the results.

1.07 RESTRICTIONS

Do not allow cameras on site or photographs taken except by written approval of Engineer.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01 40 00 - QUALITY REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Submittals.
- B. Quality assurance.
- C. References and standards.
- D. Testing and inspection agencies and services.
- E. Control of installation.
- F. Mock-ups.
- G. Tolerances.
- H. Manufacturers' field services.
- I. Defect Assessment.

1.02 RELATED REQUIREMENTS

- A. Section 00 72 00 - General Conditions.
- B. Section 00 71 00 - Definitions.
- C. Section 01 60 00 - Product Requirements: .

1.03 REFERENCE STANDARDS

- A. ASTM C1021 - Standard Practice for Laboratories Engaged in Testing of Building Sealants; 2008 (Reapproved 2014).
- B. ASTM C1077 - Standard Practice for Agencies Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Testing Agency Evaluation; 2016.
- C. ASTM C1093 - Standard Practice for Accreditation of Testing Agencies for Masonry; 2015a.
- D. ASTM D3740 - Standard Practice for Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction; 2012a.
- E. ASTM E329 - Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection; 2014a.
- F. ASTM E543 - Standard Specification for Agencies Performing Nondestructive Testing; 2015.
- G. IAS AC89 - Accreditation Criteria for Testing Laboratories; 2010.

1.04 SUBMITTALS

- A. See Section 00 72 00 – General Conditions, for submittal procedures.
- B. Design Data: Submit for Engineer's knowledge as contract administrator for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents, or for Owner's information.
- C. Test Reports: After each test/inspection, promptly submit two copies of report to Engineer and to Contractor.
 - 1. Include:
 - a. Date issued.
 - b. Project title and number.
 - c. Name of inspector.
 - d. Date and time of sampling or inspection.
 - e. Identification of product and specifications section.
 - f. Location in the Project.
 - g. Type of test/inspection.
 - h. Date of test/inspection.

- i. Results of test/inspection.
 - j. Conformance with Contract Documents.
 - k. When requested by Engineer, provide interpretation of results.
- 2. Test report submittals are for Engineer's knowledge as contract administrator for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents, or for Owner's information.
- D. Certificates: When specified in individual specification sections, submit certification by the manufacturer and Contractor or installation/application subcontractor to Engineer, in quantities specified for Product Data.
 - 1. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
 - 2. Certificates may be recent or previous test results on material or product, but must be acceptable to Engineer.
- E. Manufacturer's Instructions: When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, for the Owner's information. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.
- F. Manufacturer's Field Reports: Submit reports for Engineer's benefit as contract administrator or for Owner.
 - 1. Submit report in duplicate within 30 days of observation to Engineer for information.
 - 2. Submit for information for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents.
- G. Erection Drawings: Submit drawings for Engineer's benefit as contract administrator or for Owner.
 - 1. Submit for information for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents.
 - 2. Data indicating inappropriate or unacceptable Work may be subject to action by Engineer or Owner.

1.05 QUALITY ASSURANCE

- A. Testing Agency Qualifications:
 - 1. Prior to start of Work, submit agency name, address, and telephone number, and names of full time registered Engineer and responsible officer.
 - 2. Submit copy of report of laboratory facilities inspection made by NIST Construction Materials Reference Laboratory during most recent inspection, with memorandum of remedies of any deficiencies reported by the inspection.
 - 3. Qualification Statement: Provide documentation showing testing laboratory is accredited under IAS AC89.

1.06 REFERENCES AND STANDARDS

- A. For products and workmanship specified by reference to a document or documents not included in the Project Manual, also referred to as reference standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Conform to reference standard of date of issue current on date of Contract Documents, except where a specific date is established by applicable code.
- C. Obtain copies of standards where required by product specification sections.
- D. Maintain copy at project site during submittals, planning, and progress of the specific work, until Substantial Completion.
- E. Should specified reference standards conflict with Contract Documents, request clarification from Engineer before proceeding.

- F. Neither the contractual relationships, duties, or responsibilities of the parties in Contract nor those of Engineer shall be altered from the Contract Documents by mention or inference otherwise in any reference document.

1.07 TESTING AND INSPECTION AGENCIES AND SERVICES

- A. Owner will employ services of an independent testing agency to perform certain specified testing; payment for cost of services will be derived from allowance specified in Section 01 21 00; see Section 01 21 00 and applicable sections for description of services included in allowance.
- B. Owner will employ and pay for services of an independent testing agency to perform other specified testing.
- C. Contractor shall employ and pay for services of an independent testing agency to perform other specified testing.
- D. As indicated in individual specification sections, Owner or Contractor shall employ and pay for services of an independent testing agency to perform other specified testing.
- E. Employment of agency in no way relieves Contractor of obligation to perform Work in accordance with requirements of Contract Documents.
- F. Contractor Employed Agency:
 - 1. Testing agency: Comply with requirements of ASTM E329, ASTM E543, ASTM C1021, ASTM C1077, ASTM C1093, ASTM D3740.
 - 2. Inspection agency: Comply with requirements of ASTM D3740, ASTM E329.
 - 3. Laboratory Qualifications: Accredited by IAS according to IAS AC89.
 - 4. Laboratory: Authorized to operate in the State in which the Project is located.
 - 5. Laboratory Staff: Maintain a full time registered Engineer on staff to review services.
 - 6. Testing Equipment: Calibrated at reasonable intervals either by NIST or using an NIST established Measurement Assurance Program, under a laboratory measurement quality assurance program.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with manufacturers' instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Engineer before proceeding.
- D. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Have Work performed by persons qualified to produce required and specified quality.
- F. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.
- G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, and disfigurement.

3.02 MOCK-UPS

- A. Before installing portions of the Work where mock-ups are required, construct mock-ups in location and size indicated for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work. The purpose of mock-up is to demonstrate the proposed range of aesthetic effects and workmanship.
- B. Accepted mock-ups establish the standard of quality the Engineer will use to judge the Work.

- C. Integrated Exterior Mock-ups: construct integrated exterior mock-up as indicated on Drawings. Coordinate installation of exterior envelope materials and products as required in individual Specification Sections. Provide adequate supporting structure for mock-up materials as necessary.
- D. Room Mock-ups: Construct room mock-ups as indicated on Drawings. Coordinate installation of materials, products, and assemblies as required in Specification Sections; finish according to requirements. Provide required lighting and any supplemental lighting where required to enable Engineer to evaluate quality of the mock-up.
- E. Notify Engineer, fifteen (10) working days in advance of dates and times when mock-ups will be constructed.
- F. Provide supervisory personnel who will oversee mock-up construction. Provide workers that will be employed during the construction at Project.
- G. Tests shall be performed under provisions identified in this section and identified in the respective product specification sections.
- H. Assemble and erect specified items with specified attachment and anchorage devices, flashings, seals, and finishes.
- I. Obtain Engineer's approval of mock-ups before starting work, fabrication, or construction.
 - 1. Engineer will issue written comments within seven (7) working days of initial review and each subsequent follow up review of each mock-up.
 - 2. Make corrections as necessary until Architect's approval is issued.
- J. Accepted mock-ups shall be a comparison standard for the remaining Work.
- K. Where mock-up has been accepted by Engineer and is specified in product specification sections to be removed, protect mock-up throughout construction, remove mock-up and clear area when directed to do so by Engineer.
- L. Where possible salvage and recycle the demolished mock-up materials.

3.03 TOLERANCES

- A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply with manufacturers' tolerances. Should manufacturers' tolerances conflict with Contract Documents, request clarification from Engineer before proceeding.
- C. Adjust products to appropriate dimensions; position before securing products in place.

3.04 TESTING AND INSPECTION

- A. See individual specification sections for testing and inspection required.
- B. Testing Agency Duties:
 - 1. Test samples of mixes submitted by Contractor.
 - 2. Provide qualified personnel at site. Cooperate with Engineer and Contractor in performance of services.
 - 3. Perform specified sampling and testing of products in accordance with specified standards.
 - 4. Ascertain compliance of materials and mixes with requirements of Contract Documents.
 - 5. Promptly notify Engineer and Contractor of observed irregularities or non-conformance of Work or products.
 - 6. Perform additional tests and inspections required by Engineer.
 - 7. Attend preconstruction meetings and progress meetings.
 - 8. Submit reports of all tests/inspections specified.
- C. Limits on Testing/Inspection Agency Authority:
 - 1. Agency may not release, revoke, alter, or enlarge on requirements of Contract Documents.
 - 2. Agency may not approve or accept any portion of the Work.
 - 3. Agency may not assume any duties of Contractor.

4. Agency has no authority to stop the Work.
- D. Contractor Responsibilities:
1. Deliver to agency at designated location, adequate samples of materials proposed to be used that require testing, along with proposed mix designs.
 2. Cooperate with laboratory personnel, and provide access to the Work and to manufacturers' facilities.
 3. Provide incidental labor and facilities:
 - a. To provide access to Work to be tested/inspected.
 - b. To obtain and handle samples at the site or at source of Products to be tested/inspected.
 - c. To facilitate tests/inspections.
 - d. To provide storage and curing of test samples.
 4. Notify Engineer and laboratory 24 hours prior to expected time for operations requiring testing/inspection services.
 5. Employ services of an independent qualified testing laboratory and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
 6. Arrange with Owner's agency and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
- E. Re-testing required because of non-conformance to specified requirements shall be performed by the same agency on instructions by Engineer.
- F. Re-testing required because of non-conformance to specified requirements shall be paid for by Contractor.

3.05 MANUFACTURERS' FIELD SERVICES

- A. When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust and balance of equipment and to initiate instructions when necessary.
- B. Submit qualifications of observer to Engineer 30 days in advance of required observations.
 1. Observer subject to approval of Engineer.
 2. Observer subject to approval of Owner.
- C. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

3.06 DEFECT ASSESSMENT

- A. Replace Work or portions of the Work not conforming to specified requirements.
- B. If, in the opinion of Owner, it is not practical to remove and replace the Work, the Owner will direct an appropriate remedy or adjust payment.

END OF SECTION

SECTION 01 41 00 - REGULATORY REQUIREMENTS

PART 1 GENERAL

1.01 SUMMARY OF REFERENCE STANDARDS

- A. Regulatory requirements applicable to this project are the following:
- B. 28 CFR 35 - Nondiscrimination on the Basis of Disability in State and Local Government Services; Final Rule; Department of Justice; current edition.
- C. 28 CFR 36 - Nondiscrimination by Public Accommodations and in Commercial Facilities; Final Rule; Department of Justice; current edition.
- D. 36 CFR 1191 - Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities; Architectural Barriers Act (ABA) Accessibility Guidelines; current edition.
- E. 49 CFR 37 - Transportation Services for Individuals with Disabilities (ADA); current edition.
- F. ADA Standards - Americans with Disabilities Act (ADA) Standards for Accessible Design.
- G. FED-STD-795 - Uniform Federal Accessibility Standards (UFAS).
- H. 29 CFR 1910 - Occupational Safety and Health Standards; current edition.
- I. State of California amendments to some or all of the following.
- J. City of Irvine amendments to some or all of the following.
- K. Zoning Codes.
- L. ICC A117.1 - Accessible and Usable Buildings and Facilities.
- M. ICC (IFC) - International Fire Code.
- N. NFPA 1 - Fire Code.
- O. NFPA 101 - Life Safety Code.
- P. ICC (IBC) - International Building Code.
- Q. ICC (IRC) - International Residential Code for One- and Two-Family Dwellings.
- R. NFPA 5000 - Building Construction and Safety Code.
- S. CBC (CBC) - California Building Code.
- T. ICC (IPC) - International Plumbing Code.
- U. IAPMO (UPC) - Uniform Plumbing Code.
- V. CPC (CPC) - California Plumbing Code.
- W. ICC (IMC) - International Mechanical Code.
- X. IAPMO (UPC) - Uniform Plumbing Code.
- Y. CMC (CMC) - California Mechanical Code.
- Z. ICC (IFGC) - International Fuel Gas Code.
- AA. Fuel Gas Code.
- AB. ICC (IPSDC) - International Private Sewage Disposal Code.
- AC. Private Sewage Disposal Code.
- AD. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- AE. Elevator Code.
- AF. ICC (IECC) - International Energy Conservation Code; 2012.
- AG. Building Energy Efficiency Standards.
- AH. ICC (IPMC) - International Property Maintenance Code; 2012.
- AI. California Green Building Standards Code.

AJ. Erosion and Sedimentation Control Regulations.

1.02 RELATED REQUIREMENTS

A. Section 01 40 00 - Quality Requirements.

1.03 QUALITY ASSURANCE

A. Designer Qualifications: Where delegated engineering design is to be performed under the construction contract provide the direct supervision of a Professional Engineer experienced in design of this type of work and licensed in the State in which the Project is located.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01 45 33 - CODE-REQUIRED SPECIAL INSPECTIONS

PART 1 GENERAL

Refer to the City of Irvine – Special Inspection Manual and Contract Documents.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01 50 00 - TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Temporary utilities.
- B. Temporary telecommunications services.
- C. Temporary sanitary facilities.
- D. Temporary Controls: Barriers, enclosures, and fencing.
- E. Security requirements.
- F. Vehicular access and parking.
- G. Waste removal facilities and services.
- H. Project identification sign.
- I. Field offices.

1.02 RELATED REQUIREMENTS

- A. Section 01 35 53 - Security Procedures
- B. Section 01 51 00 - Temporary Utilities.
- C. Section 00 72 00 – General Conditions.
- D. Section 01 55 00 - Vehicular Access and Parking.

1.03 REFERENCE STANDARDS

- A. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2016.
- B. ASTM E90 - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements; 2009.

1.04 TEMPORARY UTILITIES - SEE SECTION 01 51 00

- A. Provide and pay for all electrical power, lighting, water, heating and cooling, and ventilation required for construction purposes.
- B. Existing facilities may not be used.
- C. New permanent facilities may be used.
- D. Use trigger-operated nozzles for water hoses, to avoid waste of water.

1.05 TELECOMMUNICATIONS SERVICES

- A. Provide, maintain, and pay for telecommunications services to field office at time of project mobilization, if applicable.
- B. Provide equivalent equipment and connections for Engineer's field office.
- C. Telecommunications services shall include:
 - 1. Telephone Land Lines: One line, minimum; one handset per line.
 - 2. Internet Connections: Minimum of one; DSL modem or faster.
 - 3. Project web site.

1.06 TEMPORARY SANITARY FACILITIES

- A. Provide and maintain required facilities and enclosures. Provide at time of project mobilization.
- B. Maintain daily in clean and sanitary condition.
- C. At end of construction, return facilities to same or better condition as originally found.

1.07 BARRIERS

- A. Provide barriers to prevent unauthorized entry to construction areas, to prevent access to areas that could be hazardous to workers or the public , to allow for owner's use of site and to protect existing facilities and adjacent properties from damage from construction operations and demolition.
- B. Provide barricades and covered walkways required by City for public rights-of-way and for public access to existing building.
- C. Provide protection for plants designated to remain. Replace damaged plants.
- D. Provide protection for existing flooring designated to remain.
- D. Protect non-owned vehicular traffic, stored materials, site, and structures from damage.

1.08 FENCING

- A. When applicable, provide privacy fence around construction site perimeter; equip with vehicular and pedestrian gates with locks, as per the City of Irvine Construction Site Security Requirements.

1.09 EXTERIOR ENCLOSURES

- A. Provide temporary insulated weather tight closure of exterior openings to accommodate acceptable working conditions and protection for Products, to allow for temporary heating and maintenance of required ambient temperatures identified in individual specification sections, and to prevent entry of unauthorized persons. Provide access doors with self-closing hardware and locks.
- B. Provide temporary roofing as specified.

1.10 INTERIOR ENCLOSURES

- A. Provide temporary partitions and ceilings as indicated to separate work areas from City-occupied areas, to prevent penetration of dust and moisture into City-occupied areas, and to prevent damage to existing materials and equipment.
- B. Construction: Framing and reinforced polyethylene sheet materials with closed joints and sealed edges at intersections with existing surfaces:
 - 1. Insulated per specifications.
 - 2. STC rating of 35 in accordance with ASTM E90.
 - 3. Maximum flame spread rating of 75 in accordance with ASTM E84.
- C. Paint surfaces exposed to view from City-occupied areas.

1.11 SECURITY - SEE SECTION 01 35 53

- A. Provide security and facilities to protect Work, existing facilities, and City's operations from unauthorized entry, vandalism, or theft.
- B. Coordinate with City of Irvine Construction Site Security Requirements and Security Codes.

1.12 VEHICULAR ACCESS AND PARKING - SEE SECTION 01 55 00

- A. Comply with regulations relating to use of streets and sidewalks, access to emergency facilities, and access for emergency vehicles.
- B. Coordinate access and haul routes with governing authorities and City.
- C. Provide and maintain access to fire hydrants, free of obstructions.
- D. Provide means of removing mud from vehicle wheels before entering streets.
- E. Designated existing on-site roads may be used for construction traffic.
- F. Provide temporary parking areas to accommodate construction personnel. When site space is not adequate, provide additional off-site parking.
- G. Existing parking areas may be used for construction parking, if properly authorized.
- H. Do not allow vehicle parking on existing pavement.

- I. Provide two parking spaces for Engineer use.

1.13 WASTE REMOVAL

- A. See Section 01 74 19 - Construction Waste Management and Disposal, for additional requirements.
- B. Provide waste removal facilities and services as required to maintain the site in clean and orderly condition.
- C. Provide containers with lids. Remove trash from site periodically.
- D. If materials to be recycled or re-used on the project must be stored on-site, provide suitable non-combustible containers; locate containers holding flammable material outside the structure unless otherwise approved by the authorities having jurisdiction.
- E. Open free-fall chutes are not permitted. Terminate closed chutes into appropriate containers with lids.

1.14 PROJECT SIGNS - SEE SECTION 01 58 13 (NOT APPLICABLE)

1.15 PROJECT IDENTIFICATION

- A. Erect on site at location established by Engineer.
- B. Provide project identification sign of design, construction, and location approved by Owner.
- C. No other signs are allowed without Owner permission except those required by law.

1.16 FIELD OFFICES - SEE SECTION 00 72 00

- A. Office: Weathertight, with lighting, electrical outlets, heating, cooling equipment, and equipped with sturdy furniture, drawing rack and drawing display table.
- B. Provide space for Project meetings, with table and chairs to accommodate 6 persons.
- C. Provide separate private office similarly equipped and furnished, for use of Engineer.
- D. Locate offices a minimum distance of 30 feet from existing and new structures.

1.17 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove temporary utilities, equipment, facilities, materials, prior to Date of Substantial Completion inspection.
- B. Remove underground installations to a minimum depth of 2 feet. Grade site as indicated.
- C. Clean and repair damage caused by installation or use of temporary work.
- D. Restore existing facilities used during construction to original condition.
- E. Restore new permanent facilities used during construction to specified condition.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01 51 00 - TEMPORARY UTILITIES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Temporary Utilities: Electricity, lighting, heat, ventilation, and water.

1.02 RELATED REQUIREMENTS

- A. Section 01 50 00 - Temporary Facilities and Controls:
 - 1. Temporary telecommunications services for administrative purposes.
 - 2. Temporary sanitary facilities required by law.

1.03 TEMPORARY ELECTRICITY

- A. Cost: By Contractor.
- C. Provide power service required from utility source.
- D. Connect to City's existing power service.
 - 1. Do not disrupt City's need for continuous service.
 - 2. Exercise measures to conserve energy.
 - 3. Provide separate metering and reimburse City for cost of energy used.
- E. Provide power outlets for construction operations, with branch wiring and distribution boxes located at each floor. Provide flexible power cords as required.
- F. Provide main service disconnect and over-current protection at convenient location and meter.
- G. Permanent convenience receptacles may be utilized during construction.
- H. Provide adequate distribution equipment, wiring, and outlets to provide single phase branch circuits for power and lighting.
- I. For electricity, the Contractor shall:
 - 1. Provide portable power plants and/or connection to existing system for construction needs.
 - 2. Source of existing power: Southern California Edison Company (SCE). Prior to connecting to existing system:
 - a. Obtain permit from City of Irvine, Community Development Department for installation of temporary power pole and/or system.
 - b. Arrange for required inspections and coordinate temporary meter installation with City and SCE.

1.04 TEMPORARY LIGHTING FOR CONSTRUCTION PURPOSES

- A. Provide and maintain incandescent lighting for construction operations to achieve a minimum lighting level of 2 watt/sq ft.
- B. Provide and maintain 1 watt/sq ft lighting to exterior staging and storage areas after dark for security purposes.
- C. Provide and maintain 0.25 watt/sq ft H.I.D. lighting to interior work areas after dark for security purposes.
- D. Provide branch wiring from power source to distribution boxes with lighting conductors, pigtails, and lamps as required.
- E. Maintain lighting and provide routine repairs.
- F. Permanent building lighting may be utilized during construction.

1.05 TEMPORARY HEATING

- A. Cost of Energy: By Contractor.
- B. Provide heating devices and heat as needed to maintain specified conditions for construction operations.
- C. Maintain minimum ambient temperature of 65 degrees F in areas where construction is in progress, unless indicated otherwise in specifications.

D. Existing facilities shall not be used.

1.06 TEMPORARY COOLING

A. Cost of Energy: By Contractor.

B. Provide cooling devices and cooling as needed to maintain specified conditions for construction operations.

C. Maintain maximum ambient temperature of 75 degrees F in areas where construction is in progress, unless indicated otherwise in specifications.

D. Existing facilities shall not be used.

1.07 TEMPORARY VENTILATION

A. Existing ventilation equipment may not be used.

1.08 TEMPORARY WATER SERVICE

A. Cost of Water Used: By Contractor.

B. Provide and maintain suitable quality water service for construction operations at time of project mobilization.

C. Extend branch piping with outlets located so water is available by hoses with threaded connections.

D. Water Source: Irvine Ranch Water District (IRWD)

1. Obtain meter, inspections and approvals prior to use of existing system.

2. Comply with IRWD requirements.

E. Conservation:

1. Minimize water use whenever possible.

2. Maintain watering equipment in good working order.

3. Repair leaks promptly.

1.09 TEMPORARY SANITARY FACILITIES

A. Furnish and maintain portable toilet units in a clean, operable and sanitary condition for use by construction personnel.

B. Place units in conformance with applicable laws, codes and regulations.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01 53 00 - MOLD PREVENTION MEASURES

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Administrative and procedural requirements to help prevent mold contamination in construction.

1.2 SUBMITTALS

- A. Reports: Submit reports required in this Section, including but not limited to the following:
 - 1. Sightings of existing mold.
 - 2. Moisture contents of materials.

1.3 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft. Comply with manufacturer's written instructions.
- B. Do not bring finish materials into building until building is in a conditioned state. Protect finish materials stored within building. Stage materials off the floor and cover with waterproof, breathable covering.
- C. Remove from Project site damaged materials or materials that have become wet. Do not install such materials.

1.4 PROJECT CONDITIONS

- A. Remove water found within building during construction immediately.
 - 1. Energize lift stations and sump pumps as early in Project as possible. Use temporary pumps if necessary to get water out of building and drain lines.
- B. Maintain clean project site, free from hazards, garbage, and debris.
- C. Eating, drinking, and smoking are not permitted within buildings.
- D. Flash roof penetrations immediately. Do not allow water to penetrate to floor below.
- E. Monitor humidity and temperature for conformance to installation requirements defined by material and equipment manufacturers.
- F. Check moisture content of gypsum board prior to applying finishes. Record findings.
- G. Ventilation and Humidity Control: Provide temporary ventilation required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of high humidity. Select equipment which will not have a harmful effect on completed installations or elements being installed. Coordinate ventilation requirements to produce ambient condition required and minimize energy consumption.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Floor Drains: Connect floor drains as soon as possible. Do not cover floor drains with tape or other obstructions during construction. Clean out floor drain lines to mains prior to Substantial Completion.
- B. Cavity Conditions: Clean and inspect cavity conditions prior to covering, sealing, or restricting access. Vacuum clean cavity spaces prior to covering or enclosing.

- C. Plumbing: Pressure test plumbing piping identified as insulated on Project prior to installation of insulation.
- D. Sealants: Inspect exterior sealants for cracks, damage, or deterioration. Record findings and forward to Owner's Representative.

END OF SECTION

SECTION 01 55 00 - VEHICULAR ACCESS AND PARKING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Access roads.
- B. Parking.
- C. Existing pavements and parking areas.
- D. Permanent pavements and parking facilities.
- E. Construction parking controls.
- F. Flag persons.
- G. Flares and lights.
- H. Haul routes.
- I. Traffic signs and signals.
- J. Maintenance.
- K. Removal, repair.
- L. Mud from site vehicles.

1.02 RELATED REQUIREMENTS

- A. Section 01 10 00 - Summary: access to site, work sequence, and occupancy.
- B. Section 31 22 00 - Grading: Specifications for earthwork and paving bases.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Temporary Construction: Contractor's option.
- B. Materials for Permanent Construction: As specified in product specification sections, including earthwork, paving base, and topping.

2.02 SIGNS, SIGNALS, AND DEVICES

- A. Stock Post Mounted and Wall Mounted Traffic Control and Informational Signs:
 - 1. Products:
 - a. Zumar; www.Zumar.com.
 - b. Brimar Industries, Inc.; www.safetysign.com.
 - c. Substitutions: See Section 01 60 00 - Product Requirements.
- B. Post Mounted and Wall Mounted Traffic Control and Informational Signs: Specified in Section 01 58 13 - Temporary Project Signage.
- C. Automatic Traffic Control Signals: As approved by local jurisdictions.
- D. Traffic Cones and Drums, Flares and Lights: As approved by local jurisdictions.
- E. Flag Person Equipment: As required by local jurisdictions.

PART 3 EXECUTION

3.01 PREPARATION

- A. Clear areas, provide surface and storm drainage of road, parking, area premises, and adjacent areas.

3.02 ACCESS ROADS

- A. Use of existing on-site streets and driveways for construction traffic is not permitted.
- B. Use of designated existing on-site streets and driveways for construction traffic is permitted.
- C. Tracked vehicles not allowed on paved areas.

- D. Construct new temporary all-weather access roads from public thoroughfares to serve construction area, of a width and load bearing capacity to provide unimpeded traffic for construction purposes.
- E. Construct temporary bridges and culverts to span low areas and allow unimpeded drainage.
- F. Extend and relocate as Work progress requires, provide detours as necessary for unimpeded traffic flow.
- G. Location as indicated.
- H. Location as approved by Engineer.
- I. Provide unimpeded access for emergency vehicles. Maintain 20 foot (6 m) width driveways with turning space between and around combustible materials.
- J. Provide and maintain access to fire hydrants free of obstructions.

3.03 PARKING

- A. Use of existing parking facilities by construction personnel is not permitted.
- B. Use of designated areas of existing parking facilities by construction personnel is permitted.
- C. Use of new parking facilities by construction personnel is not permitted.
- D. Use of designated areas of new parking facilities by construction personnel is permitted.
- E. Arrange for temporary parking areas to accommodate use of construction personnel.
- F. When site space is not adequate, provide additional off-site parking.
- G. Locate as indicated.
- H. Locate as approved by Engineer.

3.04 PERMANENT PAVEMENTS AND PARKING FACILITIES

- A. Prior to Substantial Completion the base for permanent roads and parking areas may be used for construction traffic.
- B. Avoid traffic loading beyond paving design capacity. Tracked vehicles not allowed.

3.05 CONSTRUCTION PARKING CONTROL

- A. Control vehicular parking to prevent interference with public traffic and parking, access by emergency vehicles, and Owner's operations.
- B. Monitor parking of construction personnel's vehicles in existing facilities. Maintain vehicular access to and through parking areas.
- C. Prevent parking on or adjacent to access roads or in non-designated areas.

3.06 FLAG PERSONS

- A. Provide trained and equipped flag persons to regulate traffic when construction operations or traffic encroach on public traffic lanes.

3.07 FLARES AND LIGHTS

- A. Use flares and lights during hours of low visibility to delineate traffic lanes and to guide traffic.

3.08 HAUL ROUTES

- A. Confine construction traffic to designated haul routes.
- B. Provide traffic control at critical areas of haul routes to regulate traffic, to minimize interference with public traffic.

3.09 TRAFFIC SIGNS AND SIGNALS

- A. At approaches to site and on site, install at crossroads, detours, parking areas, and elsewhere as needed to direct construction and affected public traffic.
- B. Install and operate automatic traffic control signals to direct and maintain orderly flow of traffic in areas under Contractor's control, and areas affected by Contractor's operations.

- C. Relocate as Work progresses, to maintain effective traffic control.

3.10 MAINTENANCE

- A. Maintain traffic and parking areas in a sound condition free of excavated material, construction equipment, Products, mud, snow, and ice.
- B. Maintain existing paved areas used for construction; promptly repair breaks, potholes, low areas, standing water, and other deficiencies, to maintain paving and drainage in original, or specified, condition.

3.11 REMOVAL, REPAIR

- A. Remove temporary roads when permanent paving is usable.
- B. Remove underground work and compacted materials to a depth of 2 feet (600 mm); fill and grade site as specified.
- C. Remove equipment and devices when no longer required.
- D. Repair damage caused by installation.
- E. Remove post settings to a depth of 2 feet (600 mm).

3.12 MUD FROM SITE VEHICLES

- A. Provide means of removing mud from vehicle wheels before entering streets.

END OF SECTION

SECTION 01 56 10 - AIRBORNE CONTAMINANT CONTROL

PART 1 - GENERAL

1.1 SUMMARY

- A. Notification of Potential Hazards –All trades shall coordinate with other trades and conduct their work to prevent worker exposure or site contamination. The contractor is required to monitor all construction activities in anticipation of hazardous materials in accordance with all legally mandated requirements, laws and codes. Should hazardous materials be detected, the contractor shall report findings immediately as required by EPA and OSHA as well as to the owner representative to determine further action.

1.02 DEFINITIONS

- A. "Airborne Contaminants" are those contaminants listed in 29 CFR 1926.55 and 8 AAC 61.1100 that have the potential to become airborne due to various work activities being performed by the Contractor. Additionally, airborne contaminants include those fumes and odors that may be objectionable to personnel in Occupied Areas of the facility even though they are not listed in the reference regulations. Airborne contaminants may be broadly categorized as Pre-Existing or Activity Generated. Contaminant producing activities include, but are not limited to:
1. Demolition, removal, installation and disposal of walls, floors ceilings, steel, and other architectural and structural materials.
 2. Disturbance or removal of existing settled and concealed dusts.
 3. Demolition, relocation, installation and disposal of plumbing, mechanical and electrical systems and equipment.
 4. Finish operations such as sanding, preparation, painting, and application of special surface coatings.
 5. Any construction activity, which can generate aerosols, dust, smoke, or fumes.
 6. Temporary heat sources.
 7. Other on-site work operations not described above.
- B. "Pre-Existing Contaminants" are those contaminants that are present in the facility prior to the start of any work. These include settled and concealed dust in areas of the facility not subjected to routine cleaning, including the roof and inside and on top of architectural, mechanical, electrical and structural elements. The dust generally contains several common components including, but not limited to asbestos, cellulose, cotton, fiberglass, lead, silica, and other Particulates not otherwise regulated.
- C. "Activity Generated Contaminants" are those contaminants generated by the various demolition or construction related activities of the Contractor. Examples of typical Activity Generated Contaminants include wood dust (cellulose), cement dust (silica), gypsum dust (particulates not Otherwise regulated), paint fumes, and welding fumes. A complete list regulated air contaminants is available in 29 CFR 1926.55 and 8 AAC 61.1100.
AIRBORNE CONTAMINANT CONTROL Division 011 Section 01 56 10
- D. "Work Areas": Areas of demolition, renovation, construction, adjacent staging and storage areas, and passage areas for workers, supplies, and waste. This may include but is not limited to attic spaces, spaces above ceilings, crawl spaces, mechanical and electrical spaces, confined spaces and other spaces not normally accessed or occupied.
- E. "Occupied Areas": Areas as determined by Owner's Representative and as shown on contract drawings. Typically, these include areas adjacent to Work Areas or containment areas, either occupied or used for passage, as well as areas connected to construction area by mechanical system air intake, exhaust, and ductwork. Contaminant control procedures may be relaxed during periods when school is not in session as allowed by the Contractor's approved work plan.
- F. "Contractor" is defined to include all trades and all subcontractors performing work on the work site.

- G. "Negative Initial Determination" is a determination made either through air monitoring or other objective data that indicates worker exposure to regulated airborne contaminants are below or expected to be below the regulated limits.

1.03 AIRBORNE CONTAMINANT CONTROL

- A. There is no requirement to remove Pre-Existing Contaminants from the facility. The Contractor may remove Pre-Existing Contaminants from his work areas if he determines that to be a more cost effective means of completing the work.
- B. The Contractors shall establish and maintain control over the generation and containment of all potential airborne contaminants so that facilities, occupants, equipment, and operations are not adversely affected. Construction activities that disturb existing materials or create airborne contaminants must be conducted in Work Areas specifically constructed, ventilated, and/or equipped to prevent the movement of contaminants into Occupied Areas.
- C. The Contractor shall establish and maintain control over Activity Generated Contaminants within the Work Area to prevent abnormally high levels of airborne contaminants to settle on architectural, mechanical, electrical or structural components within the work areas. The Contractor shall be required to clean all surfaces within a work area where abnormally high levels of Activity Generated Contaminants are deposited.
- D. The Contractor shall ensure that all workers are aware of the Occupied Areas, the potential air contaminants present and the means and methods established in the work plan to control those contaminants.
- E. The Contractor shall ensure workers have the proper protective equipment needed for the job being performed.

1.04 TRAINING

- A. The Contractor shall ensure that all workers/traders performing work on the project site are trained in accordance with OSHA standards for hazard communication (29 CFR 1910.1200) and proper Protective equipment (29 CFR 1926), as well as engineering controls and work methods required To prevent exposure to regulated air contaminants that might be generated or encountered as a results of their work.

1.05 RESPONSIBILITY

AIRBORNE CONTAMINANT CONTROL Division 01 Section 015610

- A. Owner's Responsibilities:
 - 1. The Owner shall identify in contract documents Occupied Areas prior to allowing the contractor to begin work. The Contractor shall be notified of all changes to these areas as work progresses.
- B. Contractor's Responsibilities:
 - 1. Preparing proposed work plan and procedures for control of airborne contaminants during demolition and construction.
 - 2. Identifying and implementing specific means and methods of achieving and maintaining control of airborne contaminants.
 - 3. Controlling the generation and spread of airborne contaminants from the Contractor's Work Areas.
 - 4. Cleaning and decontaminating all areas contaminated as the result of their operation. The Owner has the right to review and approve of any and all cleanup and decontamination procedures, chemicals, and processes.
 - 5. Notifying Owner's Representative a minimum of 48 hours prior to starting construction

Activities that might be expected to produce excess levels of airborne contaminants in Work Area so that precautions may be taken.

1.06 SUBMITTALS

- A. Submittals Required: Submit the following documents to the Owner for approval. The submittal Shall be coordinated with all the Contractor's subcontractors and trades and be submitted as one Submittal for all work covered by this section. WORK SHALL NOT PROCEED UNTIL THE SUBMITTAL PACKAGE IS APPROVED, AND THE PRE-CONSTRUCTION MEETING HAS BEEN HELD.
1. Shop Drawings: Make all shop drawings accurately and to a scale sufficiently large to Show all pertinent features of the work. Shop Drawings shall show:
 - a. Boundaries of each Work Area and Occupied Areas.
 - b. Location of barriers, negative pressure areas, and exhaust fan units (if required).
 - c. Locations of windows, louvers, ducts and other penetrations into Occupied Areas that need to be protected from airborne contamination.
 - d. Disposal Routes.
 - e. Locations of contaminant producing operations like painting or sanding which could be moved away from Occupied Areas.
 2. Work Plan: The Work Plan shall be prepared for this specific job in the form of check-Lists and shall include:
 - a. Work area set-up and protection procedures during occupied times.
 - b. Work area set-up and protection procedures during periods of limited occupancy (vacation and holidays).
 - c. Work procedures to minimize generation of airborne contaminants.
 - d. Worker protection procedures.
 - e. Daily cleanup procedures and activities.
 - f. Procedures to follow if air contaminants enter Occupied Area.
 - g. Exposure assessment procedures if a "negative initial determination" has not been completed. A record of "negative initial determinations" shall be maintained by the Contractor and be available on the job site for review by the Owner or regulatory agencies.

AIRBORNE CONTAMINANT CONTROL Division 01 Section 01 56 10

3. Material Safety Data Sheets: The Contractor shall identify the location where Material Safety Data Sheets (MSDS) for each chemical proposed to be used or installed will be maintained.
- B. Monitoring Results: The Contractor shall submit copies of all air monitoring and testing results to the Owner within 24 hours of receipt of results.

1.07 WORKER PROTECTION

- A. The Contractor shall review the MSDS's for the substances that will be used, data provided by these specifications, proposed means and methods, manufacturer's data and other available data to determine the potential for worker exposure.
- B. Conduct air monitoring of worker exposures as necessary to show that workers are not being Exposed above the permissible exposure limits established by 29 CFR 1926 and 8 AAC 61.1100 (negative initial determination). Not all contaminants or substances will require exposure monitoring.
- C. In lieu of worker exposure monitoring, the Contractor may rely on objective data from recognized Trade groups, manufacturer or previous exposure monitoring data that establish that worker Exposure above the permissible exposure limits is not probable under conditions "closely re-sembling" the processes, types of materials, control methods, work practices and environmental conditions in the current job.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.01 WORK PRACTICES

- A. General: All construction/demolition work shall be isolated, either by enclosures, and/or work Practices and equipment to prevent the migration of contaminants (dust, fumes, smoke, etc.) into occupied Areas of the facility. If the Contractor's work practices are not effective in controlling Airborne contaminants, as evidenced by dust, fumes, smoke, odors, dust, etc. in Occupied Areas, The Contractor shall provide a sealed barrier at the perimeter of the work area and exhaust the Work area to maintain a negative pressure or provide positive pressure to Occupied Areas to keep Airborne contaminants out.
- B. Direct exhaust from fume or smoke producing equipment away from building air intakes, windows and other penetrations into Occupied Areas.
- C. The Contractor shall provide "walk-off" mats, at all connections between Work Areas and Occupied Areas, vacuumed or changed daily when there is traffic between the Work Area and the Occupied Areas.
- D. Enclosures where used shall be dust tight and withstand air pressure.
- E. Prohibited Materials: The use or application of the following materials is prohibited:
 - 1. All cleaners and aerosol products not submitted approved by the Owner
 - 2. All flammable or chlorinated hydrocarbon solvents, unless approved by the Owner.

AIRBORNE CONTAMINANT CONTROL Division 01 Section 01 56 10

- F. Any dust or debris tracked outside of Work Areas into Occupied Areas shall be cleaned up immediately. Contractor shall have the necessary manpower and equipment (dust and wet mops, HEPA vacuums, buckets and clean wiping rags) to keep adjacent Occupied Areas clean at all times.
- G. All vacuums used for cleaning shall be equipped with HEPA filters.
- H. Traffic between Work Areas and Occupied Areas shall be kept to a minimum. Keep doors between such areas closed at all times. Transport refuse through Occupied Areas in covered containers.
- I. Notify the Owner's Representative immediately of any release of airborne contaminants into Occupied Areas.

3.02 ENFORCEMENT

- A. The Contractor shall periodically inspect Occupied Areas at the perimeter of the work area to verify that airborne contaminants have not spread into those areas.
- B. Failure to properly maintain airborne contaminant control in Occupied Areas will result in issuance of a written warning. If the problem is not corrected immediately, the Owner will have cause to stop work.
- C. Failure of the Contractor to correct deficiencies in controlling airborne contaminants will result in corrective action taken by the Owner and deduction of all costs from the Contract.

3.03 WORK STOPPAGE

- A. The Contractor shall stop work and notify the Owner whenever his work has cause visible dust,

smoke, fumes or objectionable odors in Occupied Areas.

- B. When such work stoppage occurs, the area shall be restored to its original condition by the Contractor at no expense to the Owner. The Contractor is responsible for removing dust, fumes and debris that were generated as a result of his work.

3.04 WORK COMPLETION

- A. Provide thorough cleaning of finished surfaces that become exposed to dust or other airborne contaminants. Cleaning Pre-Existing contaminants is not required.
- B. Removal of construction barriers and airborne contaminant control equipment shall be performed in a manner to minimize disturbance of airborne contaminants into occupied spaces. HEPA Vacuum and clean all finished surfaces free of dust after the removal of barriers and equipment.

END OF SECTION

SECTION 01 57 21 - INDOOR AIR QUALITY CONTROLS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Construction procedures to promote adequate indoor air quality after construction.
- B. Building flush-out after construction and before occupancy.
- C. Testing indoor air quality before commencement of construction; existing building areas only.
- D. Testing indoor air quality after completion of construction.
- E. Testing air change effectiveness after completion of construction.
- F. Testing smoking room ventilation and isolation.

1.02 PROJECT GOALS

- A. Dust and Airborne Particulates: Prevent deposition of dust and other particulates in HVAC ducts and equipment.
 - 1. Cleaning of ductwork is not contemplated under this Contract.
 - 2. Contractor shall bear the cost of cleaning required due to failure to protect ducts and equipment from construction dust.
 - 3. Establish condition of existing ducts and equipment prior to start of alterations.
- C. Airborne Contaminants: Procedures and products have been specified to minimize indoor air pollutants.
 - 1. Furnish products meeting the specifications.
 - 2. Avoid construction practices that could result in contamination of installed products leading to indoor air pollution.
- D. Environmental Tobacco Smoke Control: Smoking rooms have been designed with direct exhaust to outdoors, no recirculated air, impermeable partitions from floor to structure above, and negative pressure of at least 0.03 inch wg (7 Pa).
- E. Residential Units Air Isolation: Units have been designed with impermeable party walls and sealed openings in walls and floors.

1.03 RELATED REQUIREMENTS

- B. Section 01 40 00 - Quality Requirements: Testing and inspection services.
- C. Section 01 61 16 - Volatile Organic Compound (VOC) Content Restrictions.
- D. Section 23 40 00 - HVAC Air Cleaning Devices: HVAC filters.
- E. Section 23 05 93 - Testing, Adjusting, and Balancing for HVAC: Testing HVAC systems for proper air flow rates, adjustment of dampers and registers, and settings for equipment.
- F. Section 23 01 30.51 - HVAC Air Duct Cleaning: Cleaning air ducts, equipment, and terminal units.

1.04 REFERENCE STANDARDS

- A. ASHRAE Std 52.2 - Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size; 2012, with 2015 amendments.
- B. ASHRAE Std 129 - Measuring Air-Change Effectiveness; 1997 (Reaffirmed 2002).
- C. ASTM D5149 - Standard Test Method for Ozone in the Atmosphere: Continuous Measurement by Ethylene Chemiluminescence; 2002 (Reapproved 2008).
- D. ASTM D5197 - Standard Test Method for Determination of Formaldehyde and Other Carbonyl Compounds in Air (Active Sampler Methodology); 2009.
- E. ASTM E779 - Standard Test Method for Determining Air Leakage Rate by Fan Pressurization; 2010.

- F. CAL (CDPH SM) - Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions From Indoor Sources Using Environmental Chambers; California Department of Public Health; v1.1, 2010.
- G. EPA 600/4-90/010 - Compendium of Methods for the Determination of Air Pollutants in Indoor Air; April 1990.
- H. EPA 625/R-96/010b - Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air; Jan-99.
- I. SMACNA (OCC) - IAQ Guidelines for Occupied Buildings Under Construction; 2007.

1.05 DEFINITIONS

- A. Adsorptive Materials: Gypsum board, acoustical ceiling tile and panels, carpet and carpet tile, fabrics, fibrous insulation, and other similar products.
- B. Contaminants: Gases, vapors, regulated pollutants, airborne mold and mildew, and the like, as specified.
- C. Particulates: Dust, dirt, and other airborne solid matter.
- D. Wet Work: Concrete, plaster, coatings, and other products that emit water vapor or volatile organic compounds during installation, drying, or curing.

1.06 SUBMITTALS

- A. See Section 00 72 00 - General Conditions, for submittal procedures.
- B. Indoor Air Quality Management Plan: Describe in detail measures to be taken to promote adequate indoor air quality upon completion; use SMACNA (OCC) as a guide.
 - 1. Submit not less than 60 days before enclosure of building.
 - 2. Identify potential sources of odor and dust.
 - 3. Identify construction activities likely to produce odor or dust.
 - 4. Identify areas of project potentially affected, especially occupied areas.
 - 5. Evaluate potential problems by severity and describe methods of control.
 - 6. Describe construction ventilation to be provided, including type and duration of ventilation, use of permanent HVAC systems, types of filters and schedule for replacement of filters.
 - 7. Describe cleaning and dust control procedures.
- C. Interior Finishes Installation Schedule: Identify each interior finish that either generates odors, moisture, or vapors or is susceptible to adsorption of odors and vapors, and indicate air handling zone, sequence of application, and curing times.
- D. Duct and Terminal Unit Inspection Report.
- E. Air Contaminant Test Plan: Identify:
 - 1. Testing agency qualifications.
 - 2. Locations and scheduling of air sampling.
 - 3. Test procedures, in detail.
 - 4. Test instruments and apparatus.
 - 5. Sampling methods.
- F. Air Contaminant Test Reports: Show:
 - 1. Location where each sample was taken, and time.
 - 2. Test values for each air sample; average the values of each set of 3.
 - 3. HVAC operating conditions.
 - 4. Certification of test equipment calibration.
 - 5. Other conditions or discrepancies that might have influenced results.
- G. Ventilation Effectiveness Test Plan: Identify:
 - 1. Testing agency qualifications.
 - 2. Description of test spaces, including locations of air sampling.
 - 3. Test procedures, in detail; state whether tracer gas decay or step-up will be used.

4. Test instruments and apparatus; identify tracer gas to be used.
 5. Sampling methods.
- H. Ventilation Effectiveness Test Reports: Show:
1. Include preliminary tests of instruments and apparatus and of test spaces.
 2. Calculation of ventilation effectiveness, E.
 3. Location where each sample was taken, and time.
 4. Test values for each air sample.
 5. HVAC operating conditions.
 6. Other information specified in ASHRAE Std 129.
 7. Other conditions or discrepancies that might have influenced results.
- I. Smoking Room Test and Inspection Plan: Identify:
1. Testing agency qualifications.
 2. Description of test spaces, including locations of air sampling.
 3. Test procedures, in detail.
 4. Test instruments and apparatus; identify tracer gas to be used.
 5. Sampling methods.
- J. Smoking Room Test and Inspection Reports: Show:
1. Include preliminary tests of instruments and apparatus.
 2. Include inspection of membrane seals in test spaces.
 3. HVAC operating conditions.
 4. Location where each sample was taken, and time.
 5. Test values for each air sample.
 6. Other information specified in ASHRAE Std 129.
 7. Other conditions or discrepancies that might have influenced results.

1.07 QUALITY ASSURANCE

- A. Testing and Inspection Agency Qualifications: Independent testing agency having minimum of 5 years experience in performing the types of testing specified.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Low VOC Materials: See Section 01 61 16.
- B. Low VOC Materials: See other sections for specific requirements for materials with low VOC content.
- C. Auxiliary Air Filters: MERV of 8, minimum, when tested in accordance with ASHRAE Std 52.2.

PART 3 EXECUTION

3.01 CONSTRUCTION PROCEDURES

- A. Prevent the absorption of moisture and humidity by adsorptive materials by:
1. Sequencing the delivery of such materials so that they are not present in the building until wet work is completed and dry.
 2. Delivery and storage of such materials in fully sealed moisture-impermeable packaging.
 3. Provide sufficient ventilation for drying within reasonable time frame.
- B. Begin construction ventilation when building is substantially enclosed.
- C. If extremely dusty or dirty work must be conducted inside the building, shut down HVAC systems for the duration; remove dust and dirt completely before restarting systems.
- D. When working in a portion of an occupied building, prevent movement of air from construction area to occupied area.
- E. Use of HVAC equipment and ductwork for ventilation during construction is not permitted:
1. Provide temporary ventilation equivalent to 1.5 air changes per hour, minimum.

2. Exhaust directly to outside.
 3. Seal HVAC air inlets and outlets immediately after duct installation.
- F. HVAC equipment and supply air ductwork may be used for ventilation during construction:
1. Operate HVAC system on 100 percent outside air, with 1.5 air changes per hour, minimum.
 2. Ensure that air filters are correctly installed prior to starting use; replace filters when they lose efficiency.
 3. Do not use return air ductwork for ventilation.
 4. Do not use return air ductwork for ventilation unless absolutely necessary.
 5. Seal return air inlets or otherwise positively isolate return air system to prevent recirculation of air; provide alternate return air pathways.
 6. Where return air ducts must be used for ventilation, install auxiliary filters at return inlets, sealed to ducts; use filters with at least the equivalent efficiency as those required at supply air side; inspect and replace filters when they lose efficiency.
- G. Do not store construction materials or waste in mechanical or electrical rooms.
- H. Prior to use of return air ductwork without intake filters clean up and remove dust and debris generated by construction activities.
1. Inspect duct intakes, return air grilles, and terminal units for dust.
 2. Clean plenum spaces, including top sides of lay-in ceilings, outsides of ducts, tops of pipes and conduit.
 3. Clean tops of doors and frames.
 4. Clean mechanical and electrical rooms, including tops of pipes, ducts, and conduit, equipment, and supports.
 5. Clean return plenums of air handling units.
 6. Remove intake filters last, after cleaning is complete.
- I. Do not perform dusty or dirty work after starting use of return air ducts without intake filters.
- J. Use other relevant recommendations of SMACNA (OCC) for avoiding unnecessary contamination due to construction procedures.

3.02 BUILDING FLUSH-OUT

- A. Contractor's Option: Either full continuous flush-out OR satisfactory air contaminant testing is required, not both.
- B. Perform building flush-out before occupancy.
- C. Do not start flush-out until:
1. All construction is complete.
 2. HVAC systems have been tested, adjusted, and balanced for proper operation.
 3. Cleaning of inside of HVAC ductwork, specified elsewhere, has been completed.
 4. Inspection of inside of return air ducts and terminal units confirms that cleaning is not necessary.
 5. New HVAC filtration media have been installed.
- D. Building Flush-Out: Operate all ventilation systems at normal flow rates with 100 percent outside air until a total air volume of 14,000 cubic feet per square foot (4500 cubic meters per square meter) of floor area has been supplied.
1. Obtain Owner's concurrence that construction is complete enough before beginning flush-out.
 2. Maintain interior temperature of at least 60 degrees F (15 degrees C) and interior relative humidity no higher than 60 percent.
 3. If additional construction involving materials that produce particulates or any of the specified contaminants is conducted during flush-out, start flush-out over.
 4. If interior spaces must be occupied prior to completion of the flush-out, supply a minimum of 25 percent of the total air volume prior to occupancy, and:

- a. Begin ventilation at least three hours prior to daily occupancy.
 - b. Continue ventilation during all occupied periods.
 - c. Provide minimum outside air volume of 0.30 cfm per square foot (0.0015 cu m/s/sq m) or design minimum outside air rate, whichever is greater.
- E. Install new HVAC filtration media after completion of flush-out and before occupancy or further testing.

3.03 AIR CONTAMINANT TESTING

- A. Contractor's Option: Either full continuous flush-out, or satisfactory air contaminant testing is required, not both.
- B. Perform air contaminant testing before starting construction, as base line for evaluation of post-construction testing.
- C. Perform air contaminant testing before occupancy.
- D. Do not start air contaminant testing until:
 - 1. All construction is complete, including interior finishes.
 - 2. HVAC systems have been tested, adjusted, and balanced for proper operation.
 - 3. Cleaning of inside of HVAC ductwork, specified elsewhere, has been completed.
 - 4. New HVAC filtration media have been installed.
- E. Indoor Air Samples: Collect from spaces representative of occupied areas:
 - 1. Collect samples while operable windows and exterior doors are closed, HVAC system is running normally as if occupied, with design minimum outdoor air, but with the building unoccupied.
 - 2. Collect samples from spaces in each contiguous floor area in each air handler zone, but not less than one sample per 25,000 square feet (2300 square meters); take samples from areas having the least ventilation and those having the greatest presumed source strength.
 - 3. Collect samples from height from 36 inches (915 mm) to 72 inches (1830 mm) above floor.
 - 4. Collect samples from same locations on 3 consecutive days during normal business hours; average the results of each set of 3 samples.
 - 5. Exception: Areas with normal very high outside air ventilation rates, such as laboratories, do not need to be tested.
 - 6. When retesting the same building areas, take samples from at least the same locations as in first test.
- F. Outdoor Air Samples: Collect samples at outside air intake of each air handler at the same time as indoor samples are taken.
- G. Analyze air samples and submit report.
- H. Air Contaminant Concentration Limits:
 - 1. Formaldehyde: Not more than 16.3 parts per billion.
 - 2. PM10 Particulates: Not more than 20 micrograms per cubic meter.
 - 3. Total Volatile Organic Compounds (TVOCs): Not more than 500 micrograms per cubic meter.
 - 4. Chemicals Listed in CAL (CDPH SM) Table 4-1, except Formaldehyde: Allowable concentrations listed in Table 4-1.
 - 5. Carbon Monoxide: Not more than 9 parts per million and not more than 2 parts per million higher than outdoor air.
 - 6. Carbon Dioxide: Measure in ppm, in relation to outdoor air ; not more than 700 ppm higher than outdoor air.
 - 7. Airborne Mold and Mildew: Measure in relation to outside air ; not higher than outside air.
 - 8. Regulated Pollutants: Measure in relation to outside air ; not more than contained in outside air.

- I. Air Contaminant Concentration Test Methods:
 - 1. Formaldehyde: ASTM D5197, EPA 625/R-96/010b Method TO-11A, or EPA 600/4-90/010 Method IP-6.
 - 2. Particulates: EPA 600/4-90/010 Method IP-10.
 - 3. Ozone: ASTM D5149.
 - 4. Total Volatile Organic Compounds (TVOC): EPA 625/R-96/010b Method TO-1, TO-15, or TO-17; or EPA 600/4-90/010 Method IP-1.
 - 5. Chemicals Listed in CAL (CDPH SM) Table 4-1, except Formaldehyde: ASTM D5197, or EPA 625/R-96/010b Method TO-1, TO-15, or TO-17.
 - 6. Carbon Monoxide: EPA 600/4-90/010 Method IP-3, plus measure outdoor air; measure in ppm; report both indoor and outdoor measurements.
- J. If air samples show concentrations higher than those specified, ventilate with 100 percent outside air and retest at no cost to Owner, or conduct full building flush-out specified above.

3.04 VENTILATION EFFECTIVENESS TESTING

- A. Perform ventilation effectiveness testing before occupancy.
- B. Do not begin ventilation effectiveness testing until:
 - 1. HVAC testing, adjusting, and balancing has been satisfactorily completed.
 - 2. Building flush-out or air contaminant testing has been completed satisfactorily.
 - 3. New HVAC filtration media have been installed.
- C. Test each air handler zone in accordance with ASHRAE Std 129.
- D. If calculated air change effectiveness for a particular zone is less than 0.9 due to inadequate balancing of the system, adjust, and retest at no cost to Owner.

END OF SECTION

SECTION 01 60 00 - PRODUCT REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. General product requirements.
- B. Re-use of existing products.
- C. Transportation, handling, storage and protection.
- D. Product option requirements.
- E. Substitution limitations and procedures.
- F. Procedures for Owner-supplied products.
- G. Maintenance materials, including extra materials, spare parts, tools, and software.

1.02 RELATED REQUIREMENTS

- A. Document 00 43 25 - Substitution Request Form.
- C. Document 00 21 13 - Instructions to Bidders: Product options and substitution procedures prior to bid date.
- D. Section 01 10 00 - Summary: Lists of products to be removed from existing building.
- E. Section 01 40 00 - Quality Requirements: Product quality monitoring.
- F. Section 01 61 16 - Volatile Organic Compound (VOC) Content Restrictions: Requirements for VOC-restricted product categories.
- G. Section 01 74 19 - Construction Waste Management and Disposal: Waste disposal requirements potentially affecting packaging and substitutions.
- H. Section 22 05 13 - Common Motor Requirements for Plumbing Equipment: Motors for plumbing equipment.
- I. Section 23 05 13 - Common Motor Requirements for HVAC Equipment: Motors for HVAC equipment.

1.03 REFERENCE STANDARDS

- A. 16 CFR 260.13 - Guides for the Use of Environmental Marketing Claims; Federal Trade Commission; Recycled Content; Current Edition.
- B. ASTM D6866 - Standard Test Methods for Determining the Biobased Content of Solid, Liquid, and Gaseous Samples Using Radiocarbon Analysis; 2016.
- C. C2C (DIR) - C2C Certified Products Registry; Cradle to Cradle Products Innovation Institute; www.c2ccertified.org/products/registry.
- D. CAN/CSA Z809 - National Standard for Sustainable Forest Management; CSA International Inc; 2008.
- E. EN 15804 - Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products; 2012.
- F. GreenScreen (LIST) - GreenScreen for Safer Chemicals List Translator; Clean Production Action; www.greenscreenchemicals.org.
- G. GreenScreen (METH) - GreenScreen for Safer Chemicals Method v1.2; Clean Production Action; www.greenscreenchemicals.org.
- H. HPDC (Tool) - Create an HPD On-Line Tool; Health Product Declaration Collaborative; <http://www.hpd-collaborative.org/>.
- I. ISO 14025 - Environmental labels and declarations -- Type III environmental declarations -- Principles and procedures; 2006.
- J. ISO 14040 - Environmental management -- Life cycle assessment -- Principles and framework; 2006.

- K. ISO 14044 - Environmental management -- Life cycle assessment -- Requirements and guidelines; 2006.
- L. ISO 21930 - Sustainability in building construction -- Environmental declaration of building products; 2007.
- M. NEMA MG 1 - Motors and Generators; 2014.
- N. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

1.04 SUBMITTALS

- A. Proposed Products List: Submit list of major products proposed for use, with name of manufacturer, trade name, and model number of each product.
 - 1. Submit within 15 days after date of Agreement.
 - 2. For products specified only by reference standards, list applicable reference standards.
- B. Product Data Submittals: Submit manufacturer's standard published data. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- C. Shop Drawing Submittals: Prepared specifically for this Project; indicate utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- D. Sample Submittals: Illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
 - 1. For selection from standard finishes, submit samples of the full range of the manufacturer's standard colors, textures, and patterns.

1.05 QUALITY ASSURANCE

- A. Bio-Based Content: Of vegetable or animal origin, not including products made by killing the animal.
 - 1. Determine percentage of bio-based content in accordance with ASTM D6866.
 - 2. Bio-based content must be sourced from a Sustainable Agriculture Network certified farm.
- B. Cradle-to-Cradle Certified: End use product certified Cradle-to-Cradle v2 Basic or Cradle-to-Cradle v3 Bronze, minimum, as evidenced by C2C (DIR).
- C. Environmental Product Declaration (EPD): Publicly available, critically reviewed life cycle analysis having at least a cradle-to-gate scope.
 - 1. Good: Product-specific; compliant with ISO 14044.
 - 2. Better: Industry-wide, generic; compliant with ISO 21930, or with ISO 14044, ISO 14040, ISO 14025, and EN 15804; Type III third-party certification with external verification, in which the manufacturer is recognized as the program operator.
 - 3. Best: Commercial-product-specific; compliant with ISO 21930, or with ISO 14044, ISO 14040, ISO 14025, and EN 15804; Type III third-party certification with external verification, in which the manufacturer is recognized as the program operator.
 - 4. Where demonstration of impact reduction below industry average is required, submit both industry-wide and commercial-product-specific declarations; or submit at least 5 declarations for products of the same type by other manufacturers in the same industry.
- D. GreenScreen Chemical Hazard Analysis: All ingredients of 100 parts-per-million or greater evaluated using GreenScreen (METH).
 - 1. Good: GreenScreen (LIST) evaluation to identify Benchmark 1 hazards; a Health Product Declaration includes this information.
 - 2. Better: GreenScreen Full Assessment.
 - 3. Best: GreenScreen Full Assessment by GreenScreen Licensed Profiler.
 - 4. Acceptable Evidence: GreenScreen report.

- E. Health Product Declarations (HPD): Complete, published declaration with full disclosure of known hazards, prepared using HPDC (Tool); HPD's with "unknown" listed for any hazard will not be considered acceptable.
- F. Manufacturer's Inventory of Product Content: Publicly available inventory of all ingredients identified by name and Chemical Abstract Service Registration Number (CAS RN).
 - 1. For ingredients considered a trade secret or intellectual property, the name and CAS RN may be omitted, provided the ingredient's role, amount, and GreenScreen Benchmark are given.
- G. Recycled Content: Determine percentage of post-consumer and pre-consumer (post-industrial) content separately, using the guidelines contained in 16 CFR 260.13.
 - 1. Previously used, reused, refurbished, and salvaged products are not considered recycled.
 - 2. Wood fabricated from timber abandoned in transit to original mill is considered reused, not recycled.
 - 3. Determine percentage of recycled content of any item by dividing the weight of recycled content in the item by the total weight of all material in the item.
 - 4. Determine value of recycled content of each item separately, by multiplying the content percentage by the value of the item.
 - 5. Acceptable Evidence:
 - a. For percentage of recycled content, information from manufacturer.
 - b. For cost, Contractor's cost data.
- H. Reused Products: Materials and equipment previously used in this or other construction, salvaged and refurbished as specified.
 - 1. Wood fabricated from timber abandoned in transit after harvesting is considered reused, not recycled.
 - 2. Acceptable Evidence: Information about the origin or source, from Contractor or supplier.
- I. Source Location: Location of harvest, extraction, recovery, or manufacture; where information about source location is required to be submitted, give the postal address:
 - 1. In all cases, indicate the location of final assembly.
 - 2. For harvested products, indicate location of harvest.
 - 3. For extracted (i.e. mined) products, indicate location of extraction.
 - 4. For recovered products, indicate location of recovery.
 - 5. For products involving multiple manufacturing steps, provide a description of the process at each step, with location.
 - 6. Acceptable Evidence:
 - a. Manufacturer's certification.
 - b. Life cycle analysis (LCA) performed by third-party.
- J. Sustainably Harvested Wood: Solid wood, wood chips, and wood fiber certified or labeled by an organization accredited by one of the following:
 - 1. American Forest Foundation, The American Tree Farm System; refer to <http://www.treefarmssystem.org>.
 - 2. Canadian Sustainable Forest Management System, under CAN/CSA Z809; refer to <http://www.csasfmforests.ca>.
 - 3. The Forest Stewardship Council, The Principles for Natural Forest Management; for Canada visit <http://www.fscscanada.org>, for the USA visit <http://www.fscus.org>.
 - 4. Sustainable Forestry Board, under The Sustainable Forestry Initiative® of the American Forest & Paper Association; refer to <http://www.afandpa.org>.
 - 5. Acceptable Evidence: Copies of invoices bearing the certifying organization's certification numbers.

PART 2 PRODUCTS

2.01 EXISTING PRODUCTS

- A. Do not use materials and equipment removed from existing premises unless specifically required or permitted by the Contract Documents.
- B. Unforeseen historic items encountered remain the property of the Owner; notify Owner promptly upon discovery; protect, remove, handle, and store as directed by Owner.
- C. Existing materials and equipment indicated to be removed, but not to be re-used, relocated, reinstalled, delivered to the Owner, or otherwise indicated as to remain the property of the Owner, become the property of the Contractor; remove from site.
- D. Specific Products to be Reused: The reuse of certain materials and equipment already existing on the project site is required.
 - 1. See Section 01 1000 for list of items required to be salvaged for reuse and relocation.
 - 2. If reuse of other existing materials or equipment is desired, submit substitution request.

2.02 NEW PRODUCTS

- A. Provide new products unless specifically required or permitted by the Contract Documents.
- B. DO NOT USE products having any of the following characteristics:
 - 1. Made outside the United States, its territories, Canada, or Mexico.
 - 2. Made using or containing CFC's or HCFC's.
 - 3. Made of wood from newly cut old growth timber.
 - 4. Containing lead, cadmium, asbestos.
- C. Where all other criteria are met, Contractor shall give preference to products that:
 - 1. If used on interior, have lower emissions, as defined in Section 01 61 16.
 - 2. If wet-applied, have lower VOC content, as defined in Section 01 61 16.
 - 3. Are extracted, harvested, and/or manufactured closer to the location of the project.
 - 4. Have longer documented life span under normal use.
 - 5. Result in less construction waste.
 - 6. Are made of vegetable materials that are rapidly renewable.
 - 7. Are made of recycled materials.
 - 8. If made of wood, are made of sustainably harvested wood, wood chips, or wood fiber.
 - 9. If bio-based, other than wood, are or are made of Sustainable Agriculture Network certified products.
 - 10. Are Cradle-to-Cradle Certified.
 - 11. Have a published Environmental Product Declaration (EPD).
 - 12. Have a published Health Product Declaration (HPD).
 - 13. Have a published GreenScreen Chemical Hazard Analysis.
 - 14. Have a published Manufacturer's Inventory of Chemical Content.
- D. Provide interchangeable components of the same manufacture for components being replaced.
- E. Motors: Refer to Section 21 05 13 - Common Motor Requirements for Fire Suppression Equipment, NEMA MG 1 Type. Specific motor type is specified in individual specification sections.
- F. Motors: Refer to Section 22 05 13 - Common Motor Requirements for Plumbing Equipment, NEMA MG 1 Type. Specific motor type is specified in individual specification sections.
- G. Motors: Refer to Section 23 05 13 - Common Motor Requirements for HVAC Equipment, NEMA MG 1 Type. Specific motor type is specified in individual specification sections.
- H. Wiring Terminations: Provide terminal lugs to match branch circuit conductor quantities, sizes, and materials indicated. Size terminal lugs to NFPA 70, include lugs for terminal box.

- I. Cord and Plug: Provide minimum 6 foot (2 m) cord and plug including grounding connector for connection to electric wiring system. Cord of longer length is specified in individual specification sections.

2.03 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Use any product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: Use a product of one of the manufacturers named and meeting specifications, no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.

2.04 MAINTENANCE MATERIALS

- A. Furnish extra materials, spare parts, tools, and software of types and in quantities specified in individual specification sections.
- B. Deliver to Project site; obtain receipt prior to final payment.

PART 3 EXECUTION

3.01 SUBSTITUTION PROCEDURES

- A. Instructions to Bidders specifies time restrictions for submitting requests for substitutions during the bidding period and the documents required. Comply with requirements specified in Section 00 21 13.
- B. Submit substitution requests by completing the form in Section 00 43 25; see this section for additional information and instructions. Use only this form; other forms of submission are unacceptable.
- C. Engineer will consider requests for substitutions only within 15 days after date of Agreement.
- D. Substitutions will not be considered when a product becomes unavailable through no fault of the Contractor.
- E. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents.
- F. A request for substitution constitutes a representation that the submitter:
 1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
 2. Agrees to provide the same warranty for the substitution as for the specified product.
 3. Agrees to coordinate installation and make changes to other Work that may be required for the Work to be complete with no additional cost to Owner.
 4. Waives claims for additional costs or time extension that may subsequently become apparent.
 5. Agrees to reimburse Owner and Engineer for review or redesign services associated with re-approval by authorities.
- G. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request, or when acceptance will require revision to the Contract Documents.
- H. Substitution Submittal Procedure (after contract award):
 1. Submit three copies of request for substitution for consideration. Limit each request to one proposed substitution.
 2. Submit shop drawings, product data, and certified test results attesting to the proposed product equivalence. Burden of proof is on proposer.
 3. Engineer will notify Contractor in writing of decision to accept or reject request.

3.02 OWNER-SUPPLIED PRODUCTS

- A. See Section 01 10 00 - Summary for identification of Owner-supplied products.

- B. Owner's Responsibilities:
 - 1. Arrange for and deliver Owner reviewed shop drawings, product data, and samples, to Contractor.
 - 2. Arrange and pay for product delivery to site.
 - 3. On delivery, inspect products jointly with Contractor.
 - 4. Submit claims for transportation damage and replace damaged, defective, or deficient items.
 - 5. Arrange for manufacturers' warranties, inspections, and service.
- C. Contractor's Responsibilities:
 - 1. Review Owner reviewed shop drawings, product data, and samples.
 - 2. Receive and unload products at site; inspect for completeness or damage jointly with Owner.
 - 3. Handle, store, install and finish products.
 - 4. Repair or replace items damaged after receipt.

3.03 TRANSPORTATION AND HANDLING

- A. Package products for shipment in manner to prevent damage; for equipment, package to avoid loss of factory calibration.
- B. If special precautions are required, attach instructions prominently and legibly on outside of packaging.
- C. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to stored materials.
- D. Transport and handle products in accordance with manufacturer's instructions.
- E. Transport materials in covered trucks to prevent contamination of product and littering of surrounding areas.
- F. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.
- G. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage, and to minimize handling.
- H. Arrange for the return of packing materials, such as wood pallets, where economically feasible.

3.04 STORAGE AND PROTECTION

- A. Designate receiving/storage areas for incoming products so that they are delivered according to installation schedule and placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication.
- B. Store and protect products in accordance with manufacturers' instructions.
- C. Store with seals and labels intact and legible.
- D. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product.
- E. For exterior storage of fabricated products, place on sloped supports above ground.
- F. Provide bonded off-site storage and protection when site does not permit on-site storage or protection.
- G. Protect products from damage or deterioration due to construction operations, weather, precipitation, humidity, temperature, sunlight and ultraviolet light, dirt, dust, and other contaminants.
- H. Comply with manufacturer's warranty conditions, if any.
- I. Do not store products directly on the ground.

- J. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- K. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.
- L. Prevent contact with material that may cause corrosion, discoloration, or staining.
- M. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- N. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

END OF SECTION

SECTION 01 61 16 - VOLATILE ORGANIC COMPOUND (VOC) CONTENT RESTRICTIONS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Requirements for Indoor-Emissions-Restricted products.
- B. Requirements for VOC-Content-Restricted products.
- C. Requirement for installer certification that they did not use any non-compliant products.

1.02 RELATED REQUIREMENTS

- A. Section 00 72 00 - General Conditions: Submittal procedures.
- B. Section 01 33 29.04 - Material Content Form: Form for reporting emissions and VOC content.
- C. Section 01 33 29.07 - Prohibited Content Installer Certification: Form for certifying that no non-compliant products were used.
- D. Section 01 40 00 - Quality Requirements: Procedures for testing and certifications.
- E. Section 01 57 21 - Indoor Air Quality Controls: Procedures and testing.
- F. Section 01 60 00 - Product Requirements: Fundamental product requirements, substitutions and product options, delivery, storage, and handling.
- G. Section 07 90 05 - Joint Sealants: Emissions-compliant sealants.

1.03 DEFINITIONS

- A. Indoor-Emissions-Restricted Products: All products in the following product categories, whether specified or not:
 - 1. Interior paints and coatings.
 - 2. Interior adhesives and sealants, including flooring adhesives.
 - 3. Flooring.
 - 4. Composite wood.
 - 5. Products making up wall and ceiling assemblies.
 - 6. Thermal and acoustical insulation.
 - 7. Free-standing furniture.
 - 8. Other products when specifically stated in the specifications.
- B. VOC-Content-Restricted Products: All products in the following product categories, whether specified or not:
 - 1. Interior paints and coatings.
 - 2. Interior adhesives and sealants, including flooring adhesives.
 - 3. Wet-applied roofing and waterproofing.
 - 4. Other products when specifically stated in the specifications.
- C. Interior of Building: Anywhere inside the exterior weather barrier.
- D. Adhesives: All gunnable, trowelable, liquid-applied, and aerosol adhesives, whether specified or not; including flooring adhesives, resilient base adhesives, and pipe jointing adhesives.
- E. Sealants: All gunnable, trowelable, and liquid-applied joint sealants and sealant primers, whether specified or not; including firestopping sealants and duct joint sealers.
- F. Inherently Non-Emitting Materials: Products composed wholly of minerals or metals, unless they include organic-based surface coatings, binders, or sealants; and specifically the following:
 - 1. Concrete.
 - 2. Clay brick.
 - 3. Metals that are plated, anodized, or powder-coated.
 - 4. Glass.

5. Ceramics.
6. Solid wood flooring that is unfinished and untreated.
7. Other products when specifically stated in the specifications.

1.04 REFERENCE STANDARDS

- A. 40 CFR 59, Subpart D - National Volatile Organic Compound Emission Standards for Architectural Coatings; U.S. Environmental Protection Agency; current edition.
- B. ASTM D3960 - Standard Practice for Determining Volatile Organic Compound (VOC) Content of Paints and Related Coatings; 2005 (Reapproved 2013).
- C. BIFMA e3 - Furniture Sustainability Standard; Business and Institutional Furniture Manufacturers Association; 2012.
- D. BIFMA M7.1 - Standard Test Method for Determining VOC Emissions; Business and Institutional Furniture Manufacturers Association; 2011.
- E. CAL (CDPH SM) - Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions From Indoor Sources Using Environmental Chambers; California Department of Public Health; v1.1, 2010.
- F. CARB (ATCM) - Airborne Toxic Control Measure to Reduce Formaldehyde Emissions from Composite Wood Products; California Air Resources Board; current edition.
- G. CARB (SCM) - Suggested Control Measure for Architectural Coatings; California Air Resources Board; 2007.
- H. CHPS (HPPD) - High Performance Products Database; Current Edition at www.chps.net/.
- I. CRI (GLP) - Green Label Plus Testing Program - Certified Products; www.carpet-rug.org; current edition.
- J. GreenSeal GS-36 - Adhesives for Commercial Use; 2013.
- K. SCAQMD 1113 - South Coast Air Quality Management District Rule No.1113; current edition.
- L. SCAQMD 1168 - South Coast Air Quality Management District Rule No.1168; current edition.
- M. SCS (CPD) - SCS Certified Products; current listings at www.scs-certified.com.
- N. UL (GGG) - GREENGUARD Gold Certified Products; current listings at <http://productguide.ulenvironment.com/QuickSearch.aspx>.

1.05 SUBMITTALS

- A. See Section 00 72 00 - General Conditions, for submittal procedures.
- B. Product Data: For each VOC-restricted product used in the project, submit evidence of compliance.
- C. Installer Certifications Regarding Prohibited Content: Require each installer of any type of product (not just the products for which VOC restrictions are specified) to certify that either 1) no adhesives, joint sealants, paints, coatings, or composite wood or agrifiber products have been used in the installation of his products, or 2) that such products used comply with these requirements.

1.06 QUALITY ASSURANCE

- A. Indoor Emissions Standard and Test Method: CAL (CDPH SM), using Standard Private Office exposure scenario and the allowable concentrations specified in the method, and range of total VOC's after 14 days.
 1. Wet-Applied Products: State amount applied in mass per surface area.
 2. Paints and Coatings: Test tinted products, not just tinting bases.
 3. Evidence of Compliance: Acceptable types of evidence are the following;
 - a. Current UL (GGG) certification.
 - b. Current SCS (CPD) Floorscore certification.
 - c. Current SCS (CPD) Indoor Advantage Gold certification.

- d. Current listing in CHPS (HPPD) as a low-emitting product.
- e. Current CRI (GLP) certification.
- f. Test report showing compliance and stating exposure scenario used.
- 4. Product data submittal showing VOC content is NOT acceptable evidence.
- 5. Manufacturer's certification without test report by independent agency is NOT acceptable evidence.
- B. VOC Content Test Method: 40 CFR 59, Subpart D (EPA Method 24), or ASTM D3960, unless otherwise indicated.
 - 1. Evidence of Compliance: Acceptable types of evidence are:
 - a. Report of laboratory testing performed in accordance with requirements.
 - b. Certification by manufacturer that product complies with requirements.
- C. Composite Wood Emissions Standard: CARB (ATCM) for ultra-low emitting formaldehyde (ULEF) resins.
 - 1. Evidence of Compliance: Acceptable types of evidence are:
 - a. Current SCS "No Added Formaldehyde (NAF)" certification; www.scs-certified.com.
 - b. Report of laboratory testing performed in accordance with requirements.
 - c. Published product data showing compliance with requirements.
 - d. Certification by manufacturer that product complies with requirements.
- D. Furnishings Emissions Standard and Test Method: BIFMA e3 Sections 7.6.1 and 7.6.2, tested in accordance with BIFMA M7.1.
 - 1. Evidence of Compliance:
 - a. Test report showing compliance and stating exposure scenario used.
- E. Testing Agency Qualifications: Independent firm specializing in performing testing and inspections of the type specified in this section.

PART 2 PRODUCTS

2.01 MATERIALS

- A. All Products: Comply with the most stringent of federal, State, and local requirements, or these specifications.
- B. Indoor-Emissions-Restricted Products: Comply with Indoor Emissions Standard and Test Method, except for:
 - 1. Composite Wood, Wood Fiber, and Wood Chip Products: Comply with Composite Wood Emissions Standard or contain no added formaldehyde resins.
 - 2. Furnishings: Comply with Furnishings Emissions Standard and Test Method.
 - 3. Inherently Non-Emitting Materials.
- C. VOC-Content-Restricted Products: VOC content not greater than required by the following:
 - 1. Adhesives, Including Flooring Adhesives: SCAQMD 1168 Rule.
 - 2. Aerosol Adhesives: GreenSeal GS-36.
 - 3. Joint Sealants: SCAQMD 1168 Rule.
 - 4. Paints and Coatings: Each color; most stringent of the following:
 - a. 40 CFR 59, Subpart D.
 - b. SCAQMD 1113 Rule.
 - c. CARB (SCM).
 - 5. Wet-Applied Roofing and Waterproofing: Comply with requirements for paints and coatings.

PART 3 EXECUTION

3.01 FIELD QUALITY CONTROL

- A. Owner reserves the right to reject non-compliant products, whether installed or not, and require their removal and replacement with compliant products at no extra cost to Owner.

- B. Additional costs to restore indoor air quality due to installation of non-compliant products will be borne by Contractor.

END OF SECTION

SECTION 01 70 00 - EXECUTION AND CLOSEOUT REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Examination, preparation, and general installation procedures.
- B. Requirements for alterations work, including selective demolition , except removal, disposal, and/or remediation of hazardous materials and toxic substances.
- C. Pre-installation meetings.
- D. Cutting and patching.
- E. Surveying for laying out the work.
- F. Cleaning and protection.
- G. Starting of systems and equipment.
- H. Demonstration and instruction of Owner personnel.
- I. Closeout procedures, including Contractor's Correction Punch List, except payment procedures.
- J. General requirements for maintenance service.

1.02 RELATED REQUIREMENTS

- A. Section 01 10 00 - Summary: Limitations on working in existing building; continued occupancy; work sequence; identification of salvaged and relocated materials.
- B. Section 00 72 00 - General Conditions: Submittals procedures , Electronic document submittal service.
- C. Section 01 40 00 - Quality Requirements: Testing and inspection procedures.
- D. Section 01 50 00 - Temporary Facilities and Controls: Temporary exterior enclosures.
- E. Section 01 50 00 - Temporary Facilities and Controls: Temporary interior partitions.
- F. Section 01 51 00 - Temporary Utilities: Temporary heating, cooling, and ventilating facilities.
- G. Section 01 57 13 - Temporary Erosion and Sediment Control: Additional erosion and sedimentation control requirements.
- H. Section 01 74 19 - Construction Waste Management and Disposal: Additional procedures for trash/waste removal, recycling, salvage, and reuse.
- I. Section 01 76 10 - Temporary Protective Coverings: Materials for protection of installed work.
- J. Section 01 78 00 - Closeout Submittals: Project record documents, operation and maintenance data, warranties and bonds.
- K. Section 01 79 00 - Demonstration and Training: Demonstration of products and systems to be commissioned and where indicated in specific specification sections
- L. Section 01 91 13 - General Commissioning Requirements: Contractor's responsibilities in regard to commissioning.
- M. Section 02 4100 - Demolition: Demolition of whole structures and parts thereof; site utility demolition.
- N. Section 02 84 00 - Polychlorinate Biphenyl (PCB) Remediation: Removal of equipment containing substances regulated under the Federal Toxic Substances Control Act (TSCA), including but not limited to PCB- and mercury-containing equipment.
- O. Section 07 84 00 - Firestopping.
- P. Individual Product Specification Sections:
 - 1. Advance notification to other sections of openings required in work of those sections.
 - 2. Limitations on cutting structural members.

1.03 REFERENCE STANDARDS

- A. NFPA 241 - Standard for Safeguarding Construction, Alteration, and Demolition Operations; 2013.

1.04 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Survey work: Submit name, address, and telephone number of Surveyor before starting survey work.
 - 1. On request, submit documentation verifying accuracy of survey work.
 - 2. Submit a copy of site drawing signed by the Land Surveyor, that the elevations and locations of the work are in conformance with Contract Documents.
 - 3. Submit surveys and survey logs for the project record.
- C. Demolition Plan: Submit demolition plan as specified by OSHA and local authorities.
 - 1. Indicate extent of demolition, removal sequence, bracing and shoring, and location and construction of barricades and fences. Include design drawings and calculations for bracing and shoring.
 - 2. Identify demolition firm and submit qualifications.
 - 3. Include a summary of safety procedures.
- D. Cutting and Patching: Submit written request in advance of cutting or alteration that affects:
 - 1. Structural integrity of any element of Project.
 - 2. Integrity of weather exposed or moisture resistant element.
 - 3. Efficiency, maintenance, or safety of any operational element.
 - 4. Visual qualities of sight exposed elements.
 - 5. Work of Owner or separate Contractor.
 - 6. Include in request:
 - a. Identification of Project.
 - b. Location and description of affected work.
 - c. Necessity for cutting or alteration.
 - d. Description of proposed work and products to be used.
 - e. Alternatives to cutting and patching.
 - f. Effect on work of Owner or separate Contractor.
 - g. Written permission of affected separate Contractor.
 - h. Date and time work will be executed.
- E. Project Record Documents: Accurately record actual locations of capped and active utilities.

1.05 QUALIFICATIONS

- A. For demolition work, employ a firm specializing in the type of work required.
 - 1. Minimum of three (3) years of documented experience.
- B. For survey work, employ a land surveyor registered in the State in which the Project is located and acceptable to Engineer. Submit evidence of Surveyor's Errors and Omissions insurance coverage in the form of an Insurance Certificate.
- C. For field engineering, employ a professional engineer of the discipline required for specific service on Project, licensed in the State in which the Project is located.
- D. For design of temporary shoring and bracing, employ a Professional Engineer experienced in design of this type of work and licensed in the State in which the Project is located.

1.06 PROJECT CONDITIONS

- A. Use of explosives is not permitted.
- B. Grade site to drain. Maintain excavations free of water. Provide, operate, and maintain pumping equipment.
- C. Protect site from puddling or running water. Provide water barriers as required to protect site from soil erosion.

- D. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.
- E. Dust Control: Execute work by methods to minimize raising dust from construction operations. Provide positive means to prevent air-borne dust from dispersing into atmosphere and over adjacent property.
 - 1. Provide dust-proof enclosures to prevent entry of dust generated outdoors.
 - 2. Provide dust-proof barriers between construction areas and areas continuing to be occupied by Owner.
- F. Erosion and Sediment Control: Plan and execute work by methods to control surface drainage from cuts and fills, from borrow and waste disposal areas. Prevent erosion and sedimentation.
 - 1. Minimize amount of bare soil exposed at one time.
 - 2. Provide temporary measures such as berms, dikes, and drains, to prevent water flow.
 - 3. Construct fill and waste areas by selective placement to avoid erosive surface silts or clays.
 - 4. Periodically inspect earthwork to detect evidence of erosion and sedimentation; promptly apply corrective measures.
- G. Noise Control: Provide methods, means, and facilities to minimize noise produced by construction operations.
 - 1. At All Times: Excessively noisy tools and operations will not be tolerated inside the building at any time of day; excessively noisy includes jackhammers.
 - 2. Outdoors: Limit conduct of especially noisy exterior work to the hours of 8 am to 5 pm.
 - 3. Indoors: Limit conduct of especially noisy interior work to the hours of 6 pm to 7 am.
- H. Pest and Rodent Control: Provide methods, means, and facilities to prevent pests and insects from damaging the work.
 - 1. Pest Control Service: Weekly treatments.
- I. Rodent Control: Provide methods, means, and facilities to prevent rodents from accessing or invading premises.
- J. Pollution Control: Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations. Comply with federal, state, and local regulations.

1.07 COORDINATION

- A. See Section 01 10 00 for occupancy-related requirements.
- B. Coordinate scheduling, submittals, and work of the various sections of the Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements , with provisions for accommodating items installed later.
- C. Notify affected utility companies and comply with their requirements.
- D. Verify that utility requirements and characteristics of new operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- E. Coordinate space requirements, supports, and installation of mechanical and electrical work that are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- F. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.
- G. Coordinate completion and clean-up of work of separate sections.

- H. After Owner occupancy of premises, coordinate access to site for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

PART 2 PRODUCTS

2.01 PATCHING MATERIALS

- A. New Materials: As specified in product sections; match existing products and work for patching and extending work.
- B. Type and Quality of Existing Products: Determine by inspecting and testing products where necessary, referring to existing work as a standard.
- C. Product Substitution: For any proposed change in materials, submit request for substitution described in Section 01 60 00 - Product Requirements.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent work. Start of work means acceptance of existing conditions.
- B. Verify that existing substrate is capable of structural support or attachment of new work being applied or attached.
- C. Examine and verify specific conditions described in individual specification sections.
- D. Take field measurements before confirming product orders or beginning fabrication, to minimize waste due to over-ordering or misfabrication.
- E. Verify that utility services are available, of the correct characteristics, and in the correct locations.
- F. Prior to Cutting: Examine existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching. After uncovering existing work, assess conditions affecting performance of work. Beginning of cutting or patching means acceptance of existing conditions.

3.02 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.

3.03 PREINSTALLATION MEETINGS

- A. When required in individual specification sections, convene a preinstallation meeting at the site prior to commencing work of the section.
- B. Require attendance of parties directly affecting, or affected by, work of the specific section.
- C. Notify Engineer four days in advance of meeting date.
- D. Prepare agenda and preside at meeting:
 - 1. Review conditions of examination, preparation and installation procedures.
 - 2. Review coordination with related work.
- E. Record minutes and distribute copies within two days after meeting to participants, with two copies to Engineer, Owner, participants, and those affected by decisions made.

3.04 LAYING OUT THE WORK

- A. Verify locations of survey control points prior to starting work.
- B. Promptly notify Engineer of any discrepancies discovered.
- C. Owner will locate and protect survey control and reference points.
- D. Contractor shall locate and protect survey control and reference points.

- E. Control datum for survey is that established by Owner provided survey.
- F. Control datum for survey is that indicated on Drawings.
- G. Control datum for survey is TBD.
- H. Protect survey control points prior to starting site work; preserve permanent reference points during construction.
- I. Promptly report to Engineer the loss or destruction of any reference point or relocation required because of changes in grades or other reasons.
- J. Replace dislocated survey control points based on original survey control. Make no changes without prior written notice to Engineer.
- K. Utilize recognized engineering survey practices.
- L. Establish a minimum of two permanent bench marks on site, referenced to established control points. Record locations, with horizontal and vertical data, on project record documents.
- M. Establish elevations, lines and levels. Locate and lay out by instrumentation and similar appropriate means:
 - 1. Site improvements including pavements; stakes for grading, fill and topsoil placement; utility locations, slopes, and invert elevations.
 - 3. Building foundation, column locations, ground floor elevations.
- N. Periodically verify layouts by same means.
- O. Maintain a complete and accurate log of control and survey work as it progresses.
- P. On completion of foundation walls and major site improvements, prepare a certified survey illustrating dimensions, locations, angles, and elevations of construction and site work.

3.05 GENERAL INSTALLATION REQUIREMENTS

- A. In addition to compliance with regulatory requirements, conduct construction operations in compliance with NFPA 241, including applicable recommendations in Appendix A.
- B. Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to necessity for replacement.
- C. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
- D. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.
- E. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.
- F. Make neat transitions between different surfaces, maintaining texture and appearance.

3.06 ALTERATIONS

- A. Drawings showing existing construction and utilities are based on casual field observation and existing record documents only.
 - 1. Verify that construction and utility arrangements are as shown.
 - 2. Report discrepancies to Engineer before disturbing existing installation.
 - 3. Beginning of alterations work constitutes acceptance of existing conditions.
- B. Keep areas in which alterations are being conducted separated from other areas that are still occupied.
 - 1. Provide, erect, and maintain temporary dustproof partitions of construction specified in Section 01 50 00 in locations indicated on drawings.
 - 2. Provide sound retardant partitions of construction indicated on drawings in locations indicated on drawings.
- C. Maintain weatherproof exterior building enclosure except for interruptions required for replacement or modifications; take care to prevent water and humidity damage.

1. Where openings in exterior enclosure exist, provide construction to make exterior enclosure weatherproof.
 2. Insulate existing ducts or pipes that are exposed to outdoor ambient temperatures by alterations work.
- D. Remove existing work as indicated and as required to accomplish new work.
1. Remove rotted wood, corroded metals, and deteriorated masonry and concrete; replace with new construction specified.
 2. Remove items indicated on drawings.
 3. Relocate items indicated on drawings.
 4. Where new surface finishes are to be applied to existing work, perform removals, patch, and prepare existing surfaces as required to receive new finish; remove existing finish if necessary for successful application of new finish.
 5. Where new surface finishes are not specified or indicated, patch holes and damaged surfaces to match adjacent finished surfaces as closely as possible.
- E. Services (Including but not limited to HVAC, Plumbing, Fire Protection, Electrical, Telecommunications, and others deemed necessary): Remove, relocate, and extend existing systems to accommodate new construction.
1. Maintain existing active systems that are to remain in operation; maintain access to equipment and operational components; if necessary, modify installation to allow access or provide access panel.
 2. Where existing systems or equipment are not active and Contract Documents require reactivation, put back into operational condition; repair supply, distribution, and equipment as required.
 3. Where existing active systems serve occupied facilities but are to be replaced with new services, maintain existing systems in service until new systems are complete and ready for service.
 - a. Disable existing systems only to make switchovers and connections; minimize duration of outages.
 - b. See Section 01 1000 for other limitations on outages and required notifications.
 - c. Provide temporary connections as required to maintain existing systems in service.
 4. Verify that abandoned services serve only abandoned facilities.
 5. Remove abandoned pipe, ducts, conduits, and equipment, including those above accessible ceilings; remove back to source of supply where possible, otherwise cap stub and tag with identification; patch holes left by removal using materials specified for new construction.
- F. Protect existing work to remain.
1. Prevent movement of structure; provide shoring and bracing if necessary.
 2. Perform cutting to accomplish removals neatly and as specified for cutting new work.
 3. Repair adjacent construction and finishes damaged during removal work.
- G. Adapt existing work to fit new work: Make as neat and smooth transition as possible.
1. When existing finished surfaces are cut so that a smooth transition with new work is not possible, terminate existing surface along a straight line at a natural line of division and make recommendation to Engineer.
 2. Where removal of partitions or walls results in adjacent spaces becoming one, rework floors, walls, and ceilings to a smooth plane without breaks, steps, or bulkheads.
 3. Where a change of plane of 1/4 inch (6 mm) or more occurs in existing work, submit recommendation for providing a smooth transition for Engineer review and request instructions.
 4. Where a change of plane of 1/4 inch (6 mm) or more occurs in existing work.
 5. Trim existing wood doors as necessary to clear new floor finish. Refinish trim as required.

- H. Patching: Where the existing surface is not indicated to be refinished, patch to match the surface finish that existed prior to cutting. Where the surface is indicated to be refinished, patch so that the substrate is ready for the new finish.
- I. Refinish existing surfaces as indicated:
 1. Where rooms or spaces are indicated to be refinished, refinish all visible existing surfaces to remain to the specified condition for each material, with a neat transition to adjacent finishes.
 2. If mechanical or electrical work is exposed accidentally during the work, re-cover and refinish to match.
- J. Clean existing systems and equipment.
- K. Remove demolition debris and abandoned items from alterations areas and dispose of off-site; do not burn or bury.
- L. Do not begin new construction in alterations areas before demolition is complete.
- M. Comply with all other applicable requirements of this section.

3.07 CUTTING AND PATCHING

- A. Whenever possible, execute the work by methods that avoid cutting or patching.
- B. See Alterations article above for additional requirements.
- C. Perform whatever cutting and patching is necessary to:
 1. Complete the work.
 2. Fit products together to integrate with other work.
 3. Provide openings for penetration of mechanical, electrical, and other services.
 4. Match work that has been cut to adjacent work.
 5. Repair areas adjacent to cuts to required condition.
 6. Repair new work damaged by subsequent work.
 7. Remove samples of installed work for testing when requested.
 8. Remove and replace defective and non-conforming work.
- D. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing. In existing work, minimize damage and restore to original condition.
- E. Employ original installer to perform cutting for weather exposed and moisture resistant elements, and sight exposed surfaces.
- F. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.
- G. Restore work with new products in accordance with requirements of Contract Documents.
- H. Fit work air tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- I. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material in accordance with Section 07 8400, to full thickness of the penetrated element.
- J. Patching:
 1. Finish patched surfaces to match finish that existed prior to patching. On continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
 2. Match color, texture, and appearance.
 3. Repair patched surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. If defects are due to condition of substrate, repair substrate prior to repairing finish.

3.08 PROGRESS CLEANING

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.
- C. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
- D. Collect and remove waste materials, debris, and trash/rubbish from site periodically and dispose off-site; do not burn or bury.

3.09 PROTECTION OF INSTALLED WORK

- A. See Section 01 7610 for temporary protective covering materials.
- B. Protect installed work from damage by construction operations.
- C. Provide special protection where specified in individual specification sections.
- D. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- E. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
- F. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- G. Protect work from spilled liquids. If work is exposed to spilled liquids, immediately remove protective coverings, dry out work, and replace protective coverings.
- H. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- I. Prohibit traffic from landscaped areas.
- J. Remove protective coverings when no longer needed; reuse or recycle coverings if possible.

3.10 SYSTEM STARTUP

- A. Coordinate with requirements of Section 01 91 13 - General Commissioning Requirements.
- B. Coordinate schedule for start-up of various equipment and systems.
- C. Notify Engineer and owner seven days prior to start-up of each item.
- D. Verify that each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, and for conditions that may cause damage.
- E. Verify tests, meter readings, and specified electrical characteristics agree with those required by the equipment or system manufacturer.
- F. Verify that wiring and support components for equipment are complete and tested.
- G. Execute start-up under supervision of applicable Contractor personnel and manufacturer's representative in accordance with manufacturers' instructions.
- H. When specified in individual specification Sections, require manufacturer to provide authorized representative to be present at site to inspect, check, and approve equipment or system installation prior to start-up, and to supervise placing equipment or system in operation.
- I. Submit a written report that equipment or system has been properly installed and is functioning correctly.

3.11 DEMONSTRATION AND INSTRUCTION

- A. See Section 01 79 00 - Demonstration and Training.
- B. Demonstrate operation and maintenance of products to Owner's personnel two weeks prior to date of Substantial Completion.

- C. Demonstrate start-up, operation, control, adjustment, trouble-shooting, servicing, maintenance, and shutdown of each item of equipment at scheduled time, at equipment location.
- D. For equipment or systems requiring seasonal operation, perform demonstration for other season within six months.
- E. Provide a qualified person who is knowledgeable about the Project to perform demonstration and instruction of owner personnel.
- F. Perform instruction in a classroom environment.
- G. Utilize operation and maintenance manuals as basis for instruction. Review contents of manual with Owner's personnel in detail to explain all aspects of operation and maintenance.
- H. Prepare and insert additional data in operations and maintenance manuals when need for additional data becomes apparent during instruction.
- I. The amount of time required for instruction on each item of equipment and system is that specified in individual sections.

3.12 ADJUSTING

- A. Adjust operating products and equipment to ensure smooth and unhindered operation.
- B. Testing, adjusting, and balancing HVAC systems: See Section 23 05 93 - Testing, Adjusting, and Balancing for HVAC.

3.13 FINAL CLEANING

- A. Owner will provide comprehensive cleaning after final acceptance.
- B. Execute final cleaning prior to final project assessment.
 - 1. Clean areas to be occupied by Owner prior to final completion before Owner occupancy.
- C. Use cleaning materials that are nonhazardous.
- D. Clean interior and exterior glass, surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces.
- E. Remove all labels that are not permanent. Do not paint or otherwise cover fire test labels or nameplates on mechanical and electrical equipment.
- F. Clean equipment and fixtures to a sanitary condition with cleaning materials appropriate to the surface and material being cleaned.
- G. Clean filters of operating equipment.
- H. Clean debris from roofs, gutters, downspouts, scuppers, overflow drains, area drains, drainage systems, and all other areas.
- I. Clean site; sweep paved areas, rake clean landscaped surfaces.
- J. Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of in legal manner; do not burn or bury.
- K. Clean Owner-occupied areas of work.

3.14 CLOSEOUT PROCEDURES

- A. Make submittals that are required by governing or other authorities.
 - 1. Provide copies to Engineer.
 - 2. Provide copies to Owner.
 - 3. Provide copies to Engineer and Owner.
- B. Accompany Project Coordinator on preliminary inspection to determine items to be listed for completion or correction in the Contractor's Correction Punch List for Contractor's Notice of Substantial Completion.

- C. Notify Engineer when work is considered ready for Engineer's Substantial Completion inspection.
- D. Submit written certification containing Contractor's Correction Punch List, that Contract Documents have been reviewed, work has been inspected, and that work is complete in accordance with Contract Documents and ready for Engineer's Substantial Completion inspection.
- E. Owner will occupy all of the building as specified in Section 01 10 00.
- F. Conduct Substantial Completion inspection and create Final Correction Punch List containing Engineer's and Contractor's comprehensive list of items identified to be completed or corrected and submit to Engineer.
- G. Correct items of work listed in Final Correction Punch List and comply with requirements for access to Owner-occupied areas.
- H. Accompany Project Coordinator on Contractor's preliminary final inspection.
- I. Notify Engineer when work is considered finally complete and ready for Engineer's Substantial Completion final inspection.
- J. Complete items of work determined by Engineer listed in executed Certificate of Substantial Completion.

3.15 MAINTENANCE

- A. Provide service and maintenance of components indicated in specification sections.
- B. Maintenance Period: As indicated in specification sections or, if not indicated, not less than one year from the Date of Substantial Completion or the length of the specified warranty, whichever is longer.
- C. Examine system components at a frequency consistent with reliable operation. Clean, adjust, and lubricate as required.
- D. Include systematic examination, adjustment, and lubrication of components. Repair or replace parts whenever required. Use parts produced by the manufacturer of the original component.
- E. Maintenance service shall not be assigned or transferred to any agent or subcontractor without prior written consent of the Owner.

END OF SECTION

SECTION 01 74 19 - CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

PART 1 GENERAL

1.01 WASTE MANAGEMENT REQUIREMENTS

- A. Owner requires that this project generate the least amount of trash and waste possible.
- B. Employ processes that ensure the generation of as little waste as possible due to error, poor planning, breakage, mishandling, contamination, or other factors.
- C. Minimize trash/waste disposal in landfills; reuse, salvage, or recycle as much waste as economically feasible.
- D. Owner may decide to pay for additional recycling, salvage, and/or reuse based on Landfill Alternatives Proposal specified below.
- E. Required Recycling, Salvage, and Reuse: The following may not be disposed of in landfills or by incineration:
 - 1. Aluminum and plastic beverage containers.
 - 2. Corrugated cardboard.
 - 3. Wood pallets.
 - 4. Clean dimensional wood : May be used as blocking or furring.
 - 5. Land clearing debris, including brush, branches, logs, and stumps; see Section 31 10 00 - Site Clearing for use options.
 - 6. Concrete : May be crushed and used as riprap, aggregate, sub-base material, or fill.
 - 7. Bricks : May be used on project if whole, or crushed and used as landscape cover, sub-base material, or fill.
 - 8. Concrete masonry units : May be used on project if whole, or crushed and used as sub-base material or fill.
 - 9. Precast concrete panels : May be used for erosion control or landscape features.
 - 10. Asphalt paving : May be recycled into paving for project.
 - 11. Metals, including packaging banding, metal studs, sheet metal, structural steel, piping, reinforcing bars, door frames, and other items made of steel, iron, galvanized steel, stainless steel, aluminum, copper, zinc, lead, brass, and bronze.
 - 12. Glass.
 - 13. Gypsum drywall and plaster.
 - 14. Plastic buckets.
 - 15. Carpet, carpet cushion, carpet tile, and carpet remnants , both new and removed: DuPont (<http://flooring.dupont.com>) and Interface (www.interfaceinc.com) conduct reclamation programs.
 - 16. Asphalt roofing shingles.
 - 17. Paint.
 - 18. Plastic sheeting.
 - 19. Rigid foam insulation.
 - 20. Vinyl siding.
 - 21. Windows, doors, and door hardware.
 - 22. Plumbing fixtures.
 - 23. Mechanical and electrical equipment.
 - 24. Fluorescent lamps (light bulbs).
 - 25. Acoustical ceiling tile and panels.
- F. The following recycling incentive programs are mandatory for this project; Contractor is responsible for implementation as per the California Green-Building Code and relevant Municipal Codes.
- G. Owner shall make arrangements for salvage of the following materials:, TBD.

- H. Contractor shall submit periodic Waste Disposal Reports; all landfill disposal, incineration, recycling, salvage, and reuse must be reported regardless of to whom the cost or savings accrues; use the same units of measure on all reports.
- I. Contractor shall develop and follow a Waste Management Plan designed to implement these requirements.
- J. The following sources may be useful in developing the Waste Management Plan:
 - 1. State Recycling Department.
 - 2. Recycling Haulers and Markets: The attached list contains local haulers and markets for recyclable materials. This list is provided for information only and is not necessarily comprehensive; other haulers and markets are acceptable.
 - 3. Recycling Economics Information: The attached list contains information that may be useful in estimating the costs or savings or recycling options.
- K. Methods of trash/waste disposal that are not acceptable are:
 - 1. Burning on the project site.
 - 2. Burying on the project site.
 - 3. Dumping or burying on other property, public or private.
 - 4. Other illegal dumping or burying.
- L. Regulatory Requirements: Contractor is responsible for knowing and complying with regulatory requirements, including but not limited to Federal, state and local requirements, pertaining to legal disposal of all construction and demolition waste materials.

1.02 RELATED REQUIREMENTS

- A. Section 01 10 00 - Summary: List of items to be salvaged from the existing building for relocation in project or for Owner.
- B. Section 00 72 00 - General Conditions: Additional requirements for project meetings, reports, submittal procedures, and project documentation.
- C. Section 01 50 00 - Temporary Facilities and Controls: Additional requirements related to trash/waste collection and removal facilities and services.
- D. Section 01 60 00 - Product Requirements: Waste prevention requirements related to delivery, storage, and handling.
- E. Section 01 70 00 - Execution and Closeout Requirements: Trash/waste prevention procedures related to demolition, cutting and patching, installation, protection, and cleaning.
- F. Section 31 10 00 - Site Clearing: Handling and disposal of land clearing debris.

1.03 DEFINITIONS

- A. Clean: Untreated and unpainted; not contaminated with oils, solvents, caulk, or the like.
- B. Construction and Demolition Waste: Solid wastes typically including building materials, packaging, trash, debris, and rubble resulting from construction, remodeling, repair and demolition operations.
- C. Hazardous: Exhibiting the characteristics of hazardous substances, i.e., ignitibility, corrosivity, toxicity or reactivity.
- D. Nonhazardous: Exhibiting none of the characteristics of hazardous substances, i.e., ignitibility, corrosivity, toxicity, or reactivity.
- E. Nontoxic: Neither immediately poisonous to humans nor poisonous after a long period of exposure.
- F. Recyclable: The ability of a product or material to be recovered at the end of its life cycle and remanufactured into a new product for reuse by others.
- G. Recycle: To remove a waste material from the project site to another site for remanufacture into a new product for reuse by others.

- H. Recycling: The process of sorting, cleansing, treating and reconstituting solid waste and other discarded materials for the purpose of using the altered form. Recycling does not include burning, incinerating, or thermally destroying waste.
- I. Return: To give back reusable items or unused products to vendors for credit.
- J. Reuse: To reuse a construction waste material in some manner on the project site.
- K. Salvage: To remove a waste material from the project site to another site for resale or reuse by others.
- L. Sediment: Soil and other debris that has been eroded and transported by storm or well production run-off water.
- M. Source Separation: The act of keeping different types of waste materials separate beginning from the first time they become waste.
- N. Toxic: Poisonous to humans either immediately or after a long period of exposure.
- O. Trash: Any product or material unable to be reused, returned, recycled, or salvaged.
- P. Waste: Extra material or material that has reached the end of its useful life in its intended use. Waste includes salvageable, returnable, recyclable, and reusable material.

1.04 SUBMITTALS

- A. See Section 00 72 00 - General Conditions, for submittal procedures.
- B. Sustainable Design Documentation: Submit Landfill Alternatives Proposal, Waste Management Plan, and Waste Disposal Reports in accordance with procedures specified in Section 01 33 29.
- C. Landfill Alternatives Proposal: Within 10 calendar days after receipt of Notice of Award of Bid, or prior to any trash or waste removal, whichever occurs sooner, submit a projection of trash/waste that will require disposal and alternatives to landfilling, with net costs.
 - 1. Submit to Engineer for Owner's review and approval.
 - 2. If Owner wishes to implement any cost alternatives, the Contract Price will be adjusted as specified elsewhere.
 - 3. Include an analysis of trash/waste to be generated and landfill options as specified for Waste Management Plan described below.
 - 4. Describe as many alternatives to landfilling as possible:
 - a. List each material proposed to be salvaged, reused, or recycled.
 - b. List the proposed local market for each material.
 - c. State the estimated net cost resulting from each alternative, after subtracting revenue from sale of recycled or salvaged materials and landfill tipping fees saved due to diversion of materials from the landfill.
 - 5. Provide alternatives to landfilling for at least the following materials:
 - a. Aluminum and plastic beverage containers.
 - b. Corrugated cardboard.
 - c. Wood pallets.
 - d. Clean dimensional wood.
 - e. Land clearing debris, including brush, branches, logs, and stumps.
 - f. Concrete.
 - g. Bricks.
 - h. Concrete masonry units.
 - i. Precast concrete panels.
 - j. Asphalt paving.
 - k. Metals, including packaging banding, metal studs, sheet metal, structural steel, piping, reinforcing bars, door frames, and other items made of steel, iron, galvanized steel, stainless steel, aluminum, copper, zinc, lead, brass, and bronze.
 - l. Glass.
 - m. Gypsum drywall and plaster.

- n. Plastic buckets.
 - o. Carpet, carpet cushion, carpet tile, and carpet remnants , both new and removed: DuPont (<http://flooring.dupont.com>) and Interface (www.interfaceinc.com) conduct reclamation programs.
 - p. Asphalt roofing shingles.
 - q. Paint.
 - r. Plastic sheeting.
 - s. Rigid foam insulation.
 - t. Vinyl siding.
 - u. Windows, doors, and door hardware.
 - v. Plumbing fixtures.
 - w. Mechanical and electrical equipment.
 - x. Fluorescent lamps (light bulbs).
 - y. Acoustical ceiling tile and panels.
- D. Once Owner has determined which of the landfill alternatives addressed in the Proposal above are acceptable, prepare and submit Waste Management Plan; submit within 10 calendar days after notification by Engineer.
- E. Submit Waste Management Plan within 10 calendar days after receipt of Notice of Award of Bid, or prior to any trash or waste removal, whichever occurs sooner; submit projection of all trash and waste that will require disposal and alternatives to landfilling.
- F. Waste Management Plan: Include the following information:
1. Analysis of the trash and waste projected to be generated during the entire project construction cycle, including types and quantities.
 2. Landfill Options: The name, address, and telephone number of the landfill(s) where trash/waste will be disposed of, the applicable landfill tipping fee(s), and the projected cost of disposing of all project trash/waste in the landfill(s).
 3. Landfill Alternatives: List all waste materials that will be diverted from landfills by reuse, salvage, or recycling.
 - a. List each material proposed to be salvaged, reused, or recycled.
 - b. List the local market for each material.
 - c. State the estimated net cost, versus landfill disposal.
 4. Meetings: Describe regular meetings to be held to address waste prevention, reduction, recycling, salvage, reuse, and disposal.
 5. Materials Handling Procedures: Describe the means by which materials to be diverted from landfills will be protected from contamination and prepared for acceptance by designated facilities; include separation procedures for recyclables, storage, and packaging.
 6. Transportation: Identify the destination and means of transportation of materials to be recycled; i.e. whether materials will be site-separated and self-hauled to designated centers, or whether mixed materials will be collected by a waste hauler.
 7. Recycling Incentives: Describe procedures required to obtain credits, rebates, or similar incentives.
- G. Waste Disposal Reports: Submit at specified intervals, with details of quantities of trash and waste, means of disposal or reuse, and costs; show both totals to date and since last report.
1. Submit updated Report with each Application for Progress Payment; failure to submit Report will delay payment.
 2. Submit Report on a form acceptable to Owner.
 3. Landfill Disposal: Include the following information:
 - a. Identification of material.
 - b. Amount, in tons or cubic yards (cubic meters), of trash/waste material from the project disposed of in landfills.

- c. State the identity of landfills, total amount of tipping fees paid to landfill, and total disposal cost.
 - d. Include manifests, weight tickets, receipts, and invoices as evidence of quantity and cost.
4. Incinerator Disposal: Include the following information:
 - a. Identification of material.
 - b. Amount, in tons or cubic yards (cubic meters), of trash/waste material from the project delivered to incinerators.
 - c. State the identity of incinerators, total amount of fees paid to incinerator, and total disposal cost.
 - d. Include manifests, weight tickets, receipts, and invoices as evidence of quantity and cost.
 5. Recycled and Salvaged Materials: Include the following information for each:
 - a. Identification of material, including those retrieved by installer for use on other projects.
 - b. Amount, in tons or cubic yards (cubic meters), date removed from the project site, and receiving party.
 - c. Transportation cost, amount paid or received for the material, and the net total cost or savings of salvage or recycling each material.
 - d. Include manifests, weight tickets, receipts, and invoices as evidence of quantity and cost.
 - e. Certification by receiving party that materials will not be disposed of in landfills or by incineration.
 6. Material Reused on Project: Include the following information for each:
 - a. Identification of material and how it was used in the project.
 - b. Amount, in tons or cubic yards (cubic meters).
 - c. Include weight tickets as evidence of quantity.
 7. Other Disposal Methods: Include information similar to that described above, as appropriate to disposal method.
- H. Recycling Incentive Programs:
1. Where revenue accrues to Contractor, submit copies of documentation required to qualify for incentive.
 2. Where revenue accrues to Owner, submit any additional documentation required by Owner in addition to information provided in periodic Waste Disposal Report.

PART 2 PRODUCTS

2.01 PRODUCT SUBSTITUTIONS

- A. See Section 01 60 00 - Product Requirements for substitution submission procedures.
- B. For each proposed product substitution, submit the following information in addition to requirements specified in Section 01 60 00:
 1. Relative amount of waste produced, compared to specified product.
 2. Cost savings on waste disposal, compared to specified product, to be deducted from the Contract Price.
 3. Proposed disposal method for waste product.
 4. Markets for recycled waste product.

PART 3 EXECUTION

3.01 WASTE MANAGEMENT PROCEDURES

- A. See Section 01 10 00 for list of items to be salvaged from the existing building for relocation in project or for Owner.
- B. See Section 01 30 00 for additional requirements for project meetings, reports, submittal procedures, and project documentation.

- C. See Section 01 50 00 for additional requirements related to trash/waste collection and removal facilities and services.
- D. See Section 01 60 00 for waste prevention requirements related to delivery, storage, and handling.
- E. See Section 01 70 00 for trash/waste prevention procedures related to demolition, cutting and patching, installation, protection, and cleaning.

3.02 WASTE MANAGEMENT PLAN IMPLEMENTATION

- A. Manager: Designate an on-site person or persons responsible for instructing workers and overseeing and documenting results of the Waste Management Plan.
- B. Communication: Distribute copies of the Waste Management Plan to job site foreman, each subcontractor, Owner, and Engineer.
- C. Instruction: Provide on-site instruction of appropriate separation, handling, and recycling, salvage, reuse, and return methods to be used by all parties at the appropriate stages of the project.
- D. Meetings: Discuss trash/waste management goals and issues at project meetings.
 - 1. Pre-bid meeting.
 - 2. Pre-construction meeting.
 - 3. Regular job-site meetings.
 - 4. Job safety meetings.
- E. Facilities: Provide specific facilities for separation and storage of materials for recycling, salvage, reuse, return, and trash disposal, for use by all contractors and installers.
 - 1. As a minimum, provide:
 - a. Separate area for storage of materials to be reused on-site, such as wood cut-offs for blocking.
 - b. Separate dumpsters for each category of recyclable.
 - c. Recycling bins at worker lunch area.
 - 2. Provide containers as required.
 - 3. Provide temporary enclosures around piles of separated materials to be recycled or salvaged.
 - 4. Provide materials for barriers and enclosures that are nonhazardous, recyclable, or reusable to the maximum extent possible; reuse project construction waste materials if possible.
 - 5. Locate enclosures out of the way of construction traffic.
 - 6. Provide adequate space for pick-up and delivery and convenience to subcontractors.
 - 7. If an enclosed area is not provided, clearly lay out and label a specific area on-site.
 - 8. Keep recycling and trash/waste bin areas neat and clean and clearly marked in order to avoid contamination of materials.
- F. Hazardous Wastes: Separate, store, and dispose of hazardous wastes according to applicable regulations.
- G. Recycling: Separate, store, protect, and handle at the site identified recyclable waste products in order to prevent contamination of materials and to maximize recyclability of identified materials. Arrange for timely pickups from the site or deliveries to recycling facility in order to prevent contamination of recyclable materials.
- H. Reuse of Materials On-Site: Set aside, sort, and protect separated products in preparation for reuse.
- I. Salvage: Set aside, sort, and protect products to be salvaged for reuse off-site.

END OF SECTION

SECTION 01 76 10 - TEMPORARY PROTECTIVE COVERINGS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Temporary protective coverings for installed floors, walls, other surfaces.

1.02 RELATED REQUIREMENTS

- A. Section 01 70 00 - Execution and Closeout Requirements: Coordination of requirements for materials specified in this section.

1.03 REFERENCE STANDARDS

- A. ANSI A135.4 - American National Standard for Basic Hardboard; 2012.
- B. ASTM C208 - Standard Specification for Cellulosic Fiber Insulating Board; 2012.
- C. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2016.
- D. ASTM E96/E96M - Standard Test Methods for Water Vapor Transmission of Materials; 2014.
- E. NFPA 701 - Standard Methods of Fire Tests for Flame Propagation of Textiles and Films; 2015.

1.04 SUBMITTALS

- A. See Section 02 72 00 - General Conditions for submittal procedures.
- B. Product Data: Provide data on specified products, describing physical and performance characteristics; including sizes available; and installation instructions.
- C. Shop Drawings: Indicate existing finished surfaces to be protected.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Temporary Protective Coverings:
 - 1. Fortifiber Building Systems Group; fortifiber.com.
 - 2. Protex Products ; www.protex-products.com.
 - 3. Surface Shields, Inc ; www.surfaceshields.com.
- B. Substitutions: See Section 01 60 00 - Product Requirements.

2.02 GENERAL

- A. Provide materials that are easily removed without damage to the surfaces covered and with the following characteristics:
 - 1. Water resistant.
 - 2. Vapor permeable.
 - 3. Impact resistant.
 - 4. Slip resistant.
 - 5. Flame retardant.

2.03 MATERIALS

- A. Sheet Materials :
 - 1. Corrugated polypropylene sheet.
 - 2. Recycled paperboard/plastic composite sheet.
 - 3. Recycled paperboard sheet.
 - 4. Wood Hardboard: ANSI A135.4, tempered, 1/4 inch (6 mm) thick nominal.
 - 5. Plywood, 1/2 inch (13 mm) thick nominal.
 - 6. Fiberboard: ASTM C208, 1/2 inch (13 mm) thick nominal.
 - 7. Water Vapor Permeability: tested in accordance with ASTM E96/E96M.
 - 8. Flame Retardance: Meet requirements of NFPA 701.

9. Surface Burning Characteristics: Maximum flame spread index of 25 and smoke developed index of 450; when system tested in accordance with ASTM E84.
- B. Rolled Materials :
1. Self-adhering polyethylene film.
 2. Recycled cellulose fiberboard paper.
 3. Laminated glass fiber reinforced kraft paper.
 4. Rosin coated paper.
 5. Roll Width: TBD
 6. Thickness: TBD
 7. Water Vapor Permeability: tested in accordance with ASTM E96/E96M.
 8. Flame Retardance: Meet requirements of NFPA 701.
 9. Surface Burning Characteristics: Maximum flame spread index of 25 and smoke developed index of 450; when system tested in accordance with ASTM E84.
- C. Corner and Door Jamb Protection Materials:
1. Cardboard, shaped specifically for application.
 2. PVC plastic.
- D. Tape: Type recommended by protective covering material manufacturer.

PART 3 EXECUTION

3.01 PREPARATION

- A. Remove dirt and debris from surfaces to be protected.

3.02 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Trim or overlap sheet materials to fit area to be covered.
- C. Roll out and cut rolled materials to fit area to be covered.
- D. Tape seams. Avoid taping directly to finished surfaces.
- E. Stretch self-adhering film materials to completely cover surface.
- F. Install door jamb protection to full height of opening.
- G. Position corner protection

3.03 REMOVAL

- A. Remove protective coverings prior to Date of Substantial Completion. Reuse or recycle materials if possible.

END OF SECTION

SECTION 01 78 00 - CLOSEOUT SUBMITTALS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Project Record Documents.
- B. Operation and Maintenance Data.
- C. Warranties and bonds.

1.02 RELATED REQUIREMENTS

- A. Section 00 72 00 - General Conditions and 00 50 0 - Performance bond and 00 50 02 – Payment Bond (labor and material payment bonds, warranty, and correction of work.)
- B. Section 00 72 00 - General Conditions: Submittals procedures, shop drawings, product data, and samples.
- C. Section 01 70 00 - Execution and Closeout Requirements: Contract closeout procedures.
- D. Individual Product Sections: Specific requirements for operation and maintenance data.
- E. Individual Product Sections: Warranties required for specific products or Work.

1.03 SUBMITTALS

- A. Project Record Documents: Submit documents to Engineer with claim for final Application for Payment.
- B. Operation and Maintenance Data:
 - 1. Submit **two** copies of preliminary draft or proposed formats and outlines of contents before start of Work. Engineer will review draft and return one copy with comments.
 - 2. For equipment, or component parts of equipment put into service during construction and operated by Owner, submit completed documents within ten days after acceptance.
 - 3. Submit one copy of completed documents 15 days prior to final inspection. This copy will be reviewed and returned after final inspection, with Engineer comments. Revise content of all document sets as required prior to final submission.
 - 4. Submit two sets of revised final documents in final form within 10 days after final inspection.
- C. Warranties and Bonds:
 - 1. For equipment or component parts of equipment put into service during construction with Owner's permission, submit documents within 10 days after acceptance.
 - 2. Make other submittals within 10 days after Date of Substantial Completion, prior to final Application for Payment.
 - 3. For items of Work for which acceptance is delayed beyond Date of Substantial Completion, submit within 10 days after acceptance, listing the date of acceptance as the beginning of the warranty period.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 PROJECT RECORD DOCUMENTS

- A. Maintain on site one set of the following record documents; record actual revisions to the Work:
 - 1. Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change Orders and other modifications to the Contract.
 - 5. Reviewed shop drawings, product data, and samples.
 - 6. Manufacturer's instruction for assembly, installation, and adjusting.
- B. Ensure entries are complete and accurate, enabling future reference by Owner.

- C. Store record documents separate from documents used for construction.
- D. Record information concurrent with construction progress.
- E. Specifications: Legibly mark and record at each product section description of actual products installed, including the following:
 - 1. Manufacturer's name and product model and number.
 - 2. Product substitutions or alternates utilized.
 - 3. Changes made by Addenda and modifications.
- F. Record Drawings and Shop Drawings: Legibly mark each item to record actual construction including:
 - 1. Measured depths of foundations in relation to finish first floor datum.
 - 2. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
 - 3. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
 - 4. Field changes of dimension and detail.
 - 5. Details not on original Contract drawings.

3.02 OPERATION AND MAINTENANCE DATA

- A. Source Data: For each product or system, list names, addresses and telephone numbers of Subcontractors and suppliers, including local source of supplies and replacement parts.
- B. Product Data: Mark each sheet to clearly identify specific products and component parts, and data applicable to installation. Delete inapplicable information.
- C. Drawings: Supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Do not use Project Record Documents as maintenance drawings.
- D. Typed Text: As required to supplement product data. Provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions.

3.03 OPERATION AND MAINTENANCE DATA FOR MATERIALS AND FINISHES

- A. For Each Product, Applied Material, and Finish:
 - 1. Product data, with catalog number, size, composition, and color and texture designations.
 - 2. Information for re-ordering custom manufactured products.
- B. Instructions for Care and Maintenance: Manufacturer's recommendations for cleaning agents and methods, precautions against detrimental cleaning agents and methods, and recommended schedule for cleaning and maintenance.
- C. Moisture protection and weather-exposed products: Include product data listing applicable reference standards, chemical composition, and details of installation. Provide recommendations for inspections, maintenance, and repair.
- D. Additional information as specified in individual product specification sections.
- E. Where additional instructions are required, beyond the manufacturer's standard printed instructions, have instructions prepared by personnel experienced in the operation and maintenance of the specific products.

3.04 OPERATION AND MAINTENANCE DATA FOR EQUIPMENT AND SYSTEMS

- A. For Each Item of Equipment and Each System:
 - 1. Description of unit or system, and component parts.
 - 2. Identify function, normal operating characteristics, and limiting conditions.
 - 3. Include performance curves, with engineering data and tests.
 - 4. Complete nomenclature and model number of replaceable parts.
- B. Where additional instructions are required, beyond the manufacturer's standard printed instructions, have instructions prepared by personnel experienced in the operation and maintenance of the specific products.

- C. Panelboard Circuit Directories: Provide electrical service characteristics, controls, and communications; typed.
- D. Include color coded wiring diagrams as installed.
- E. Operating Procedures: Include start-up, break-in, and routine normal operating instructions and sequences. Include regulation, control, stopping, shut-down, and emergency instructions. Include summer, winter, and any special operating instructions.
- F. Maintenance Requirements: Include routine procedures and guide for preventative maintenance and trouble shooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.
- G. Provide servicing and lubrication schedule, and list of lubricants required.
- H. Include manufacturer's printed operation and maintenance instructions.
- I. Include sequence of operation by controls manufacturer.
- J. Provide original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
- K. Provide control diagrams by controls manufacturer as installed.
- L. Provide Contractor's coordination drawings, with color coded piping diagrams as installed.
- M. Provide charts of valve tag numbers, with location and function of each valve, keyed to flow and control diagrams.
- N. Provide list of original manufacturer's spare parts, current prices, and recommended quantities to be maintained in storage.
- O. Include test and balancing reports.
- P. Additional Requirements: As specified in individual product specification sections.

3.05 ASSEMBLY OF OPERATION AND MAINTENANCE MANUALS

- A. Assemble operation and maintenance data into durable manuals for Owner's personnel use, with data arranged in the same sequence as, and identified by, the specification sections.
- B. Where systems involve more than one specification section, provide separate tabbed divider for each system.
- C. Binders: Commercial quality, 8-1/2 by 11 inch (216 by 280 mm) three D side ring binders with durable plastic covers; 2 inch (50 mm) maximum ring size. When multiple binders are used, correlate data into related consistent groupings.
- D. Cover: Identify each binder with typed or printed title OPERATION AND MAINTENANCE INSTRUCTIONS; identify title of Project; identify subject matter of contents.
- E. Project Directory: Title and address of Project; names, addresses, and telephone numbers of Engineer, Consultants, Contractor and subcontractors, with names of responsible parties.
- F. Tables of Contents: List every item separated by a divider, using the same identification as on the divider tab; where multiple volumes are required, include all volumes Tables of Contents in each volume, with the current volume clearly identified.
- G. Dividers: Provide tabbed dividers for each separate product and system; identify the contents on the divider tab; immediately following the divider tab include a description of product and major component parts of equipment.
- H. Text: Manufacturer's printed data, or typewritten data on 20 pound paper.
- I. Drawings: Provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.
- J. Arrangement of Contents: Organize each volume in parts as follows:
 1. Project Directory.
 2. Table of Contents, of all volumes, and of this volume.
 3. Operation and Maintenance Data: Arranged by system, then by product category.

- a. Source data.
 - b. Product data, shop drawings, and other submittals.
 - c. Operation and maintenance data.
 - d. Field quality control data.
 - e. Photocopies of warranties and bonds.
4. Design Data: To allow for addition of design data furnished by Engineer or others, provide a tab labeled "Design Data" and provide a binder large enough to allow for insertion of at least 20 pages of typed text.

3.06 WARRANTIES AND BONDS

- A. Obtain warranties and bonds, executed in duplicate by responsible Subcontractors, suppliers, and manufacturers, within 10 days after completion of the applicable item of work. Except for items put into use with Owner's permission, leave date of beginning of time of warranty until Date of Substantial completion is determined.
- B. Verify that documents are in proper form, contain full information, and are notarized.
- C. Co-execute submittals when required.
- D. Retain warranties and bonds until time specified for submittal.
- E. Include originals of each in operation and maintenance manuals, indexed separately on Table of Contents.
- F. Manual: Bind in commercial quality 8-1/2 by 11 inch (216 by 279 mm) three D side ring binders with durable plastic covers.
- G. Cover: Identify each binder with typed or printed title WARRANTIES AND BONDS, with title of Project; name, address and telephone number of Contractor and equipment supplier; and name of responsible company principal.
- H. Table of Contents: Neatly typed, in the sequence of the Table of Contents of the Project Manual, with each item identified with the number and title of the specification section in which specified, and the name of product or work item.
- I. Separate each warranty or bond with index tab sheets keyed to the Table of Contents listing. Provide full information, using separate typed sheets as necessary. List Subcontractor, supplier, and manufacturer, with name, address, and telephone number of responsible principal.

END OF SECTION

SECTION 02 20 00 – EARTHWORK

PART 1- GENERAL

A. DESCRIPTION

This section includes all earthwork operations necessary to perform site grading, excavation for structures and foundations, construction of subgrade for sidewalks and road sections, all as indicated on the Contract Drawings and specified herein.

The Contractor shall perform all earthwork necessary to execute the required work. The earthwork and grading shall include the removal and disposal of all deleterious and excess materials of whatever nature encountered, which may include rock and excess common excavation, including all obstructions that would interfere with the proper construction and completion of the work.

The Contractor shall dispose of all excess excavated material at his own expense and in accordance with an approved hauling plan.

No payment will be made for unauthorized excavated and fill material exceeding the contract lines and grades.

B. RELATED WORK SPECIFIED ELSEWHERE

1. Protecting Existing Underground Utilities: 020120.
2. General Concrete Construction: 030000.

C. SUBMITTALS

1. Compaction density test reports.

D. TESTING FOR COMPACTION

1. The City's Geotechnical Consultant will test for compaction and relative density as described below:
 - The standard test used to define water content and dry unit weight of soils (compaction curve) shall be the ASTM Test Procedure D 1557, unless designated otherwise.
 - In-place measured soil densities shall be expressed as a relative compaction. "Relative compaction" is the ratio, expressed as a percentage, of the in-place dry density to the laboratory maximum dry density
 - Determine the density of soil in place by the sand cone method, ASTM D 1556 or by nuclear methods, ASTM D 2922 and D 3017. Compaction tests will be performed for each lift or layer. If nuclear methods are used for in-place density determination, the compaction test results for maximum dry density and optimum water content shall be adjusted in accordance with ASTM D 4718. This will be required for determination of percent relative compaction and moisture variation from optimum.

PART 2 - MATERIALS

A. EARTH FILL MATERIAL

Earth fill material used for grading operations shall be site-cut material that is free from organic matter, roots, debris, and rocks larger than 3 inches in the greatest dimension.

B. AGGREGATE BASE (SIDEWALK, CURB-AND-GUTTER, CROSS-GUTTER)

See City of Irvine standard details and Specification Section 03000.

C. AGGREGATE BASE (AC PAVEMENT SECTION/TRENCH REPAIR)

See Specification Section 025200.

D. CONSTRUCTION WATER FOR COMPACTION

Water shall be free of organic materials. Provide all water needed for earthwork. Provide means to convey water from the source to the point of use. Provide means to meter water if taken from a city pipeline. See Specification Section 01500 for additional requirements regarding construction water.

PART 3 - EXECUTION

A. SITE EXAMINATION AND PREPARATION

1. Verify that survey benchmarks, construction stakes, and intended elevations for the Work are as indicated.
2. Identify required lines, levels, contours, and datum.
3. Locate, identify, and protect known utilities from damage.

B. PAVEMENT , SPANDRELS, CURB, GUTTER & SIDEWALK REMOVAL

1. Pavement, spandrels, curb, gutter & sidewalk shall be cut prior to breaking out and removal. Portland Cement Concrete shall be sawcut. Concrete sidewalks, curb, gutters and driveways which must be removed to pursue the work shall be sawcut to the nearest score marks. Asphalt concrete may be sawcut, wheel cut, or cut with a spade, except that if the cuts are not satisfactory, the contractor will be required to use a diamond saw to cut the asphalt concrete. Sawcutting slurry shall be vacuumed up at the same time the cutting is occurring. The dust and slurry shall be removed from the site by vacuuming and not washed or dumped into City sewers or storm drains or left to sit in the street or gutters.
2. If there is a possibility of a narrow section of pavement breaking out between the excavation and a nearby crack or joint, the pavement shall be removed to the crack or joint to create a clean, straight edge. Where the pavement edges have raveled or broken out in an irregular fashion due to construction operations, the Contractor shall square off the pavement edges to provide a neat and regular appearance, in accordance with the direction of the Engineer. All trimmed edges shall have a straight and vertical face at least 1 ½" deep prior to resurfacing. All extra cutting and trimming to square off the pavement edges shall be considered included in the contract unit prices paid for the various items of work in which pavement must be removed and replaced and no additional compensation will be allowed therefor.

C. SITE GRADING

1. The subgrade shall be cut to grade and proof rolled in order to detect isolated unstable areas. Any areas found to be yielding shall be stabilized. If unstable soils are encountered at any time during the grading operation, stabilization will be required prior to placement of aggregate base. Stabilization, if required, shall consist of removing soft, spongy or otherwise unsuitable materials to firm unyielding soil and backfilling with crushed aggregate base.
2. Prior to finish grading, verify debris, roots, branches, stones, in excess of 1/2 inch in size have been removed. Remove soil contaminated with petroleum products. Verify subgrade has been contoured and compacted

D. PREPARATION FOR PLACING EARTH FILL AND AGGREGATE BASE COURSE

1. Prepare subgrade prior to placing earth fill and aggregate base course materials.
2. Scarify native material and compact to relative compactions indicated in City of Irvine Standard Details and Street Specifications.

E. PLACING FILL AND AGGREGATE BASE COURSE

1. Place backfill in maximum 6-inch lifts and compact each lift to relative compactions specified in Standard Details and/or General Notes.
2. Employ a placement method that does not disturb or damage other work.
3. Systematically fill to allow maximum time for natural settlement. Do not fill over porous, wet, or spongy subgrade surfaces.
4. Maintain optimum moisture content of fill materials to attain required compaction density.
5. Remove unused stockpiled materials; leave area in a clean and neat condition. Grade stockpile area to prevent standing surface water.

F. TOLERANCES

Immediately before placing subsequent layers of material, prepare the grading plane to comply with the following:

1. Where PCC base or pavement is to be placed, the grading plane must not extend above the grade established by the Engineer.
2. If material to be placed on the grading plane is paid by the cubic yard, the grading plane at any point must be within 0.05 foot above the grade established by the Engineer.
3. If subbase or base material to be placed on the grading plane is paid by the ton, the grading plane at any point must be within 0.10 foot above the grade established by the Engineer.

END OF SECTION

SECTION 02 41 13 – SELECTIVE SITE DEMOLITION

PART 1 – GENERAL

1.1 SUMMARY

- A. This section includes the following:
 - 1. Demolition of designated elements.
 - 2. Demolition and removal of pavements, concrete, curb and gutter.
 - 3. Disposal of demolished materials.
- B. Related Documents: The Contract Documents, as defined in Section 01100 – Summary of Work, apply to the Work of this Section. Additional requirements and information necessary to complete the Work of this Section may be found in other Documents.
- C. Related Sections:
 - 1. Section 017419 – Construction Waste Management Disposal
 - 2. Section 015000 - Temporary Facilities and Controls: Temporary protection and barriers. Removal and disposal of demolished materials. Coordination of temporary utilities.
 - 3. Section 311000 - Site Clearing: Clearing outside periphery of structures.

1.2 QUALITY ASSURANCE

- A. Regulatory Requirements:
 - 1. Conform to applicable local code for demolition of structures, safety of adjacent buildings and structures, dust control and runoff control.
 - 2. Obtain required permits and licenses from authorities having jurisdiction. Pay associated fees including disposal charges.
 - 3. Notify affected utility companies before starting work and comply with utility company requirements.
 - 4. Do not close or obstruct roadways, sidewalks or fire hydrants without permits.
 - 5. Barricade and mark hazards as necessary.
 - 6. Conform to applicable regulatory procedures when discovering hazardous or contaminated materials. Do not commence removals, remediation, or abatement without authorization from the Engineer.

1.3 PROJECT CONDITIONS

- A. Existing Conditions:
- B.
 - 1. Unless otherwise indicated in the Contract Documents or specified by the Engineer, remove items of salvageable value to Contractor from project site and structure Storage of removed items on project site not permitted.
 - 2. Burning or fires on any nature not permitted unless otherwise noted.
 - 3. Explosives are not permitted on site.

PART 2 – PRODUCTS

2.1 FILL MATERIALS

- A. Not Applicable

PART 3 – EXECUTION

3.1 EXAMINATION

- A. Section 017933 – Execution: Verification of existing conditions before starting work.
- B. Site Verification of Conditions: Verify that field measurements, surfaces, substrates, and conditions are as required, and ready to receive Work.
- C. By beginning Work, Contractor accepts conditions and assumes responsibility for correction unsuitable conditions encountered at no additional cost to City.

3.2 PREPARATION

- A. Provide, erect, and maintain erosion control devices, dust control measures, temporary barriers, and security devices at locations indicated on Drawings and as specified in Section 015000 – Temporary Facilities and Controls.
- B. Protect appurtenances and structures which are not indicated to be demolished during the Work of this Section, repair damage caused by demolition operations at no additional cost to the City.
- C. Mark location of utilities. Protect and maintain, in safe and operable condition, utilities to remain. Provide temporary services during interruptions to existing utilities acceptable to governing authorities and City.
- D. Clear areas around items and structures indicated to be demolished as specified in Section 311000.

3.3 CONSTRUCTION

- A. Demolition Requirements:
 - 1. Conduct demolition to minimize interference with adjacent structures or pavements.
 - 2. Stop operations immediately if adjacent structures appear to be in danger. Notify the Engineer immediately. Do not resume operation until directed by the Engineer.
 - 3. Conduct operations with minimum interference to public or private access. Maintain access and egress at all times.
 - 4. Obtain written permission from adjacent property owners when demolition equipment will traverse, infringe upon, or limit access to their property.
 - 5. Sprinkle soil and demolition work area with water to minimize dust. Provide hoses and water connections for this purpose. Comply with AQMD standards.
 - 6. Comply with governing regulations pertaining to environmental protection.
 - 7. Clean adjacent structures and improvements of dust, dirt, and debris caused by

demolition operations. Return adjacent areas to its condition prior to start of work.

B. Demolition:

1. Disconnect and remove designated utilities within demolition areas.
2. Proceed with demolition in systematic manner, from top of structure to ground.
3. Locate demolition equipment and remove materials using procedures to prevent excessive loading to supporting walls, floors, or framing.
4. Demolish paving in small sections. Break up concrete slabs-on-grade.

C. Filling Voids:

1. Completely fill below grade areas and voids existing or resulting from demolition or removal of structures (pits, wells, cisterns, etc.) using approved select fill materials consisting of stone, gravel, and sand free from debris, trash, frozen materials, roots, other organic matter.
2. Remove standing water, frost, frozen, or unsuitable material, trash, and debris from areas to be filled before fill placement.
3. Grade surface to match adjacent grades and to provide flow of surface drainage after fill placement and compaction.

D. Disposal of Demolished Materials:

1. Collect, recycle, reuse and dispose of demolished materials as specified in Section 017419 – Construction Waste Management Disposal

END OF SECTION

SECTION 02 41 19 - SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

Section Includes:

Demolition and removal of selected portions of building or structure.

1.3 DEFINITIONS

Remove: Detach items from existing construction and legally dispose of them off-site unless indicated to be removed and salvaged or removed and reinstalled.

Remove and Salvage: Carefully detach from existing construction, in a manner to prevent damage, and deliver to Owner ready for reuse.

1.4 MATERIALS OWNERSHIP

Unless otherwise indicated, demolition waste becomes property of Contractor.

1.5 INFORMATIONAL SUBMITTALS

Proposed Protection Measures: Submit report, including drawings, that indicates the measures proposed for protecting individuals and property for environmental protection for dust control. Indicate proposed locations and construction of barriers.

1.6 FIELD CONDITIONS

Owner will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.

Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical. Notify Architect of discrepancies between existing conditions and Drawings before proceeding with selective demolition.

Hazardous Materials: It is not expected that hazardous materials will be encountered in the Work.

Hazardous materials will be removed by Owner before start of the Work.

Storage or sale of removed items or materials on-site is not permitted.

Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.

Maintain fire-protection facilities in service during selective demolition operations.

PART 2 - PRODUCTS

PART 3 - EXECUTION

3.1 EXAMINATION

Verify that utilities have been disconnected and capped before starting selective demolition operations.

Review record documents of existing construction provided by Owner. Owner does not guarantee that existing conditions are same as those indicated in record documents.

Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.

When unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure the nature and extent of conflict. Promptly submit a written report to Architect.

3.2 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

Existing Services/Systems to Be Removed, Relocated, or Abandoned: Locate, identify, disconnect, and seal or cap off indicated utility services and mechanical/electrical systems serving areas to be selectively demolished.

Arrange to shut off indicated utilities with utility companies.

If services/systems are required to be removed, relocated, or abandoned, provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of building.

Disconnect, demolish, and remove fire-suppression systems, plumbing, and HVAC systems, equipment, and components indicated to be removed.

Piping to Be Removed: Remove portion of piping indicated to be removed and cap or plug remaining piping with same or compatible piping material.

Equipment to Be Removed: Disconnect and cap services and remove equipment.

Ducts to Be Removed: Remove portion of ducts indicated to be removed and plug remaining ducts with same or compatible ductwork material.

3.3 PREPARATION

Temporary Facilities: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.

Provide protection to ensure safe passage of people around selective demolition area and to and from occupied portions of building.

Provide temporary weather protection, during interval between selective demolition of existing construction on exterior surfaces and new construction, to prevent water leakage and damage to structure and interior areas.

Protect walls, ceilings, floors, and other existing finish work that are to remain or that are exposed during selective demolition operations.

Cover and protect furniture, furnishings, and equipment that have not been removed.

Comply with requirements for temporary enclosures, dust control, heating, and cooling specified in Section 015000 "Temporary Facilities and Controls."

3.4 SELECTIVE DEMOLITION, GENERAL

General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:

Proceed with selective demolition systematically, from higher to lower level. Complete selective demolition operations above each floor or tier before disturbing supporting members on the next lower level.

Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping, to minimize disturbance of adjacent surfaces. Temporarily cover openings to remain.

Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.

Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain fire watch and portable fire-suppression devices during flame-cutting operations.

Maintain adequate ventilation when using cutting torches.

Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.

Remove structural framing members and lower to ground by method suitable to avoid free fall and to prevent ground impact or dust generation.

Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.

Removed and Salvaged Items:

Clean salvaged items.

Pack or crate items after cleaning. Identify contents of containers.

Store items in a secure area until delivery to Owner.

Transport items to Owner's storage area designated by Owner. Protect items from damage during transport and storage.

3.5 SELECTIVE DEMOLITION PROCEDURES FOR SPECIFIC MATERIALS

Concrete Slabs-on-Grade: Saw-cut perimeter of area to be demolished, then break up and remove.

Resilient Floor Coverings: Remove floor coverings and adhesive according to recommendations in RFCI's "Recommended Work Practices for the Removal of Resilient Floor Coverings." Do not use methods requiring solvent-based adhesive strippers.

3.6 DISPOSAL OF DEMOLISHED MATERIALS

General: Except for items or materials indicated to be [**recycled,**] reused, salvaged, reinstalled, or otherwise indicated to remain Owner's property, remove demolished materials from Project site and legally dispose of them in an EPA-approved landfill.

Do not allow demolished materials to accumulate on-site.

Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.

Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.

Comply with requirements specified in Section 017419 "Construction Waste Management and Disposal."

Burning: Do not burn demolished materials.

Disposal: Transport demolished materials off Owner's property and legally dispose of them.

3.7 CLEANING

Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations.

Return adjacent areas to condition existing before selective demolition operations began.

END OF SECTION

SECTION 02 52 00 - CEMENT CONCRETE PAVEMENT

PART 1 - GENERAL

1.1 SUMMARY

- A. Work Included: Exterior cement concrete pavement for the following:
 - 1. Driveways and roadways.
 - 2. Parking lots.
 - 3. Curbs and gutters.
 - 4. Walkways, steps, ramps.
- B. Related Sections include the following:
 - 1. Divisions 2 and 7 Section "Earthwork" for subgrade preparation, grading, and subbase course.
 - 2. Division 2 Section "Pavement Joint Sealants" for joint sealants within concrete pavement and at isolation joints of concrete pavement with adjacent construction.
 - 3. Division 3 Section "Cast-in-Place Concrete" for general building applications of concrete.

1.2 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.3 REFERENCES

- A. State of Colorado, Department of Transportation (CDOT): State Department of Highways Standard Construction Specifications for Road and Bridge Construction, 1999.
- B. Local Jurisdiction Standard Specifications for Design and Construction, Latest Edition.

1.4 DEFINITIONS

- A. Cementitious Materials: Portland cement alone or in combination with one or more of blended hydraulic cement, expansive hydraulic cement, fly ash and other pozzolans, ground granulated blast-furnace slag, and silica fume.

1.5 SUBMITTALS

- A. Product Data: For each type of manufactured material and product indicated.
- B. Design Mixes: For each concrete pavement mix. Include alternate mix designs when characteristics of materials, project conditions, weather, test results, or other circumstances warrant adjustments.
- C. Material Test Reports: From a qualified testing agency indicating and interpreting test results for compliance of the following with requirements indicated, based on comprehensive testing of current materials:
 - 1. Cementitious materials and aggregates.
 - 2. Fiber reinforcement.
 - 3. Admixtures.
 - 4. Curing compounds.
 - 5. Bonding agent or adhesive.
 - 6. Joint fillers.
- D. Material Certificates: Signed by manufacturers certifying that each of the following materials complies with requirements:
 - 1. Cementitious materials and aggregates.
 - 2. Fiber reinforcement.
 - 3. Admixtures.
 - 4. Curing compounds.
 - 5. Bonding agent or adhesive.
 - 6. Joint fillers.

1.6 QUALITY ASSURANCE

- A. Installer Qualifications: An experienced installer who has completed pavement work similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.

- B. Manufacturer Qualifications: Manufacturer of ready-mixed concrete products complying with ASTM C 94 requirements for production facilities and equipment.
 - 1. Manufacturer must be certified according to the National Ready Mix Concrete Association's Plant Certification Program.
- C. Source Limitations: Obtain each type or class of cementitious material of the same brand from the same manufacturer's plant and each aggregate from one source.
- D. ACI Publications: Comply with ACI 301, "Specification for Structural Concrete," unless modified by the requirements of the Contract Documents.
- F. Concrete Testing Service: The Owner will engage a qualified independent testing agency to perform material testing.
- G. Regulatory Requirements:
 - 1. Comply with County standards for sidewalks, curbs, ramps, gutters, and driveway approaches or aprons, including standard dimensions, profiles, thicknesses, reinforcing, and compressive strength. In the event of conflict between the Contract Documents and the standards, the more stringent requirements will apply.
 - 2. Comply with applicable requirements of ADA Handbook, ANSI A117.1, and local and State codes and ordinances regarding walks, steps, ramps and curb ramps.

1.7 PROJECT CONDITIONS

- A. Traffic Control: Maintain access for vehicular and pedestrian traffic as required for other construction activities.
- B. Field Measurements: Verify dimensions and existing conditions shown on the drawings by taking field measurements. Report discrepancies to the Architect for clarification and make minor adjustments in layout as required by field conditions and as approved by the Architect, at no additional cost to the Owner.
- C. Environmental Requirements: Perform work only under suitable weather conditions. Comply with the environmental requirements of Section 03300 for concrete placement.

PART 2 - PRODUCTS

2.1 FORMS

- A. Form Materials: Plywood, metal, metal-framed plywood, or other approved panel-type materials to provide full-depth, continuous, straight, smooth exposed surfaces.
 - 1. Use flexible or curved forms for curves of a radius 100 feet or less.
- B. Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and will not impair subsequent treatments of concrete surfaces.

2.2 STEEL REINFORCEMENT

- A. Plain-Steel Welded Wire Fabric: ASTM A 185, fabricated from as-drawn steel wire into flat sheets.
- B. Reinforcement Bars: ASTM A 615/A 615M, Grade 60, deformed.
- C. Joint Dowel Bars: Plain steel bars, ASTM A 615/A 615M, Grade 60. Cut bars true to length with ends square and free of burrs.
- D. Supports for Reinforcement: Chairs, spacers, and other devices for spacing, supporting, and fastening reinforcement bars, welded wire fabric, and dowels in place. Manufacture bar supports according to CRSI's "Manual of Standard Practice" from steel wire, plastic, or precast concrete or fiber-reinforced concrete of greater compressive strength than concrete, and as follows:
 - 1. Equip wire bar supports with sand plates or horizontal runners where base material will not support chair legs.

2.3 COLORED ADMIXTURE

Colored Admixture: L.M. Scofield Co. "Chromix" or Rockwood Industries "Davis Colors", color as selected by Architect. Use for site concrete where indicated on the drawings.

2.4 EXPANSION JOINT FILLER

- A. Sealed Joints: Preformed, compressible fiber or cork filler material complying with ASTM D1751 or D1752, Type II, guaranteed compatible with expansion joint sealant materials, ½" thick unless otherwise indicated. Provide high-impact polystyrene removable "void cap" to create ½" deep reveal for installation of sealant.
- B. Self-Sealing Joints: Preformed, compressible asphalt fiber joint filler complying with ASTM D994, ½" thick unless otherwise indicated. Do not use asphalt fiber filler in joints to receive elastomeric joint sealants.

2.5 CONCRETE MATERIALS

- A. General: Use the same brand and type of cementitious material from the same manufacturer throughout the Project.
- B. Portland Cement: ASTM C 150, Type II.
 - 1. Fly Ash: ASTM C 618, Class F.
- C. Aggregate: ASTM C 33, uniformly graded, from a single source, with coarse aggregate as follows:
 - 1. Maximum Aggregate Size: ¾ inches.
 - 2. Do not use fine or coarse aggregates containing substances that cause spalling.
- D. Water: Potable.

2.6 ADMIXTURES

- A. General: Admixtures certified by manufacturer to contain not more than 0.1 percent water-soluble chloride ions by mass of cement and to be compatible with other admixtures.
- B. Air-Entraining Admixture: ASTM C 260.
- C. Water-Reducing Admixture: ASTM C 494, Type A.
- D. High-Range, Water-Reducing Admixture: ASTM C 494, Type F.
- E. Water-Reducing and Accelerating Admixture: ASTM C 494, Type E.
- F. Water-Reducing and Retarding Admixture: ASTM C 494, Type D.

2.7 CURING MATERIALS

- A. Moisture-Retaining Cover: One of the following, complying with ASTM C 171.
 - 1. Waterproof paper.
 - 2. Polyethylene film.
 - 3. White burlap-polyethylene sheet.
- B. Waterborne Membrane-Forming Curing Compound: ASTM C 309, Type I or II, Class B.
 - 1. Provide material that has a maximum volatile organic compound (VOC) rating of 350 g/L.

2.8 CONCRETE MIXES

- A. Prepare design mixes, proportioned according to ACI 211.1 and ACI 301, for each type and strength of normal-weight concrete determined by either laboratory trial mixes or field experience.
- B. Use a qualified independent testing agency for preparing and reporting proposed mix designs for the trial batch method.

1. Do not use Owner's field quality-control testing agency as the independent testing agency.
- C. Proportion mixes to provide concrete with the following properties:
 1. Compressive Strength (28 Days): 4000 psi.
 2. Slump Limit: 4 inches.
 3. Maximum water-cement ratio at point of placement: 0.45.
 4. Minimum 594 lb. Cement per cubic yard.
- D. Cementitious Materials: Limit percentage, by weight, of cementitious materials other than portland cement according to ACI 301 requirements for concrete exposed to deicing chemicals.
- E. Add air-entraining admixture at manufacturer's prescribed rate to result in concrete at point of placement having an air content of 4.0 to 7.0 percent.

2.9 CONCRETE MIXING

- A. Ready-Mixed Concrete: Comply with requirements and with ASTM C 94.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Proof-roll prepared subbase surface to check for unstable areas and verify need for additional compaction. Proceed with pavement only after nonconforming conditions have been corrected and subgrade is ready to receive pavement.
- B. Remove loose material from compacted subbase surface immediately before placing concrete.

3.2 EDGE FORMS AND SCREED CONSTRUCTION

- A. Set, brace, and secure edge forms, bulkheads, and intermediate screed guides for pavement to required lines, grades, and elevations. Install forms to allow continuous progress of work and so forms can remain in place at least 24 hours after concrete placement.
- B. Clean forms after each use and coat with form release agent to ensure separation from concrete without damage.

3.3 STEEL REINFORCEMENT

- A. General: Comply with CRSI's "Manual of Standard Practice" for fabricating reinforcement and with recommendations in CRSI's "Placing Reinforcing Bars" for placing and supporting reinforcement.
- B. Clean reinforcement of loose rust and mill scale, earth, ice, or other bond-reducing materials.
- C. Arrange, space, and securely tie bars and bar supports to hold reinforcement in position during concrete placement. Maintain minimum cover to reinforcement.
- D. Install welded wire fabric in lengths as long as practicable. Lap adjoining pieces at least one full mesh, and lace splices with wire. Offset laps of adjoining widths to prevent continuous laps in either direction.

3.4 JOINTS

- A. General: Construct construction, isolation, and contraction joints and tool edgings true to line with faces perpendicular to surface plane of concrete. Construct transverse joints at right angles to centerline, unless otherwise indicated.
 1. When joining existing pavement, place transverse joints to align with previously placed joints, unless otherwise indicated.
- B. Construction Joints: Set construction joints at side and end terminations of pavement and at locations where pavement operations are stopped for more than one-half hour, unless pavement terminates at isolation joints.
 1. Provide preformed galvanized steel or plastic keyway-section forms or bulkhead forms with keys, unless otherwise indicated. Embed keys at least 1-1/2 inches into concrete.

2. Continue reinforcement across construction joints, unless otherwise indicated. Do not continue reinforcement through sides of pavement strips, unless otherwise indicated.
 3. Provide tie bars at sides of pavement strips where indicated.
 4. Use a bonding agent at locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.
- C. Isolation Joints: Form isolation joints of preformed joint-filler strips abutting concrete curbs, catch basins, manholes, inlets, structures, walks, other fixed objects, and where indicated.
1. Locate expansion joints at intervals of 500 feet (maximum), unless otherwise indicated.
 2. Extend joint fillers full width and depth of joint.
 3. Terminate joint filler less than 1/2 inch or more than 1 inch below finished surface for joint sealant.
 4. Furnish joint fillers in one-piece lengths. Where more than one length is required, lace or clip joint-filler sections together.
 5. Protect top edge of joint filler during concrete placement with metal, plastic, or other temporary preformed cap. Remove protective cap after concrete has been placed on both sides of joint.
- D. Install dowel bars and support assemblies at joints where indicated. Lubricate or asphalt-coat one-half of dowel length to prevent concrete bonding to one side of joint.
- E. Contraction Joints: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of the concrete thickness, as follows:
1. Grooved Joints: Form contraction joints after initial floating by grooving and finishing each edge of joint with groover tool to the following radius. Repeat grooving of contraction joints after applying surface finishes. Eliminate groover marks on concrete surfaces.
 - a. Radius: 1/4 inch.
 2. Sawed Joints: Form contraction joints with power saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut 1/8-inch- wide joints into concrete when cutting action will not tear, abrade, or otherwise damage surface and before developing random contraction cracks.
- F. Edging: Tool edges of pavement, gutters, curbs, and joints in concrete after initial floating with an edging tool to the following radius. Repeat tooling of edges after applying surface finishes. Eliminate tool marks on concrete surfaces.
1. Radius: 1/4 inch.

3.5 CONCRETE PLACEMENT

- A. Inspection: Before placing concrete, inspect and complete formwork installation, reinforcement steel, and items to be embedded or cast in. Notify other trades to permit installation of their work.
- B. Remove snow, ice, or frost from subbase surface and reinforcement before placing concrete. Do not place concrete on frozen surfaces.
- C. Moisten subbase to provide a uniform dampened condition at the time concrete is placed. Do not place concrete around manholes or other structures until they are at the required finish elevation and alignment.
- D. Comply with requirements and with recommendations in ACI 304R for measuring, mixing, transporting, and placing concrete.
- E. Deposit and spread concrete in a continuous operation between transverse joints. Do not push or drag concrete into place or use vibrators to move concrete into place.

- F. Consolidate concrete by mechanical vibrating equipment supplemented by hand-spading, rodding, or tamping. Use equipment and procedures to consolidate concrete according to recommendations in ACI 309R.
1. Consolidate concrete along face of forms and adjacent to transverse joints with an internal vibrator. Keep vibrator away from joint assemblies, reinforcement, or side forms. Use only square-faced shovels for hand-spreading and consolidation. Consolidate with care to prevent dislocating reinforcement, dowels, and joint devices.
- G. Screed pavement surfaces with a straightedge and strike off. Commence initial floating using bull floats or darbies to form an open textured and uniform surface plane before excess moisture or bleed water appears on the surface. Do not further disturb concrete surfaces before beginning finishing operations or spreading dry-shake surface treatments.
- H. Curbs and Gutters: When automatic machine placement is used for curb and gutter placement, submit revised mix design and laboratory test results that meet or exceed requirements. Produce curbs and gutters to required cross section, lines, grades, finish, and jointing as specified with expansion joints at intervals of approximately 50 feet and tooled control joints at 10' o.c. If results are not approved, remove and replace with formed concrete.
- I. Walks: Minimum 4" thick, with expansion joints at intervals of approximately 50 feet and tooled control joints at intervals equal to width of walks or maximum 5 feet o.c. Tool edges to rounded profile and finish as noted herein or shown on the drawings. Pitch walks ¼" per foot for drainage unless otherwise indicated.
- J. Ramps: Construct ramps similar to walks. Comply with applicable ADA Handbook, ANSI A117.1, and local and State codes and ordinances, including maximum allowable slope not to exceed 1 foot vertical in 12 foot horizontal, with maximum rise not to exceed 30" between level landings.
- K. Steps: Minimum 6" thick at intersection of treads and risers, reinforced as indicated. Slope treads ¼" to nosing, and tool nosings to uniform ½" radius. Finish as specified below.
- L. Paving: Minimum 6" thick unless otherwise indicated. Provide expansion joints at intervals of 100'-0" each way or as indicated on the drawings, and tooled control joints at 12'-0" o.c. Provide fibermesh reinforcing. Place concrete paving over compacted subgrade as specified in Section 02200. Provide minimum 2% slope for drainage unless otherwise indicated.
- M. Approaches: Minimum 6" thick, with #4 rebar spaced 12" o.c.b.w. unless otherwise indicated or required by local public works standards or building codes. Construct to radius of flare indicated, and taper or warp into alignment with adjacent curbs, gutters, and walks. Place approaches over compacted subgrade as specified in section 02200.
- N. Cold-Weather Placement: Comply with ACI 306.1 and as follows. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.
1. When air temperature has fallen to or is expected to fall below 40 deg F, uniformly heat water and aggregates before mixing to obtain a concrete mixture temperature of not less than 50 deg F and not more than 80 deg F at point of placement.
 2. Do not use frozen materials or materials containing ice or snow.
 3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators, unless otherwise specified and approved in mix designs.
- O. Hot-Weather Placement: Place concrete according to recommendations in ACI 305R and as follows when hot-weather conditions exist:
1. Cool ingredients before mixing to maintain concrete temperature at time of placement below 90 deg F. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated to total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.
 2. Cover reinforcement steel with water-soaked burlap so steel temperature will not exceed ambient air temperature immediately before embedding in concrete.
 3. Fog-spray forms, reinforcement steel, and subgrade just before placing concrete. Keep subgrade moisture uniform without standing water, soft spots, or dry areas.

3.6 CONCRETE FINISHING

- A. General: Wetting of concrete surfaces during screeding, initial floating, or finishing operations is prohibited.
- B. Float Finish: Begin the second floating operation when bleed-water sheen has disappeared and the concrete surface has stiffened sufficiently to permit operations. Float surface with power-driven floats, or by hand floating if area is small or inaccessible to power units. Finish surfaces to true planes. Cut down high spots, and fill low spots. Refloat surface immediately to uniform granular texture.
 - 1. Medium-to-Fine-Textured Broom Finish: Draw a soft bristle broom across float-finished concrete surface perpendicular to line of traffic to provide a uniform, fine-line texture.

3.7 CONCRETE PROTECTION AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection and follow recommendations in ACI 305R for hot-weather protection during curing.
- B. Evaporation Retarder: Apply evaporation retarder to concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete, but before float finishing.
- C. Begin curing after finishing concrete, but not before free water has disappeared from concrete surface.
- D. Curing Methods: Cure concrete by moisture curing, moisture-retaining-cover curing, curing compound, or a combination of these as follows:
 - 1. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at least 12 inches, and sealed by waterproof tape or adhesive. Immediately repair any holes or tears during curing period using cover material and waterproof tape.
 - 2. Curing Compound: Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Maintain continuity of coating and repair damage during curing period.

3.8 PAVEMENT TOLERANCES

- A. Comply with tolerances of ACI 117 and as follows:
 - 1. Elevation: 1/4 inch.
 - 2. Thickness: Plus 3/8 inch, minus 1/4 inch.
 - 3. Surface: Gap below 10-foot- long, unleveled straightedge not to exceed 1/4 inch.
 - 4. Lateral Alignment and Spacing of Tie Bars and Dowels: 1 inch.
 - 5. Vertical Alignment of Tie Bars and Dowels: 1/4 inch.
 - 6. Alignment of Tie-Bar End Relative to Line Perpendicular to Pavement Edge: 1/2 inch.
 - 7. Alignment of Dowel-Bar End Relative to Line Perpendicular to Pavement Edge: Length of dowel 1/4 inch per 12 inches.
 - 8. Joint Spacing: 3 inches.
 - 9. Contraction Joint Depth: Plus 1/4 inch, no minus.
 - 10. Joint Width: Plus 1/8 inch, no minus.

3.9 FIELD QUALITY CONTROL

- A. Testing Agency: Owner will engage a qualified testing and inspection agency to sample materials, perform tests, and submit test reports during concrete placement. Sampling and testing for quality control may include the following:
 - 1. Sampling Fresh Concrete: Representative samples of fresh concrete shall be obtained according to ASTM C 172, except modified for slump to comply with ASTM C 94.

2. Slump: ASTM C 143; one test at point of placement for each compressive-strength test, but not less than one test for each day's pour of each type of concrete. Additional tests will be required when concrete consistency changes.
 3. Air Content: ASTM C 231, pressure method; one test for each compressive-strength test, but not less than one test for each day's pour of each type of air-entrained concrete.
 4. Concrete Temperature: ASTM C 1064; one test hourly when air temperature is 40 deg F and below and when 80 deg F and above, and one test for each set of compressive-strength specimens.
 5. Compression Test Specimens: ASTM C 31/C 31M; one set of four standard cylinders for each compressive-strength test, unless otherwise indicated.
 6. Cylinders shall be molded and stored for laboratory-cured test specimens unless field-cured test specimens are required.
 7. Compressive-Strength Tests: ASTM C 39; one set for each day's pour of each concrete class exceeding 5 cu. yd., but less than 25 cu. yd., plus one set for each additional 50 cu. yd.. One specimen shall be tested at 7 days and two specimens at 28 days; one specimen shall be retained in reserve for later testing if required.
 8. When frequency of testing will provide fewer than five compressive-strength tests for a given class of concrete, testing shall be conducted from at least five randomly selected batches or from each batch if fewer than five are used.
 9. When total quantity of a given class of concrete is less than 50 cu. yd., Architect may waive compressive-strength testing if adequate evidence of satisfactory strength is provided.
 10. When strength of field-cured cylinders is less than 85 percent of companion laboratory-cured cylinders, current operations shall be evaluated and corrective procedures shall be provided for protecting and curing in-place concrete.
 11. Strength level of concrete will be considered satisfactory if averages of sets of three consecutive compressive-strength test results equal or exceed specified compressive strength and no individual compressive-strength test result falls below specified compressive strength by more than 500 psi.
- D. Test results shall be reported in writing to Architect, concrete manufacturer, and Contractor within 24 hours of testing. Reports of compressive-strength tests shall contain Project identification name and number, date of concrete placement, name of concrete testing agency, concrete type and class, location of concrete batch in pavement, design compressive strength at 28 days, concrete mix proportions and materials, compressive breaking strength, and type of break for both 7- and 28-day tests.
- E. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted by Architect but will not be used as the sole basis for approval or rejection.
- F. Additional Tests: Testing agency shall make additional tests of the concrete when test results indicate slump, air entrainment, concrete strengths, or other requirements have not been met, as directed by Architect. Testing agency may conduct tests to determine adequacy of concrete by cored cylinders complying with ASTM C 42, or by other methods as directed.

3.10 REPAIRS AND PROTECTION

- A. Remove and replace concrete pavement that is broken, damaged, or defective, or does not meet requirements in this Section.
- B. Drill test cores where directed by Architect when necessary to determine magnitude of cracks or defective areas. Fill drilled core holes in satisfactory pavement areas with portland cement concrete bonded to pavement with epoxy adhesive.
- C. Protect concrete from damage. Exclude traffic from pavement for at least 14 days after placement. When construction traffic is permitted, maintain pavement as clean as possible by removing surface stains and spillage of materials as they occur.

- D. Maintain concrete pavement free of stains, discoloration, dirt, and other foreign material. Sweep concrete pavement not more than two days before date scheduled for Substantial Completion inspections.

END OF SECTION

SECTION 03 00 00 - GENERAL CONCRETE CONSTRUCTION

PART 1- GENERAL

A. DESCRIPTION

This section includes materials and installation for Portland cement concrete (PCC) sidewalks, integral curbs, retaining curbs, ADA ramps, gutters, and cross gutters and spandrels.

B. RELATED WORK SPECIFIED ELSEWHERE

1. Protecting Existing Underground Utilities: 02012.
2. Earthwork: 02200

C. SUBMITTALS

1. Submit concrete mix design(s) for each concrete class specified. Submit mix design in writing for review by the Engineer at least 15 days before placing of any concrete.
2. Product Data: Provide data on joint filler, admixtures, and curing compound.

PART 2 - MATERIALS

A. CONCRETE MIX DESIGN

1. Concrete shall conform to City of Irvine Standard and Design Manual Std. Dwg. 405.

B. FORMWORK

1. Design forms according to ACI 347.
2. Coat forms with form release agent.

C. FORM RELEASE AGENT

1. Form release agent shall effectively prevent absorption of moisture and prevent bond with the concrete. Agent shall be nonstaining and nontoxic after 30 days.

D. REINFORCING STEEL

1. Reinforcement shall conform to ASTM A 615, Grade 60.

E. TIE WIRE

Tie wire shall be 16 gauge minimum, black, soft annealed.

F. CEMENT

1. Use domestic Portland cement that conforms to ASTM C 150, Type II
2. Use only one brand of cement in any individual structure. Use no salvaged, damaged, caked or reclaimed cement.

G. AGGREGATES

Aggregates shall be natural rock, sand, or crushed natural rock, shall comply with ASTM C 33. Aggregates shall be free from any substances that will react with the cement alkalis, as determined by Appendix X-1 of ASTM C 33.

H. WATER AND ICE

Use water and ice that is clean and free from objectionable quantities of organic matter, alkali, salts, and other impurities that might reduce the strength, durability, or otherwise adversely affect the quality of the concrete. Water shall not contain more than 500 mg/L of chlorides or more than 500 mg/L of sulfate.

I. CONCRETE ADMIXTURES

1. Do not use any admixture that contains chlorides or other corrosive elements in any concrete. Admixtures shall be nontoxic after 30 days.

J. CURING COMPOUND

1. Curing Compound: ASTM C 309, Type 1, Class A.
2. Curing compound shall be compatible with required finishes and coatings and shall meet the State of California Clean Air Quality Standards which limit the quantity of volatile organic compounds to 350 grams per liter.

PART 3 - EXECUTION

A. EXAMINATION

1. Verify compacted subgrade is acceptable and ready to support paving and imposed loads.
2. Verify gradients and elevations of base are correct.

B. SUBBASE

1. See Specification Section 02200 – Earthwork for preparation of subgrade and installation of base course material for work in this section.

C. PREPARATION

1. Moisten base to minimize absorption of water from fresh concrete.
2. Notify Engineer minimum 48 hours prior to commencement of concreting operations.

D. FORMING

1. Place and secure forms to correct location, dimension, profile, and gradient.

E. REINFORCEMENT

1. Place reinforcement as indicated.
2. Place reinforcement to achieve pavement and curb alignment as detailed.

F. PLACING CONCRETE

1. Place concrete in accordance with ACI 304R.
2. Ensure reinforcement, inserts, embedded parts, formed joints are not disturbed during concrete placement.
3. Place concrete continuously over the full width of the panel and between predetermined construction joints. Do not break or interrupt successive pours such that cold joints occur.

G. JOINTS

1. Align curb, gutter, and sidewalk joints.
2. Saw cut contraction joints 3/16 inch wide at an optimum time after finishing. Cut 1/3 into depth of slab.

H. FINISHING

1. Sidewalk Paving: Light broom, texture perpendicular to direction of travel with troweled and radiused edge 1/4 inch radius.
2. Curbs and Gutters: Light broom, texture parallel to pavement direction.
3. ADA Ramps: Light broom, texture perpendicular to direction of travel.
4. Spandrels: Light broom, texture 45 degree angle to street centerline.

I. TOLERANCES

1. Maximum Variation of Surface Flatness: 1/4 inch in 10 ft.
2. Maximum Variation From True Position: 1/4 inch.
3. Grades on accessible ramps and along paths of travel shall conform to current California Building Code.

J. FIELD QUALITY CONTROL

1. The City's Representative will perform field quality control tests, as indicated below. Provide free access to concrete operations at project site and cooperate with appointed firm. Test of concrete and concrete materials may be performed at any time to ensure conformance with specified requirements.
 - a. Comprehensive Strength Tests: ASTM C 39/C 39M. For each test, mold and cure three concrete test cylinders. Obtain test samples for every 50 cu yd or less of each class of concrete placed.
 - (1) Take one additional test cylinder during cold weather concreting, cure on job site under same conditions as concrete it represents.
 - (2) Perform minimum one slump test for each set of test cylinders taken.
 - b. Maintain records of placed concrete items. Record date, location of pour, quantity, air temperature, and test samples taken.

K. PROTECTION

1. Immediately after placement, protect pavement from premature drying, excessive hot or cold temperatures, and mechanical injury.

L. SITE-MIXED CONCRETE

Conform to ACI 304.

M. READY-MIXED CONCRETE

Conform to ASTM C 94.

N. PUMPING CONCRETE

Conform to ACI 304.2R-91.

O. WEATHER REQUIREMENTS

1. Conform to ACI 305 for placing during hot weather.
2. Conform to ACI 306 for placing during cold weather.

P. CURING CONCRETE

1. Conform to ACI 308.

Q. REPAIR OF DEFECTS AND CRACKS

1. Do not repair defects until concrete has been evaluated by the Owner's Representative.

END OF SECTION

SECTION 05 50 00 - METAL FABRICATIONS

PART 1 - GENERAL

- 1.1 SECTION INCLUDES
 - A. Shop fabricated steel items.
- 1.2 SUBMITTALS
 - A. See Section 00 72 00 - General Conditions, for submittal procedures.
 - B. Shop Drawings: Indicate profiles, sizes, connection attachments, reinforcing, anchorage, size and type of fasteners, and accessories. Include erection drawings, elevations, and details where applicable.
 - 1. Indicate welded connections using standard AWS A2.4 welding symbols. Indicate net weld lengths.

PART 2 - PRODUCTS

- 2.1 MATERIALS - STEEL
 - A. Steel Sections: ASTM A36.
 - B. Steel Tubing: ASTM A500, Grade B cold-formed structural tubing.
 - C. Plates: ASTM A283.
 - D. Pipe: ASTM A53, Grade B, black finish.
 - E. Bolts, Nuts, and Washers: ASTM A325, Type 1, galvanized to ASTM A153 where connecting galvanized components.
 - F. Welding Materials: AWS D1.1; type required for materials being welded.
 - G. Shop and Touch-Up Primer: SSPC-Paint 15, complying with VOC limitations of authorities having jurisdiction.
- 2.2 FABRICATION
 - A. Fit and shop assemble items in largest practical sections, for delivery to site.
 - B. Fabricate items with joints tightly fitted and secured.
 - C. Grind exposed joints flush and smooth with adjacent finish surface. Make exposed joints butt tight, flush, and hairline. Ease exposed edges to small uniform radius.
 - D. Supply components required for anchorage of fabrications. Fabricate anchors and related components of same material and finish as fabrication, except where specifically noted otherwise.
- 2.3 FABRICATED ITEMS
 - A. Counter Top Support Framing: Angles and tube sections as detailed; prime paint finish.
- 2.4 FINISHES - STEEL
 - A. Prime paint all steel items.
 - B. Prepare surfaces to be primed in accordance with SSPC-SP2.
 - C. Clean surfaces of rust, scale, grease, and foreign matter prior to finishing.
 - D. Prime Painting: One coat.
 - E. Galvanizing of Non-structural Items: Galvanize after fabrication to ASTM A123 requirements.
- 2.5 FABRICATION TOLERANCES
 - A. Squareness: 1/8 inch maximum difference in diagonal measurements.
 - B. Maximum Offset Between Faces: 1/16 inch.
 - C. Maximum Misalignment of Adjacent Members: 1/16 inch.
 - D. Maximum Bow: 1/8 inch in 48 inches.
 - E. Maximum Deviation From Plane: 1/16 inch in 48 inches.

PART 3 - EXECUTION

- 3.1 EXAMINATION
 - A. Verify that field conditions are acceptable and are ready to receive work.
- 3.2 PREPARATION
 - A. Supply setting templates to the appropriate entities for steel items required to be cast into concrete or embedded in masonry.

3.3 INSTALLATION

- A. Install items plumb and level, accurately fitted, free from distortion or defects.
- B. Provide for erection loads, and for sufficient temporary bracing to maintain true alignment until completion of erection and installation of permanent attachments.
- C. Field weld components indicated.
- D. Perform field welding in accordance with AWS D1.1.
- E. Obtain approval prior to site cutting or making adjustments not scheduled.
- F. After erection, prime welds, abrasions, and surfaces not shop primed or galvanized , except surfaces to be in contact with concrete.

3.4 TOLERANCES

- A. Maximum Variation From Plumb: 1/4 inch per story, non-cumulative.
- B. Maximum Offset From True Alignment: 1/4 inch.
- C. Maximum Out-of-Position: 1/4 inch.

END OF SECTION

SECTION 06 10 01 - ROUGH CARPENTRY

PART 1 - GENERAL

- 1.1 SECTION INCLUDES
 - A. Non-structural dimension lumber framing.
 - B. Concealed wood blocking, nailers, and supports.
 - C. Miscellaneous wood nailers, furring, and grounds.
- 1.2 SUBMITTALS
 - A. See Section 00 72 00 - General Conditions, for submittal procedures.
 - B. Product Data: Provide technical data on wood preservative materials and application instructions.
 - C. Warranty: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.
- 1.3 DELIVERY, STORAGE, AND HANDLING
 - A. General: Cover wood products to protect against moisture. Support stacked products to prevent deformation and to allow air circulation.
 - B. Fire Retardant Treated Wood: Prevent exposure to precipitation during shipping, storage, or installation.
- 1.4 WARRANTY
 - A. See Section 017800 - Closeout Submittals, for additional warranty requirements.
 - B. Correct defective Work within a five year period after Date of Substantial Completion.

PART 2 - PRODUCTS

- 2.1 GENERAL REQUIREMENTS
 - A. Dimension Lumber: Comply with American Softwood Lumber Standard PS 20 and requirements of specified grading agencies.
 - 1. If no species is specified, provide any species graded by the agency specified; if no grading agency is specified, provide lumber graded by any grading agency meeting the specified requirements.
 - 2. Grading Agency: Any grading agency whose rules are approved by the Board of Review, American Lumber Standard Committee (www.alsc.org) and who provides grading service for the species and grade specified; provide lumber stamped with grade mark unless otherwise indicated.
- 2.2 DIMENSION LUMBER FOR CONCEALED APPLICATIONS
 - A. Sizes: Nominal sizes as indicated on drawings, S4S.
 - B. Moisture Content: S-dry or MC19.
 - C. Stud Framing (2 by 2 through 2 by 6):
 - 1. Species: Any allowed under referenced grading rules.
 - 2. Grade: No. 2.
 - D. Miscellaneous Framing, Blocking, Nailers, Grounds, and Furring:
 - 1. Lumber: S4S, No. 2 or Standard Grade.
 - 2. Boards: Standard or No. 3.
- 2.3 ACCESSORIES
 - A. Fasteners and Anchors:
 - 1. Metal and Finish: Hot-dipped galvanized steel per ASTM A 153/A 153M for high humidity and preservative-treated wood locations, unfinished steel elsewhere.
 - 2. Anchors: Toggle bolt type for anchorage to hollow masonry.

PART 3 - EXECUTION

- 3.1 PREPARATION
 - A. Where wood framing bears on cementitious foundations, install full width sill flashing continuous over top of foundation, lap ends of flashing minimum of 4 inches and seal.
 - B. Coordinate installation of rough carpentry members specified in other sections.
- 3.2 INSTALLATION
 - A. General

1. Discard units of material with defects which might impair quality of work, and units which are too small to fabricate work with minimum joints or optimum joint arrangement.
2. Set carpentry work accurately to required levels and lines, with members plumb and true and accurately cut and fitted. Scribe and cope as required.
3. Securely attach carpentry work to substrates by anchoring and fastening as required by codes, the Drawings, as indicated herein, and as otherwise required to draw members into place and securely hold same unless otherwise indicated. Use washers under all bolt heads and nuts.
4. Select fasteners of size that will not penetrate members where opposite side will be exposed to view or will receive finish materials.
5. Make tight connections between members (except plywood) to develop full strength of members.
6. Install fasteners without splitting of wood. If wood is split, replace damaged member.
7. Pre-drill as necessary.
8. Install fastener types and at spacings recommended by National Design Specifications for Stress Grade Lumber and Its Fastening - 2005 for lumber and APA Guide E30e for Plywood, unless more restrictive code requirements dictate tighter spacing or heavier fasteners, or unless otherwise indicated herein or on the Drawings.
9. Locate members as indicated on the drawings. Size, spacing or spans shall not be changed without specific approval of Architect and Owner. Take care to place proper grades and species of members where indicated in accordance with the lumber schedule herein.
10. Temporary brace framing at the end of each days' work until all framing is completed and securely anchored. Leave temporary bracing in place as long as required for safety. As work progresses, securely connect work to compensate for dead load, wind and erection stresses. Do not use shims for leveling under wood or metal bearing points.
11. Comply with the "Manual of House Framing" published by the National Lumber Manufacturer's Association as a minimum standard of quality for workmanship.

B. Stud Framing

1. Plates and stud members
 - a. Provide single or double plates at locations indicated. Cut bottom plates at upper floor door openings to allow continuous pour of lightweight concrete.
 - b. Stud spacing: As indicated on Drawings.
 - c. Studs with finger jointing splices are allowed.
 - d. End nail in bottom plate and end nail to lower top plate.
 - e. Overlap double top plates minimum of 32 inches except at outside corners where overlap shall be 3-1/2 inches.
 - f. Face nail upper top plate to lower top plate.
 - g. Nail bottom plate to wood construction.
 - h. Anchor bottom plate to concrete structure with anchor bolts, lag bolts, or power driven studs, spaced as required to resist lateral forces as established by building code and as determined by Architect and Owner. Provide a minimum two anchors per piece.
 - i. Triple studs at corners and partitions intersections.
 - j. Anchor studs abutting masonry or concrete with 1/2 inch anchor bolts, maximum spacing of 2 feet o.c.
 - k. Partitions parallel with joists: Locate joists directly below studs.
 - l. Openings must be square, plumb, and level.
 - m. Where plates are cut nearly in two, reinforce edge of plates with steel plates anchored to each side of cut members.
2. Headers
 - a. Continuous headers, same width as studs, depth required to span widest opening. Provide solid bearing. No shimming allowed.
 - b. Toenail headers to studs and opening framing.
 - c. Stagger joints in individual header members minimum of three stud spaces, allowing no joints to occur over openings.
 - d. Refer to structural drawings for additional information.

3.3 BLOCKING, NAILERS, AND SUPPORTS

- A. Provide framing and blocking members as indicated or as required to support finishes, fixtures, specialty items, and trim.
- B. In metal stud walls, provide continuous blocking around door and window openings for anchorage of frames, securely attached to stud framing.
- C. In walls, provide blocking attached to studs as backing and support for wall-mounted items, unless item can be securely fastened to two or more studs or other method of support is explicitly indicated.

- D. Where ceiling-mounting is indicated, provide blocking and supplementary supports above ceiling, unless other method of support is explicitly indicated.
 - E. Specifically, provide the following non-structural framing and blocking:
 - 1. Grab bars.
 - 2. Toilet accessories.
- 3.4 TOLERANCES
- A. Framing Members: 1/4 inch from true position, maximum.
 - B. Variation from Plane (Other than Floors): 1/4 inch in 10 feet maximum, and 1/4 inch in 30 feet maximum.
- 3.5 CLEANING
- A. Waste Disposal:
 - 1. Comply with applicable regulations.
 - 2. Do not burn scrap on project site.
 - 3. Do not burn scraps that have been pressure treated.
 - 4. Do not send materials treated with pentachlorophenol, CCA, or ACA to co-generation facilities or "waste-to-energy" facilities.
 - B. Do not leave any wood, shavings, sawdust, etc. on the ground or buried in fill.
 - C. Prevent sawdust and wood shavings from entering the storm drainage system.

END OF SECTION

SECTION 07 90 05 - JOINT SEALERS

PART 1 - GENERAL

- 1.1 SECTION INCLUDES
 - A. Sealants and joint backing.
- 1.2 ADMINISTRATIVE REQUIREMENTS
 - A. Coordinate the work with other sections referencing this section.
- 1.3 SUBMITTALS
 - A. See Section 00 72 00 - General Conditions, for submittal procedures.
 - B. Product Data: Provide data indicating sealant chemical characteristics.
 - C. Samples: Submit one sample for each Designation and color of joint sealant required. Samples shall be installed in 1/2 inch wide joints formed between two 6 inch long strips of material matching the appearance of exposed surfaces adjacent to joint sealants.
- 1.4 QUALITY ASSURANCE
 - A. Manufacturer Qualifications: Company specializing in manufacturing the Products specified in this section with minimum three years documented experience.
 - B. Applicator Qualifications: Company specializing in performing the work of this section with minimum three years' experience.
 - C. Do not apply sealants if ambient or substrate temperatures are below 40 degrees and rising.
- 1.5 FIELD CONDITIONS
 - A. Maintain temperature and humidity recommended by the sealant manufacturer during and after installation.

PART 2 - PRODUCTS

- 2.1 MANUFACTURERS
 - A. Silicone Sealants:
 - 1. Bostik Inc: www.bostik-us.com.
 - 2. Momentive Performance Materials, Inc (formerly GE Silicones): www.momentive.com.
 - 3. Pecora Corporation: www.pecora.com.
 - 4. BASF Construction Chemicals-Building Systems: www.buildingsystems.basf.com.
 - 5. Tremco Global Sealants: www.tremcosealants.com.
 - 6. Substitutions: See Section 016000 - Product Requirements.
 - B. Polyurethane Sealants:
 - 1. Bostik Inc: www.bostik-us.com.
 - 2. Pecora Corporation: www.pecora.com.
 - 3. BASF Construction Chemicals-Building Systems: www.buildingsystems.basf.com.
 - 4. Substitutions: See Section 016000 - Product Requirements.
 - C. Acrylic Emulsion Latex Sealants:
 - 1. Bostik Inc: www.bostik-us.com.
 - 2. Pecora Corporation: www.pecora.com.
 - 3. BASF Construction Chemicals-Building Systems: www.buildingsystems.basf.com.
 - 4. Tremco Global Sealants: www.tremcosealants.com.
 - 5. Substitutions: See Section 016000 - Product Requirements.
- 2.2 SEALANTS
 - A. Designation AL - Acrylic Sealant: ASTM C 920, Grade NS, Class 12-1/2, Uses NT, M, A, O; single component, solvent curing, non-staining, non-bleeding, non-sagging.
 - 1. Color: Standard colors matching finished surfaces.
 - 2. Product: Sonolac manufactured by Sonneborn.
 - 3. Movement Capability: Plus and minus 12-1/2 percent.
 - 4. Service Temperature Range: -13 to 180 degrees F.
 - 5. Shore A Hardness Range: 25 to 50.

- B. Designation U-MC – Non-sag Polyurethane Sealant: ASTM C 920, Grade NS, Class 25, Uses NT, I, M, A, G, O; single component, chemical curing, non-staining, non bleeding, capable of continuous water immersion, non-sagging Designation.
 - 1. Color: Standard colors matching finished surfaces.
 - 2. Product: NP-2 manufactured by Sonneborn.
 - 3. Movement Capability: Plus and minus 25 percent.
 - 4. Service Temperature Range: -40 to 180 degrees F.
 - 5. Shore A Hardness Range: 20 to 35.
- C. Designation U-SL - Self-Leveling Polyurethane Sealant: ASTM C 920, Grade P, Class 25, Uses T, I, M, A, O; single component, chemical curing, non staining, non bleeding, capable of continuous water immersion, self-leveling Designation.
 - 1. Color: Color as selected.
 - 2. Product: SL-2 manufactured by Sonneborn.
 - 3. Movement Capability: Plus and minus 25 percent.
 - 4. Service Temperature Range: -40 to 180 degrees F.
 - 5. Shore A Hardness Range: 20 to 35.
- D. Designation S-S - Silicone Sealant: ASTM C 920, Grade NS, Class 25, Uses NG, A, G, M, O; single component, non-sagging, non-staining, sanitary.
 - 1. Color: Standard colors matching finished surfaces.
 - 2. Product: 786 manufactured by Dow Corning.
 - 3. Service Temperature Range: -65 to 180 degrees F.
 - 4. Shore A Hardness Range: 15 to 35.

2.3 ACCESSORIES

- A. Primer: Non-staining Designation, recommended by sealant manufacturer to suit application.
- B. Joint Backing: Round foam rod compatible with sealant; ASTM D 1667, closed cell PVC; oversized 30 to 50 percent larger than joint width.
- C. Bond Breaker: Pressure sensitive tape recommended by sealant manufacturer to suit application.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that substrate surfaces are ready to receive work.
- B. Verify that joint backing and release tapes are compatible with sealant.

3.2 PREPARATION

- A. Remove loose materials and foreign matter that could impair adhesion of sealant.
- B. Masking Tape: Use masking tape where required to prevent contact of sealant with adjoining surfaces that otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.
- C. Clean and prime joints in accordance with manufacturer's instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.
- D. Perform preparation in accordance with manufacturer's instructions and ASTM C1193.
- E. Protect elements surrounding the work of this section from damage or disfigurement.

3.3 INSTALLATION

- A. Perform work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.
- B. Perform installation in accordance with ASTM C1193.
- C. Perform acoustical sealant application work in accordance with ASTM C919 and USG manual.
- D. Measure joint dimensions and size joint backers to achieve width-to-depth ratio, neck dimension, and surface bond area as recommended by manufacturer, except where specific dimensions are indicated.
- E. Install bond breaker where joint backing is not used.
- F. Install sealant free of air pockets, foreign embedded matter, ridges, and sags.
- G. Apply sealant within recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges.
- H. Tool joints concave.
- I. Pre-compressed Foam Sealant: Do not stretch; avoid joints except at corners, ends, and intersections; install with face 1/8 to 1/4 inch below adjoining surface.

3.4 CLEANING

- A. Clean adjacent soiled surfaces.

3.5 PROTECTION

- A. Protect sealants until cured.

3.6 SCHEDULE

- A. Interior Wall Expansion Joints: Designation U-MC.
- B. Interior Joints for Which No Other Sealant is Indicated: Designation AL.
- C. Control and Expansion Joints in Interior Concrete Slabs and Floors: Designation U-SL.
- D. Joints Between Plumbing Fixtures and Walls and Floors, and Between Countertops and Walls: Designation S-S.

END OF SECTION

SECTION 08 31 00 - ACCESS DOORS AND PANELS

PART 1 - GENERAL

- 1.1 SECTION INCLUDES
 - A. Wall access door and frame units.
 - B. Ceiling access door and frame units.
- 1.2 SUBMITTALS
 - A. See Section 00 72 00 - General Conditions, for submittal procedures.
 - B. Product Data: Provide sizes, types, finishes, hardware, scheduled locations, and details of adjoining work.
- 1.3 QUALITY ASSURANCE
 - A. Labeling Requirements:
 - 1. Fire rated access door assemblies shall bear factory-applied labels showing name of manufacturer, name of third-party inspection agency, fire-protection rating, and where required for access doors in exit enclosures, maximum transmitted temperature end point.
 - 2. Horizontal access doors shall bear a label that includes the wording "For Horizontal Installation."
 - 3. Permanently attach label to each door and frame.
- 1.4 DELIVERY, STORAGE AND HANDLING
 - A. Deliver access doors in protective packaging.
 - B. Store in unopened packaging to prevent soiling and physical damage.
 - C. Store access doors until installation inside under cover in dry area out of direct sunlight.
 - D. Handle to prevent damage to finished surfaces and operating mechanisms.

PART 2 - PRODUCTS

- 2.1 WALL AND CEILING UNITS
 - A. Manufacturers:
 - 1. Acudor Products Inc : www.acudor.com.
 - 2. Karp Associates, Inc : www.karpinc.com.
 - 3. Milcor by Commercial Products Group of Hart & Cooley, Inc : www.milcorinc.com.
 - 4. Substitutions: See Section 016000 - Product Requirements.
 - B. Access Doors: Factory fabricated door and frame units, fully assembled units with corner joints welded, filled, and ground flush; square and without rack or warp; coordinate requirements with assemblies units are to be installed in.
 - 1. Material: Steel.
 - 2. Door Style: Single thickness with rolled or turned in edges.
 - 3. Frames and flanges: 0.058 inch steel.
 - 4. Door panels: 0.070 inch single thickness steel sheet.
 - 5. Units in Fire Rated Assemblies: Fire rating as required by applicable code for the fire rated assembly in which they are to be installed.
 - a. Provide products listed and labeled by UL or ITS (Warnock Hersey) as suitable for the purpose specified and indicated.
 - b. Provide certificate of compliance from authority having jurisdiction indicating approval of fire rated doors.
 - 6. Steel Finish: Primed.
 - 7. Primed Finish: Polyester powder coat; manufacturer's standard color.
 - 8. Size(s): As indicated.
 - 9. Hardware:
 - a. Provide one cylinder lock per access door. Furnish two (2) keys per lock. Key all locks alike, unless otherwise scheduled.
 - b. Hardware for Fire Rated Units: As required for listing.
 - c. Hinges, Non-Fire-Rated Units: Concealed, constant force closure spring type, 175-degree steel hinges with removable pin.
 - d. Latch/Lock: Screw driver slot for quarter turn cam latch. Keyed lock.
 - 10. Galvanized, hot-dipped finish.
 - 11. Stainless steel at wet locations.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine materials upon arrival at site. Notify the carrier and the manufacturer of any damage.
- B. Verify that rough openings are correctly sized and located.

3.2 INSTALLATION

- A. Install units in accordance with manufacturer's instructions.
- B. Install frames plumb and level in openings. Secure rigidly in place.
- C. Position units to provide convenient access to the concealed work requiring access.

3.3 PROTECTION

- A. Protect installed products until completion of Project in accordance with Section 017000.
- B. Touch-up, repair or replace damaged products prior to Substantial Completion.
- C. Remove and replace panels or frames which are warped, bowed or otherwise damaged.

END OF SECTION

SECTION 08 83 00 - MIRRORS

PART 1 - GENERAL

- 1.1 SECTION INCLUDES
 - A. Glass mirrors.
- 1.2 SUBMITTALS
 - A. See Section 00 72 00 - General Requirements, for submittal procedures.
 - B. Product Data on Mirror Types: Provide structural, physical and environmental characteristics, size limitations, special handling or installation requirements.
 - C. Warranty: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.
- 1.3 QUALITY ASSURANCE
 - A. Perform Work in accordance with GANA Glazing Manual for glazing installation methods.
 - B. Fabricate, store, transport, receive, install, and clean mirrors in accordance with recommendations of GANA (TIPS) "Mirrors Handle with Extreme Care: Tips For the Professional on the Care and Handling of Mirrors."
- 1.4 FIELD CONDITIONS
 - A. Do not install mirrors when ambient temperature is less than 50 degrees F.
 - B. Maintain minimum ambient temperature before, during and 24 hours after installation of glazing compounds.
- 1.5 WARRANTY
 - A. See Section 017800 - Closeout Submittals, for additional warranty requirements.
 - B. Provide five year manufacturer warranty for reflective coating on mirrors and replacement of same.

PART 2 - PRODUCTS

- 2.1 MANUFACTURERS
 - A. Mirrors:
 - 1. Binswanger Mirror/ACI Distribution: www.binswangerglass.com.
 - 2. Lenoir Mirror Co: www.lenoirmirror.com.
 - 3. Substitutions: See Section 016000 - Product Requirements.
- 2.2 MATERIALS
 - A. Mirror Glass - General: Select materials and/or provide supports as required to limit mirrored glass deflection to 1/200 or flexure limit of glass with full recovery of glazing materials, whichever is less.
 - B. Mirror Glass: ASTM C1036, Type 1 transparent flat, Class 1 clear, Quality Q1 (mirror select); silvering, protective coating and physical characteristics complying with ASTM C1503; 6 mm minimum thick.
 - 1. Sizes noted on Drawings.
- 2.3 GLAZING ACCESSORIES
 - A. Glazing Clips: Manufacturer's standard type.
 - B. Mirror Attachment Accessories: Stainless steel clips.
 - C. Mirror Adhesive: Chemically compatible with mirror coating and wall substrate.

PART 3 - EXECUTION

- 3.1 EXAMINATION
 - A. Verify that openings for mirrored glazing are correctly sized and within tolerance.
 - B. Verify that surfaces of glazing channels or recesses are clean, free of obstructions, and ready to receive mirrors.
 - C. Verify that wall is flat without tape and bed joint ridges.

- 3.2 PREPARATION
 - A. Clean contact surfaces with solvent and wipe dry.
 - B. Seal porous glazing channels or recesses with substrate compatible primer or sealer. Prime surfaces scheduled to receive sealant.
 - C. Perform installation in accordance with ASTM C1193 for solvent release sealants. Install sealant in accordance with manufacturer's instructions.

- 3.3 INSTALLATION - GENERAL
 - A. Install mirrors in accordance with GANA and manufacturer's recommendations.
 - B. Set mirrors plumb and level, free of optical distortion.
 - C. Set mirrors with edge clearance free of surrounding construction including countertops or backsplashes.
 - D. Frameless Mirrors: Set mirrors with clips and adhesive. Anchor rigidly to wall construction.
 - E. Leave open ventilation space, 1/8 inch minimum between mirror and substrate. Do not seal off ventilation space at edge of mirror.

- 3.4 CLEANING
 - A. Remove wet glazing materials from finish surfaces.
 - B. Remove labels after work is complete.
 - C. Clean mirrors and adjacent surfaces.

- 3.5 PROTECTION
 - A. After installation, mark pane with an 'X' by using removable plastic tape or paste.

END OF SECTION

SECTION 09 21 16 - GYPSUM BOARD ASSEMBLIES

PART 1 - GENERAL

- 1.1 SECTION INCLUDES
 - A. Performance criteria for gypsum board assemblies.
 - B. Gypsum wallboard.
 - C. Joint treatment and accessories.
 - D. Textured finish system.
- 1.2 QUALITY ASSURANCE
 - A. Installer Qualifications: Company specializing in performing gypsum board application and finishing, with minimum three years of documented experience.
- 1.3 SUBMITTALS
 - A. Submit under provisions of Section 013000.
 - B. Product Data: Provide data on metal framing, gypsum board, joint tape and joint compound.
 - C. Submit manufacturer's installation instructions for each product proposed for use.
- 1.4 DELIVERY, STORAGE, AND HANDLING
 - A. Deliver materials in original packages, containers, or bundles bearing brand name and identification of manufacturer or supplier.
 - B. Store materials inside under cover and keep them dry and protected against damage from weather, condensation, direct sunlight, surface contamination, corrosion, construction traffic, and other causes. Stack gypsum panels flat to prevent sagging. In addition, follow the guidelines in GA-801.
 - C. Handle gypsum board to prevent damage to edges, ends, and surfaces. Do not bend or damage metal corner beads and trim.
 - D. Do not exceed design loads for the floor joists. Stack no more than 10" high, and perpendicular to the floor joists.
- 1.5 FIELD CONDITIONS
 - A. Environmental Limitations: Comply with ASTM C840 requirements or gypsum board manufacturer's written recommendations, whichever are more stringent.
 - B. Do not install interior products until installation areas are enclosed and conditioned.
 - C. Do not install panels that are wet, those that are moisture damaged, and those that are mold damaged.
 - 1. Indications that panels are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
 - 2. Indications that panels are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

PART 2 - PRODUCTS

- 2.1 GYPSUM BOARD ASSEMBLIES
 - A. Provide completed assemblies complying with ASTM C840 and GA-216, ASTM C 1396/C 1396M, and compliant with approved UL assemblies as noted in the contract documents.
 - B. Interior Partitions Indicated as Acoustic: Provide completed assemblies with the following characteristics:
 - 1. Acoustic Attenuation: STC of 56-58 calculated in accordance with ASTM E 413, based on tests conducted in accordance with ASTM E 90.
 - C. Fire Rated Assemblies: Provide completed assemblies with the following characteristics:
 - 1. Provide materials and construction identical to those tested in assembly indicated according to ASTM E119 by an independent testing and inspecting agency acceptable to authorities having jurisdiction.
 - 2. UL Assembly Numbers: Provide construction equivalent to that listed for the particular assembly in the current UL Fire Resistance Directory.
- 2.2 CEILING SUSPENSION SYSTEMS
 - A. Ceiling Support Materials and Systems: Comply with ASTM C754 for conditions indicated.
 - 1. Resilient Channels: 1/2-inch-deep members designed to reduce sound transmission.

2.3 BOARD MATERIALS

- A. Manufacturers - Gypsum-Based Board:
1. American Gypsum: www.americangypsum.com.
 2. American Gypsum: www.americangypsum.com.
 3. CertainTeed Corporation: www.certainteed.com.
 4. Georgia-Pacific Gypsum: www.gpgypsum.com.
 5. National Gypsum Company: www.nationalgypsum.com.
 6. Temple-Inland Inc: www.templeinland.com.
 7. USG Corporation: www.usg.com.
 8. Substitutions: See Section 016000 - Product Requirements.
- B. Gypsum Wallboard: Paper-faced gypsum panels as defined in ASTM C1396/C1396M; sizes to minimize joints in place; ends square cut.
1. Application: Use for vertical surfaces and ceilings, unless otherwise indicated.
 2. At Assemblies Indicated with Fire-Rating: Use type required by indicated tested assembly; if no tested assembly is indicated, use Type X board, UL or WH listed.
 3. Thickness:
 - a. Vertical Surfaces: 5/8 inch, Type X unless otherwise indicated.
 - b. Ceilings: As required for fire-resistance-rated assembly indicated on Drawings.
 4. Paper-Faced Products – Basis of Design: Use type required by indicated tested assembly; if no tested assembly is indicated, the following products are acceptable:
 - a. USG Corporation; Sheetrock Brand Gypsum Panels.
 - b. CertainTeed Corporation; ProRoc Brand Gypsum Board.
 - c. Georgia-Pacific Gypsum; ToughRock, ToughRock Fireguard, and ToughRock FireGuard C Gypsum Wallboard.
 - d. National Gypsum Company; Gold Bond Brand Gypsum Wallboard.
 - e. Temple-Inland Inc; Gypsumboard and Gypsum Board Fire Resistant Panels Type X and Type TGC.
 - f. USG Corporation; Sheetrock Brand Gypsum Panels.
 - g. Substitutions: See Section 016000 - Product Requirements.
- C. Backing Board For Wet Areas: One of the following products:
1. Application: Surfaces behind tile in wet areas including tub and shower surrounds and shower ceilings.
 2. Mold Resistance: Score of 10, when tested in accordance with ASTM D3273.
 3. Glass-Mat-Faced Board: Coated glass mat water-resistant gypsum backing panel as defined in ASTM C1178.
 - a. Fire-Resistant Type: Type X core, thickness 5/8 inch.
 - b. Products – Basis of Design:
 - 1) Georgia-Pacific Gypsum; DensShield Tile Backer.
- D. Ceiling Board: Special sag-resistant gypsum ceiling board as defined in ASTM C 1396/C 1396M; sizes to minimize joints in place; ends square cut.
1. Application: Ceilings, unless otherwise indicated.
 2. Thickness: As required for fire-resistance-rated assembly indicated on Drawings.
 3. Edges: Tapered.
 4. Products – Basis of Design:
 - a. USG Corporation; Sheetrock Brand Sag-Resistant Interior Gypsum Ceiling Board.

2.4 ACCESSORIES

- A. Finishing Accessories: ASTM C1047, galvanized steel or rolled zinc, unless otherwise indicated.
1. Types: As detailed or required for finished appearance.
- B. Joint Materials: ASTM C475 and as recommended by gypsum board manufacturer for project conditions.
1. Tape: 2 inch wide, coated glass fiber tape for joints and corners , except as otherwise indicated.
 2. Ready-mixed vinyl-based joint compound.
 3. Powder-type vinyl-based joint compound.
 4. Chemical hardening type compound.
- C. High Build Drywall Surfer: Vinyl acrylic latex-based coating for spray application, designed to take the place of skim coating and separate paint primer in achieving Level 5 finish.
- D. Textured Finish Materials: Latex-based compound; plain.
- E. Screws for Attachment to Steel Members Less Than 0.03 inch In Thickness, to Wood Members, and to Gypsum Board: ASTM C1002; self-piercing tapping type; cadmium-plated for exterior locations.
- F. Screws for Attachment to Steel Members From 0.033 to 0.112 inch in Thickness: ASTM C954; steel drill screws for application of gypsum board to loadbearing steel studs.
- G. Corner Beads: Straight galvanized sheet metal with perforated legs.

- H. Acoustical Sealant: Refer to Section 079005.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that project conditions are appropriate for work of this section to commence.
- B. Guidelines for Prevention of Mold Growth on Gypsum Board (GA-238-03):
 - 1. Keep gypsum board dry throughout application.
 - 2. Do not use gypsum board that has visible mold growth.
 - 3. Gypsum Board on Walls: Install leaving a minimum 1/4" (6 mm) gap between gypsum board and finished floor.
 - 4. Do not apply gypsum board over other building materials where conditions exist favorable to mold growth.

3.2 FRAMING INSTALLATION

- A. Blocking: Install wood blocking for support of:
 - 1. Framed openings.
 - 2. Wall mounted cabinets.
 - 3. Plumbing fixtures.
 - 4. Toilet partitions.
 - 5. Toilet accessories.
 - 6. Wall mounted door hardware.

3.3 ACOUSTIC ACCESSORIES INSTALLATION

- A. Acoustic Insulation: Place tightly within spaces, around cut openings, behind and around electrical and mechanical items within partitions, and tight to items passing through partitions.
- B. Acoustic Sealant: Install in accordance with manufacturer's instructions.
- C. STC-Rated Assemblies:
 - 1. Seal construction at perimeters, behind control joints, and at openings and penetrations with a continuous bead of acoustical sealant. Install acoustical sealant at both faces of partitions at perimeters and through penetrations. Comply with ASTM C919 and with manufacturer's written recommendations for locating edge trim and closing off sound-flanking paths around or through assemblies, including sealing partitions above acoustical ceilings.

3.4 BOARD INSTALLATION

- A. Comply with ASTM C 840, GA-216, and manufacturer's instructions. Install to minimize butt end joints, especially in highly visible locations.
- B. Single-Layer Non-Rated: Install gypsum board in most economical direction, with ends and edges occurring over firm bearing.
 - 1. Exception: Tapered edges to receive joint treatment at right angles to framing.
- C. Fire-Rated Construction: Install gypsum board in strict compliance with requirements of assembly listing.

3.5 INSTALLATION OF TRIM AND ACCESSORIES

- A. Control Joints: Place control joints consistent with lines of building spaces and as indicated.
 - 1. Not more than 30 feet apart on walls and ceilings over 50 feet long.
 - 2. At exterior soffits, not more than 30 feet apart in both directions.
- B. Corner Beads: Install at external corners, using longest practical lengths.

3.6 JOINT TREATMENT

- A. Glass Mat Faced Gypsum Board: Use fiberglass joint tape, bedded and finished with chemical hardening type joint compound.
- B. Paper Faced Gypsum Board: Use paper joint tape, bedded with ready-mixed vinyl-based joint compound and finished with ready-mixed vinyl-based joint compound.
- C. Finish gypsum board in scheduled areas in accordance with levels defined in ASTM C 840.
 - 1. Above Finished Ceilings Concealed From View: Level 1.
 - 2. Utility Areas and Areas Behind Cabinetry: Level 2.
 - 3. Walls and Ceilings to Receive Flat or Eggshell Paint Finish: Level 4.
 - 4. Walls and Ceilings to Receive Semi-Gloss or Gloss Paint Finish: Level 5.
- D. Tape, fill, and sand exposed joints, edges, and corners to produce smooth surface ready to receive finishes.
 - 1. Feather coats of joint compound so that camber is maximum 1/32 inch.

2. Taping, filling, and sanding is not required at surfaces behind adhesive applied ceramic tile and fixed cabinetry.
 3. Taping, filling and sanding is not required at base layer of double layer applications.
 - E. Where Level 5 finish is indicated, spray-apply high build drywall surfacer over entire surface after joints have been properly treated; achieve a flat and tool mark-free finish.
 - F. Fill and finish joints and corners of cementitious backing board as recommended by manufacturer.
- 3.7 TEXTURE FINISH
- A. Prime gypsum board surfaces.
 - B. Apply finish texture coating by means of spraying apparatus in accordance with manufacturer's instructions and to match approved sample.
- 3.8 TOLERANCES
- A. Maximum Variation of Finished Gypsum Board Surface from True Flatness: 1/8 inch in 10 feet in any direction.
- 3.9 PROTECTION
- A. Protect installed products from damage from weather, condensation, direct sunlight, construction, and other causes during remainder of the construction period.
 - B. Remove and replace panels that are wet, moisture damaged, or mold damaged.
 1. Indications that panels are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
 2. Indications that panels are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

END OF SECTION

SECTION 09 30 00 - TILING

PART 1 - GENERAL

- 1.1 SECTION INCLUDES
 - A. Tile for floor applications.
 - B. Tile for wall applications.
 - C. Ceramic trim.
- 1.2 ADMINISTRATIVE REQUIREMENTS
 - A. Preinstallation Meeting: Convene a preinstallation meeting one week before starting work of this section; require attendance by all affected installers.
- 1.3 SUBMITTALS
 - A. See Section 00 72 00 - General Conditions, for submittal procedures.
 - B. Product Data: Provide manufacturers' data sheets on tile, mortar, grout, and accessories. Include instructions for using grouts and adhesives.
 - C. Shop Drawings: Indicate tile layout, patterns, color arrangement, perimeter conditions, junctions with dissimilar materials, control and expansion joints, thresholds, ceramic accessories, and setting details.
 - D. Samples: Mount tile and apply grout on two plywood panels, minimum 18 x 18 inches in size illustrating pattern, color variations, and grout joint size variations.
- 1.4 QUALITY ASSURANCE
 - A. Maintain one current copy of The Tile Council of North America (TCNA) Handbook for Ceramic, Glass and Stone Tile Installation and ANSI A108 Series/A118/A136.1, American National Specifications for the Installation of Ceramic Tile on site.
 - B. Manufacturer Qualifications: Company specializing in manufacturing the types of products specified in this section, with minimum 5 years of documented experience.
 - C. Installer Qualifications: Company specializing in performing tile installation, with minimum of 5 years of documented experience.
- 1.5 DELIVERY, STORAGE, AND HANDLING
 - A. Protect adhesives from freezing or overheating in accordance with manufacturer's instructions.
- 1.6 FIELD CONDITIONS
 - A. Do not install solvent-based products in an unventilated environment.
 - B. Maintain ambient and substrate temperature of 50 degrees F during installation of mortar materials.

PART 2 - PRODUCTS

- 2.1 TILE
 - A. Manufacturers: All products by the same manufacturer.
 - 1. American Olean: www.americanolean.com.
 - 2. Dal-Tile Corporation: www.daltile.com.
 - 3. Summitville Tiles, Inc: www.summitville.com.
 - 4. Thorntree: www.thorntreeslate.com.
 - 5. Substitutions: See Section 016000 - Product Requirements.
 - B. Glazed Wall Tile: ANSI A137.1 , and as follows:
 - 1. Acceptable Products: Refer to Finish Legend.
 - 2. Moisture Absorption: 3.0 to 7.0 percent.
 - 3. Size and Shape: Refer to Finish Legend.
 - 4. Edges: Cushioned.
 - 5. Surface Finish: High gloss.
 - 6. Colors: As scheduled.
 - C. Porcelain Wall Tile: ANSI A137.1, and as follows:
 - 1. Acceptable Products: Refer to Finish Legend.
 - 2. Moisture Absorption: 0 to 0.5 percent.
 - 3. Face: Plain.
 - 4. Edges: Cushioned.
 - 5. Size and Shape: Refer to Finish Legend.
 - 6. Colors and Surface Finish: As scheduled.

- D. Porcelain Floor Tile: ANSI A137.1, and as follows:
1. Acceptable Products: Refer to Finish Legend.
 2. Moisture Absorption: 0 to 0.5 percent.
 3. Face: Plain.
 4. Edges: Cushioned.
 5. Thickness: 3/8 inch.
 6. Size and Shape: Refer to Finish Legend.
 7. Colors and Surface Finish: As scheduled.
 8. Provide tile that meets slip resistance requirements of applicable codes. Refer to Interior Design selections.

2.2 TRIM AND ACCESSORIES

- A. Ceramic Trim: Matching bullnose, double bullnose, cove base, and cove ceramic shapes in sizes coordinated with field tile.
1. Applications: Use in the following locations:
 - a. Open Edges: Bullnose.
 - b. Inside Corners: Jointed.
 - c. Floor to Wall Joints: Cove base.
 2. Manufacturer: Same as for tile.

2.3 SETTING MATERIALS

- A. Latex-Portland Cement Mortar Bond Coat: ANSI A118.4.
1. Application(s): Use this type of bond coat where indicated and where no other type of bond coat is indicated.
 2. Products:
 - a. Custom Building Products; MegaLite: www.custombuildingproducts.com.
 - b. LATICRETE International, Inc; LATICRETE 254 Platinum: www.laticrete.com.
 - c. ProSpec, H.B.Fuller; Permalastic System: www.prospec.com.
 - d. Substitutions: See Section 016000 - Product Requirements.

2.4 GROUTS

- A. Manufacturers:
1. Custom Building Products: www.custombuildingproducts.com.
 2. LATICRETE International, Inc: www.laticrete.com.
 3. MAPEI Corporation: www.mapei.com.
 4. Substitutions: See Section 016000 - Product Requirements.
- B. Standard Grout: ANSI A118.6 standard cement grout.
1. Applications: Use this type of grout where indicated and where no other type of grout is indicated.
 2. Use sanded grout for joints 1/8 inch wide and larger; use unsanded grout for joints less than 1/8 inch wide.
 3. Color(s): As scheduled.

2.5 THIN-SET ACCESSORY MATERIALS

- A. Concrete Floor Slab Crack Isolation Membrane (over hard rock concrete): Material complying with ANSI A118.12.
1. Thickness: 20 mils, maximum.
 2. Crack Resistance: No failure at 1/16 inch gap, minimum.
 3. Acceptable Product: Nobleseal CIS.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that sub-floor surfaces are smooth and flat within the tolerances specified for that type of work and are ready to receive tile.
- B. Verify that wall surfaces are smooth and flat within the tolerances specified for that type of work, are dust-free, and are ready to receive tile.
- C. Verify that sub-floor surfaces are dust-free and free of substances that could impair bonding of setting materials to sub-floor surfaces.
- D. Verify that concrete sub-floor surfaces are ready for tile installation by testing for moisture emission rate and alkalinity; obtain instructions if test results are not within limits recommended by tile manufacturer and setting materials manufacturer.
- E. Verify that required floor-mounted utilities are in correct location.

- F. For tile exhibiting color variations, verify that the tile has been factory blended and packaged so that tile units taken from one package show the same range of colors as those taken from other packages and match approved samples. If the tiles have not been factory blended, either return to manufacturer, or blend tiles on site before installing.

3.2 PREPARATION

- A. Protect surrounding work from damage.
- B. Broom clean surfaces and damp clean.
- C. Seal substrate surface cracks with filler. Level existing substrate surfaces to acceptable flatness tolerances.
- D. Prepare substrate surfaces for adhesive installation in accordance with adhesive manufacturer's instructions.

3.3 INSTALLATION - GENERAL

- A. Install tile, thresholds, and stair treads and grout in accordance with applicable requirements of ANSI A108.1 through A108.13, manufacturer's instructions, and The Tile Council of North America Handbook recommendations.
- B. Lay tile to pattern indicated. Do not interrupt tile pattern through openings. At tub, start first course at top of tub, not at floor level to avoid excess tile cutting.
- C. Cut and fit tile to penetrations through tile, leaving sealant joint space. Form corners and bases neatly. Align floor joints.
- D. Place tile joints uniform in width, subject to variance in tolerance allowed in tile size. Make grout joints without voids, cracks, excess mortar or excess grout, or too little grout.
- E. Form internal angles square and external angles bull-nosed.
- F. Install non-ceramic trim in accordance with manufacturer's instructions.
- G. Install thresholds where indicated.
- H. Sound tile after setting. Replace hollow sounding units.
- I. Keep expansion joints free of adhesive or grout. Apply sealant to joints.
- J. Prior to grouting, allow installation to completely cure; minimum of 48 hours.
- K. Grout tile joints. Use standard grout unless otherwise indicated.
- L. Apply sealant to junction of tile and dissimilar materials and junction of dissimilar planes.
- M. Install ceramic accessories rigidly in prepared openings.

3.4 INSTALLATION - FLOORS - THIN-SET METHODS

- A. Over interior concrete substrates, install in accordance with The Tile Council of North America Handbook Method F113, dry-set or latex-Portland cement bond coat, with standard grout, unless otherwise indicated.
 - 1. Use uncoupling membrane under all tile unless other underlayment is indicated.
 - 2. Where waterproofing membrane is indicated, install in accordance with The Tile Council of North America Handbook Method F122, with latex-Portland cement grout.
 - 3. Where epoxy bond coat and grout are indicated, install in accordance with The Tile Council of North America Handbook Method F131.
 - 4. Where epoxy or furan grout is indicated, but not epoxy or furan bond coat, install in accordance with The Tile Council of North America Handbook Method F115.

3.5 INSTALLATION - WALL TILE

- A. Over coated glass mat backer board on studs, install in accordance with The Tile Council of North America Handbook Method W245.

3.6 CLEANING

- A. Clean tile and grout surfaces as soon as possible. Clean grout smear and haze from tile according to tile and grout manufacturer's written instructions.

3.7 PROTECTION

- A. Do not permit traffic over finished floor surface for 4 days after installation, or per manufacturer's written instructions.
- B. Protect installed tile work with kraft paper or other heavy covering during the construction period, in order to prevent staining, damage or wear.

END OF SECTION

SECTION 09 65 00 - RESILIENT FLOORING

PART 1 - GENERAL

- 1.1 SECTION INCLUDES
 - A. Resilient flooring.
 - B. Resilient base.
 - C. Installation accessories.
- 1.2 SUBMITTALS
 - A. See Section 00 72 00 - General Conditions, for submittal procedures.
 - B. Product Data: Provide data on specified products, describing physical and performance characteristics; including sizes, patterns and colors available; and installation instructions.
 - C. Selection Samples: Submit manufacturer's complete set of color samples for Architect's initial selection.
- 1.3 DELIVERY, STORAGE, AND HANDLING
 - A. Protect roll materials from damage by storing on end.
- 1.4 EXTRA MATERIALS
 - A. Provide 2 percent of installed resilient product of each type and color specified.
- 1.5 FIELD CONDITIONS
 - A. Maintain temperature in storage area between 55 degrees F and 90 degrees F.
 - B. Store materials for not less than 48 hours prior to installation in area of installation, at a temperature of 70 degrees F, to achieve temperature stability. Thereafter, maintain conditions above 55 degrees F.

PART 2 - PRODUCTS

- 2.1 FLOORING MATERIALS
 - A. Vinyl Composition Tile
 - 1. ASTM F 1068, Composition 1.
 - 2. Size: 12 by 12 inches, 1/8 inch thick.
 - 3. Acceptable Product: Refer to Finish Legend.
- 2.2 RESILIENT BASE
 - A. Resilient Base: ASTM F1861, Type TS rubber, vulcanized thermoset; top set Style B, Cove, and as follows:
 - 1. Height: As scheduled.
 - 2. Thickness: 0.125 inch thick.
 - 3. Finish: Satin.
 - 4. Length: Roll.
 - 5. Color: Color as selected from manufacturer's standards.
 - 6. Accessories: Pre-molded external corners and end stops.
 - 7. Manufacturers:
 - a. Burke Flooring: www.burkemercer.com.
 - b. Johnsonite, Inc: www.johnsonite.com.
 - c. Roppe Corp: www.roppe.com.
 - d. Substitutions: See Section 016000 - Product Requirements.
- 2.3 ACCESSORIES
 - A. Subfloor Filler: White premix latex; type recommended by adhesive material manufacturer.
 - B. Primers, Adhesives, and Seaming Materials: Waterproof; types recommended by flooring manufacturer.
 - C. Moldings, Transition and Edge Strips: Resilient rubber.
 - D. Filler for Coved Base: Plastic.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that surfaces are flat to tolerances acceptable to flooring manufacturer, free of cracks that might telegraph through flooring, clean, dry, and free of curing compounds, surface hardeners, and other chemicals that might interfere with bonding of flooring to substrate.
- B. Verify that wall surfaces are smooth and flat within the tolerances specified for that type of work, are dust-free, and are ready to receive resilient base.
- C. Cementitious Sub-floor Surfaces: Verify that substrates are dry enough and ready for resilient flooring installation by testing for moisture and pH.
 - 1. Test in accordance with ASTM F710.
 - 2. Obtain instructions if test results are not within limits recommended by resilient flooring manufacturer and adhesive materials manufacturer.
- D. Verify that required floor-mounted utilities are in correct location.

3.2 PREPARATION

- A. Prepare floor substrates as recommended by flooring and adhesive manufacturers.
- B. Remove sub-floor ridges and bumps. Fill minor low spots, cracks, joints, holes, and other defects with sub-floor filler to achieve smooth, flat, hard surface.
- C. Prohibit traffic until filler is cured.
- D. Clean substrate.

3.3 INSTALLATION

- A. Starting installation constitutes acceptance of sub-floor conditions.
- B. Install in accordance with manufacturer's instructions.
- C. Spread only enough adhesive to permit installation of materials before initial set.
- D. Fit joints tightly.
- E. Set flooring in place, press with heavy roller to attain full adhesion.
- F. Where type of floor finish, pattern or color are different on opposite sides of door, terminate flooring under centerline of door.
- G. Install edge strips at unprotected or exposed edges, where flooring terminates, and where indicated.
- H. Scribe flooring to walls, columns, cabinets, floor outlets, and other appurtenances to produce tight joints.
- I. Complete installation without open cracks, voids, raising and puckering at joints, telegraphing of adhesive spreader marks, and other surface imperfections.

3.4 TILE FLOORING

- A. Mix tile from container to ensure shade variations are consistent when tile is placed, unless manufacturer's instructions say otherwise.
- B. Lay flooring with joints and seams parallel to building lines to produce symmetrical tile pattern.

3.5 RESILIENT BASE

- A. Fit joints tightly and make vertical. Maintain minimum dimension of 18 inches between joints.
- B. Miter internal corners. At external corners, use premolded units. At exposed ends, use premolded units.
- C. Install base on solid backing. Bond tightly to wall and floor surfaces.
- D. Scribe and fit to door frames and other interruptions.

3.6 CLEANING

- A. Remove excess adhesive from floor, base, and wall surfaces without damage.
- B. Clean in accordance with manufacturer's instructions.

END OF SECTION

SECTION 09 90 00 - PAINTING AND COATING

PART 1 - GENERAL

- 1.1 SECTION INCLUDES
 - A. Surface preparation.
 - B. Field application of paints.
 - C. Scope: Finish all interior surfaces exposed to view, unless fully factory-finished and unless otherwise indicated.
- 1.2 SUBMITTALS
 - A. See Section 00 72 00 - General Conditions, for submittal procedures.
 - B. Product Data: Provide data on all finishing products, including VOC content.
 - C. Samples: Submit two paper chip samples in size illustrating range of colors and textures available for each surface finishing product scheduled.
 - D. Certification: By manufacturer that all paints and coatings comply with VOC limits specified.
- 1.3 QUALITY ASSURANCE
 - A. Manufacturer Qualifications: Company specializing in manufacturing the products specified, with minimum three years documented experience.
 - B. Applicator Qualifications: Company specializing in performing the type of work specified with minimum three years' experience.
- 1.4 EXTRA MATERIALS
 - A. Supply a minimum of one unopened gallon of each color; store where directed.
- 1.5 DELIVERY, STORAGE, AND HANDLING
 - A. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.
 - B. Container Label: Include manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.
 - C. Paint Materials: Store at minimum ambient temperature of 45 degrees F and a maximum of 90 degrees F, in ventilated area, and as required by manufacturer's instructions. Protect from freezing.
- 1.6 FIELD CONDITIONS
 - A. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the paint product manufacturer.
 - B. Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and humidity and temperature limitations.
 - C. Ventilate affected areas during paint application.
 - D. Exhaust solvent vapors outdoors, away from air intakes and people.
 - E. Minimum Application Temperatures for Latex Paints: 45 degrees F for interiors; 50 degrees F for exterior; unless required otherwise by manufacturer's instructions.
 - F. Provide minimum lighting level of 80 ft candles measured mid-height at substrate surface during application of materials.

PART 2 - PRODUCTS

- 2.1 MANUFACTURERS
 - A. Provide all paint and coating products used in any individual system from the same manufacturer; no exceptions.
 - B. Paints:
 - 1. Dunn Edwards (Basis of Design).
 - 2. Base Manufacturer: Sherwin-Williams.
 - 3. Frazee Paint, a Comex Group Company: www.frazee.com.
 - 4. Benjamin Moore & Co: www.benjaminmoore.com.
 - 5. PPG Architectural Finishes, Inc: www.ppgaf.com.
 - 6. Valspar: Valspar.com
 - C. Substitutions: See Section 016000 - Product Requirements.

2.2 PAINTS AND COATINGS - GENERAL

- A. Paints and Coatings: Ready mixed, unless intended to be a field-catalyzed coating.
 - 1. Provide paints and coatings of a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating, with good flow and brushing properties, and capable of drying or curing free of streaks or sags.
 - 2. Supply each coating material in quantity required to complete entire project's work from a single production run.
 - 3. Do not reduce, thin, or dilute coatings or add materials to coatings unless such procedure is specifically described in manufacturer's product instructions.
- B. Primers: Where the manufacturer offers options on primers for a particular substrate, use primer categorized as "best" by the manufacturer.
- C. Volatile Organic Compound (VOC) Content:
 - 1. Provide coatings that comply with the most stringent requirements specified in the following:
 - a. 40 CFR 59, Subpart D--National Volatile Organic Compound Emission Standards for Architectural Coatings.
 - 2. Determination of VOC Content: Testing and calculation in accordance with 40 CFR 59, Subpart D (EPA Method 24), exclusive of colorants added to a tint base and water added at project site; or other method acceptable to authorities having jurisdiction.
- D. Flammability: Comply with applicable code for surface burning characteristics.
- E. Colors: As indicated on drawings
 - 1. In finished areas, finish pipes, ducts, conduit, and equipment the same color as the wall/ceiling they are mounted on/under.
 - 2. Obtain clarification of intended color at locations where color is not indicated on schedule or drawings.

2.3 PAINT SYSTEMS - INTERIOR

- A. Gypsum Board - Flat
 - 1. One coat: ProMar 400 Zero VOC Interior Latex Primer, B28W4600, 1.1 mils DFT.
 - 2. One coat texture as approved by Architect.
 - 3. Two coats: ProMar 400 Zero VOC Interior Latex Flat, B30-4600 Series, 1.2 mils DFT/coat.
- B. Gypsum Board - Eggshell
 - 1. One coat: ProMar 400 Zero VOC Interior Latex Primer, B28W4600, 1.1 mils DFT..
 - 2. One coat: texture as approved by Architect.
 - 3. Two coats: Promar 400 Zero VOC Interior Latex Egg-Shell, B20-4600 Series, 1.3 mils DFT/coat
- C. Gypsum Board - Semi-gloss
 - 1. One coat: ProMar 400 Zero VOC Interior Latex Primer, B28W4600, 1.1 mils DFT.
 - 2. One coat: texture as approved by Architect.
 - 3. Two coats: Promar Zero VOC Interior, Latex Semi-gloss, B31-4600 Series 1.3 mils DFT/coat.
- D. Ferrous Metal Items - Eggshell (including hollow metal doors, frames, access doors/frames, handrails, etc):
 - 1. One coat: Pro-Cryl Universal Primer, B566-650 Series. 2.5 mils DFT.
 - 2. Two coats Pro Industrial Acrylic Semi-Gloss, B66-650 Series, 2.5 mils DFT/coat.
 - 3. Miscellaneous Items Exposed to View and Not Otherwise Scheduled: Finish with compatible paint to match adjacent surface finish and color.

2.4 ACCESSORY MATERIALS

- A. Accessory Materials: Provide all primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials required to achieve the finishes specified whether specifically indicated or not; commercial quality.
- B. Patching Material: Latex filler.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Do not begin application of coatings until substrates have been properly prepared.
- B. Verify that surfaces are ready to receive work as instructed by the product manufacturer.
- C. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially affect proper application.
- D. If substrate preparation is the responsibility of another installer, notify General Contractor of unsatisfactory preparation before proceeding.
- E. Test shop-applied primer for compatibility with subsequent cover materials.

- F. Measure moisture content of surfaces using an electronic moisture meter. Do not apply finishes unless moisture content of surfaces are below the following maximums:
 - 1. Gypsum Wallboard: 12 percent.
 - 2. Masonry, Concrete, and Concrete Unit Masonry: 12 percent.
 - 3. Interior Wood: 15 percent, measured in accordance with ASTM D4442.

3.2 PREPARATION

- A. Remove or repair existing coatings that exhibit surface defects. Fill nail holes, cracks, chips, spalls, and similar damaged areas to match adjacent undamaged areas.
- B. Clean surfaces thoroughly and correct defects prior to coating application.
- C. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- D. Remove or mask surface appurtenances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces or finishing.
- E. Seal surfaces that might cause bleed through or staining of topcoat.
- F. Remove mildew from impervious surfaces by scrubbing with solution of tetra-sodium phosphate and bleach. Rinse with clean water and allow surface to dry.
- G. Mask permanent labels.
- H. Roughen slick, poured, or precast concrete and remove sealers by chemical cleaning or abrasive method, such as sandsweeping. Rinse thoroughly with water and allow to dry
- I. Gypsum Board Surfaces to be Painted: Fill minor defects with filler compound. Spot prime defects after repair.
- J. Uncorroded Uncoated Steel and Iron Surfaces to be Painted: Remove grease, mill scale, weld splatter, dirt, and rust. Where heavy coatings of scale are evident, remove by hand or power tool wire brushing or sandblasting; clean by washing with solvent. Apply a treatment of phosphoric acid solution, ensuring weld joints, bolts, and nuts are similarly cleaned. Prime paint entire surface; spot prime after repairs.
- K. Shop-Primed Steel Surfaces to be Finish Painted: Sand and scrape to remove loose primer and rust. Feather edges to make touch-up patches inconspicuous. Clean surfaces with solvent. Prime bare steel surfaces. Re-prime entire shop-primed item.
- L. Metal Doors to be Painted: Prime metal door top and bottom edge surfaces.

3.3 APPLICATION

- A. Do not paint over UL, FMG, or other code-required labels or equipment name, identification, performance rating, or nomenclature plates.
- B. Completely cover surfaces as necessary to provide a smooth, opaque surface of uniform finish, color, appearance, and coverage. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections will not be acceptable.
- C. Remove unfinished louvers, grilles, covers, and access panels on mechanical and electrical components and paint separately.
- D. Apply products in accordance with manufacturer's instructions.
- E. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.
- F. Apply each coat to uniform appearance.
- G. Sand wood and metal surfaces lightly between coats to achieve required finish.
- H. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.
- I. Reinstall electrical cover plates, hardware, light fixture trim, escutcheons, and fittings removed prior to finishing.

3.4 CLEANING

- A. Collect waste material that could constitute a fire hazard, place in closed metal containers, and remove daily from site.

3.5 PROTECTION

- A. Protect work of other trades, whether being painted or not, against damage from painting. Correct damage by cleaning, repairing or replacing, and repainting, as approved by Architect.
- B. Provide "Wet Paint" signs to protect newly painted finishes. After completing painting operations, remove temporary protective wrappings provided by others to protect their work.
 - 1. After work of other trades is complete, touch up and restore damaged or defaced painted surfaces. Comply with Painting and Decorating Contractors of America Standard PDCA P1
- C. Protect finished coatings until completion of project.

- D. Touch Up for Previously Coated Surfaces:
 - 1. Touch up marred, scraped, and blemished areas of surfaces which were factory primed or previously coated.
 - 2. Properly prepare and touch up scratched, abrasions, and blemishes and remove foreign matter before proceeding with succeeding coats.
 - 3. Feather touch up coating overlapping minimum 2 inches onto adjacent unblemished areas producing smooth, uniform surface.
 - 4. Touch up fasteners, welded surfaces and surrounding, field connections and areas on which shop coat has been abraded or damaged with specified primer before corrosion or other damage occurs from exposure.
- E. Touch-up damaged coatings after Substantial Completion.

END OF SECTION

SECTION 10 14 00 – SIGNAGE

PART 3 -GENERAL

3.5 SUMMARY

- A. Section Includes:
 - a. Exit signage
 - b. Parking signage
 - c. Restroom signage
 - d. ISA signage
- B. Related Documents:
 - b. The Contract Documents, as defined in Section 011000 -Summary of Work, apply to the Work of this Section. Additional requirements and information necessary to complete the Work of this Section may be found in other Documents.

3.6 REFERENCES

- A. California Building Code
 - a. Tactile character type: Tactile characters on signs shall be raised 1/32 inch (0.794 mm) minimum and shall be sans serif uppercase characters accompanied by Contracted Grade 2 Braille (see note below). CBC Section 1117B.5.5.1.
 - b. Tactile character size: Raised characters shall be a minimum of 5/8 inch (15.9 mm) and a maximum of 2 inches (51 mm) high. CBC Section 1117B.5.5.2.
 - c. Finish and contrast: Contrast between character, symbols and their background must be 70% minimum and have a non-glare finish. CBC Section 1117B.5.2.
 - d. Proportions: Characters on signs shall have a width-to-height ratio of between 3:5 and 1:1 and a stroke width-to-height ratio of between 1:5 and 1:10. CBC Section 1117B.5.3. All letters measured must be uppercase. After choosing a typestyle to test, begin by printing the letters I, X, O at 1 inch high. Place the template's 1:1 square over the X or O, whichever is narrower. If the character is not wider than 1 inch, nor narrower than the 3:5 rectangle, the proportions are correct. Use the 1:5 rectangle to determine if the stroke of the I is too broad, and the 1:10 rectangle to see if it is too narrow. If all the tests are passed, the typestyle is compliant with proportion requirement.
 - e. Braille: California (Contracted) Grade 2 Braille shall be used wherever Braille is required in other portions of these standards. Dots shall be 1/10 inch (2.54 mm) on center in each cell with 2/10 inch (5.08 mm) space between cells, measured from the second column of dots in the first cell to the first column of dots in the second cell. Dots shall be raised a minimum of 1/40 inch (0.635 mm) above the background. Braille dots shall be domed or rounded. CBC Section 1117B.5.6.
 - f. Mounting location shall be determined so that a person may approach within 3 inches (76 mm) of signage without encountering protruding objects or standing within the swing of the door. CBC Section 1117B.5.7
- B. ADA-ABA Accessibility Guidelines: U.S. Architectural & Transportation Barriers Compliance Board's "Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities; Architectural Barriers Act (ABA) Accessibility Guidelines."

3.7 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: Show fabrication and installation details for signs.
 - a. Show sign mounting heights, locations of supplementary supports to be provided by others, and accessories.

- b. Provide message list, timesteps, graphic elements, including tactile characters and Braille, and layout for each sign.
- C. Samples for Initial Selection: Manufacturer's color charts consisting of actual units or sections of units showing the full range of colors available for the following:
- b. Aluminum
 - c. Acrylic Sheet
 - d. Polycarbonate sheet
 - e. Die-cut characters and graphic symbols. Include representative samples of available timesteps and graphic symbols.
- D. Samples for Verification: For each of the following products and for the full range of color, texture, and sign material indicated, of sizes indicated:
- b. Dimensional Characters: Full-size Samples of each type of dimensional character (letter, number, and graphic element).
 - c. Aluminum: For each form, finish and color, on 6 inch long sections of extrusions and squares of sheet at least 4 by 4 inches.
 - d. Acrylic Sheet: 8 by 10 inches for each color required.
 - e. Polycarbonate Sheet: 8 by 10 inches for each color required.
 - f. Phenolic-Backed Photopolymer Sheet: 8 by 10 inches for each color required.
 - g. Panel Signs: Not less than 12 inches square including border.
 - h. Trim: 6-inch-long sections of each profile.
 - i. Accessories: Manufacturer's full-size unit.
- E. Sign Schedule: Use same designations indicated on Drawings.

3.8 QUALITY ASSURANCE

- A. Installer Qualifications: Fabricator of products. Not required.
- B. Fabricator Qualifications: Shop that employs skilled workers who custom-fabricate products similar to those required for this Project and whose products have a record of successful in-service performance.
- C. Source Limitations for Signs: Obtain each sign type indicated from one source from a single manufacturer.
- D. Regulatory Requirements: Comply with applicable provisions in ADAAG Accessibility Guidelines and California Building Code.
 - a. Finish and Contrast: Contrast between character symbols and their background must be 70% minimum and have a non-glare finish. CBC Section 1117B.5.2.
 - b. Proportions: Characters on signs shall have a width-to-height ratio of between 3:5 and 1:1 and a stroke width-to-height ratio of between 1:5 and 1:10. CBC Section 1117B.5.3. All letters measured must be uppercase. After choosing a timestep to test, begin by printing the letters I, X, O at 1 inch high. Place the template's 1:1 square over the X or O, which ever is narrower. If the character is not wider than 1 inch, nor narrower than the 3:5 rectangle, the proportions are correct. Use the 1:5 rectangle to determine if the stroke of the I is too broad, and the 1:10 rectangle to see if it is too narrow. If all the tests are passed, the timestep is compliant with proportion requirement.

3.9 PROJECT CONDITIONS

- A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit installation of signs in exterior locations to be performed according to manufacturers' written instructions and warranty requirements.

3.10 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of signs that fail in materials or workmanship within specified warranty period.
 - a. Failures include, but are not limited to, the following:
 - a. Deterioration of metal and polymer finishes beyond normal weathering.
 - b. Deterioration of embedded graphic image colors and sign lamination.
- B. DELIVERY, STORAGE, AND HANDLING
- C. Section 016000 -Product Requirements: Transport, handle, store, and protect Products.
- D. Store in original packaging, off the ground and under protective covering and handle so as to prevent damage.

PART 4 -PRODUCTS

4.5 MANUFACTURERS

- A. Polycarbonate Sheet: Of thickness indicated, manufactured by extrusion process, coated on both surfaces with abrasion-resistant coating:
 - a. Impact Resistance: 16 ft-lbf/in. per ASTM D 256, Method A.
 - b. Tensile Strength: 9000 lbf/sq. in. per ASTM D 638.
 - c. Flexural Modulus of Elasticity: 340,000 lbf/sq. in. per ASTM D 790.
 - d. Heat Deflection: 265 deg F at 264 lbf/sq. in. per ASTM D 648.
 - e. Abrasion Resistance: 1.5 percent maximum haze increase for 100 revolutions of a Taber abraser with a load of 500 g per ASTM D 1044.
- B. Applied Vinyl: Die-cut characters from vinyl film of nominal thickness of 3 mils with pressure-sensitive adhesive backing, suitable for exterior applications

4.6 DIMENSIONAL CHARACTERS

- A. PANEL SIGNS
- B. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
- C. ASI-Modulex, Inc.
- D. Gemini Incorporated.
- E. Or equal.
- F. Interior and Exterior Panel Signs: Provide smooth sign panel surfaces constructed to remain flat under installed conditions within a tolerance of plus or minus 1/16 inch measured diagonally from corner to corner, complying with the following requirements:
 - a. Phenolic-Backed Photopolymer Sheet: Provide light-sensitive, water-wash photopolymer face

- layer bonded to a phenolic base layer to produce a composite sheet with overall, face layer, and base-layer thicknesses, respectively, of 0.120, 0.040, and 0.080 inch.
- b. Laminated, Etched Photopolymer: Raised graphics with Braille 1/32 inch above surface with contrasting colors as selected by Architect from manufacturer's full range and laminated to acrylic back.
 - c. Edge Condition: Beveled.
 - d. Corner Condition: Rounded to radius indicated.
 - e. Mounting: Unframed.
 - a. Wall mounted with concealed anchors.
 - b. Manufacturer's standard non-corroding anchors for substrates encountered.
 - f. Color: As selected by Architect from manufacturer's full range.
 - g. Tactile Characters: Characters and Grade 2 Braille raised 1/32 inch above surface with contrasting colors.
- G. Tactile and Braille Sign: Manufacturer's standard process for producing text and symbols complying with ADAag Accessibility Guidelines and with CBC 11B. Text shall be accompanied by Grade 2 Braille. Produce precisely formed characters with square-cut edges free from burrs and cut marks
- a. Panel Material: Opaque acrylic sheet, Photopolymer.
 - b. Raised-Copy Thickness: Not less than 1/32 inch.
 - c. Tactile Characters: Raised, Sans serif uppercase characters, minimum of 5/8 inch and a maximum of 2 inches high. CBC Section 1117B.5.5, Items 1 and 2.
 - d. Braille: Contracted (Grade 2) Braille shall be used wherever Braille is required in other portions of these standards. Dots shall be 1/10 inch on center in each cell with 2/10 inch space between cells, measured from the second column of dots in the first cell to the first column of dots in the second cell. Dots shall be raised a minimum of 1/40 inch above the background. Braille dots shall be domed or rounded. CBC Section 1117B.5.6.

4.7 FABRICATION

- A. General: Provide manufacturer's standard signs of configurations indicated.
- a. Welded Connections: Comply with AWS standards for recommended practices in shop welding. Provide welds behind finished surfaces without distortion or discoloration of exposed side. Clean exposed welded surfaces of welding flux and dress exposed and contact surfaces.
 - b. Mill joints to tight, hairline fit. Form joints exposed to weather to exclude water penetration.
 - c. Preassemble signs in the shop to greatest extent possible. Disassemble signs only as necessary for shipping and handling limitations. Clearly mark units for reassembly and installation, in location not exposed to view after final assembly.
 - d. Conceal fasteners if possible; otherwise, locate fasteners where they will be inconspicuous.
- B. FINISHES, GENERAL
- C. Comply with NAAMM's "Metal finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- D. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- E. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.
- F. ACRYLIC SHEET FINISHES

- G. Colored Coatings for Acrylic Sheet: For copy and background colors, provide colored coatings, including inks, dyes, and paints, that are recommended by acrylic manufacturers for optimum adherence to acrylic surface and that are UV and water resistant for five years for application intended.

PART 5 -EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of work.
- B. Verify that items, including anchor inserts, are sized and located to accommodate signs.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

5.6 INSTALLATION

- A. Install sign units and components at the locations shown or scheduled, securely mount with concealed theft-resistant fasteners. Attach signs to substrates in accordance with the manufacturer's instructions.
- B. Install level, plumb, and at the proper height and alignments. Cooperate with other trades for installation of sign units to finish surfaces.
- C. Sign manufacturer to provide template for spacing of letters.

5.7 FIELD QUALITY CONTROL

- A. Inspect signage locations, attachments, and messages to verify installation conforms with Drawings.

END OF SECTION

SECTION 10 21 13 - PLASTIC TOILET COMPARTMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Solid-plastic toilet compartments configured as toilet enclosures urinal screens.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for toilet compartments.
- B. Shop Drawings: For toilet compartments.
 - 1. Include plans, elevations, sections, details, and attachment details.
 - 2. Show locations of cutouts for compartment-mounted toilet accessories.
 - 3. Show locations of centerlines of toilet fixtures.
 - 4. Show locations of floor drains.
- C. Samples for Initial Selection: For each type of toilet compartment material indicated.
 - 1. Include Samples of hardware and accessories involving material and color selection.

1.4 INFORMATIONAL SUBMITTALS

- A. Product Certificates: For each type of toilet compartment.

1.5 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For toilet compartments to include in maintenance manuals.

1.6 PROJECT CONDITIONS

- A. Field Measurements: Verify actual locations of toilet fixtures, walls, columns, ceilings, and other construction contiguous with toilet compartments by field measurements before fabrication.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Surface-Burning Characteristics: Comply with ASTM E 84; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
 - 1. Flame-Spread Index: 25 or less.
 - 2. Smoke-Developed Index: 450 or less.
- B. Regulatory Requirements: Comply with applicable provisions in the U.S. Architectural & Transportation Barriers Compliance Board's ADA-ABA Accessibility Guidelines for Buildings and Facilities and ICC A117.1 for toilet compartments designated as accessible.

2.2 SOLID-PLASTIC TOILET COMPARTMENTS

- A. Subject to compliance with requirements, provide comparable product by one of the following:
 - 1. Scranton Products (Basis of Design).
 - 2. General Partitions Mfg. Corp.

3. Global Steel Products Corp.
 4. Hadrian Manufacturing Inc.
 5. Metpar Corp.
 6. Bradley Corporation; Mills Partitions.
- B. Toilet-Enclosure Style: Floor supported, overhead braced.
- C. Urinal-Screen Style: Wall hung.
- D. Door, Panel and Pilaster Construction: Solid, high-density polyethylene (HDPE) panel material, not less than 1 inch thick, seamless, with eased edges, and with homogenous color and pattern throughout thickness of material.
1. Heat-Sink Strip: Manufacturer's standard continuous, stainless-steel strip fastened to exposed bottom edges of solid-plastic components to hinder malicious combustion.
 2. Color and Pattern: One color and pattern in each room as selected by Architect from manufacturer's full range.
- E. Pilaster Sleeves (Caps): Manufacturer's standard design; stainless steel.
- F. Urinal-Screen Post: Manufacturer's standard post design of material matching the thickness and construction of pilasters; with shoe and sleeve (cap) matching that on the pilaster.

2.3 HARDWARE AND ACCESSORIES

- A. Hardware and Accessories: Manufacturer's heavy-duty operating hardware and accessories.
1. Hinges: Manufacturer's minimum 0.062-inch- thick stainless-steel continuous, cam type that swings to a closed or partially open position, allowing emergency access by lifting door. Mount with through-bolts.
 2. Latch and Keeper: Manufacturer's heavy-duty surface-mounted cast-stainless-steel latch unit designed to resist damage due to slamming, with combination rubber-faced door strike and keeper, and with provision for emergency access. Provide units that comply with regulatory requirements for accessibility at compartments designated as accessible. Mount with through-bolts.
 3. Coat Hook: Manufacturer's heavy-duty combination cast-stainless-steel hook and rubber-tipped bumper, sized to prevent in-swinging door from hitting compartment-mounted accessories. Mount with through-bolts.
 4. Door Bumper: Manufacturer's heavy-duty rubber-tipped cast-stainless-steel bumper at out-swinging doors. Mount with through-bolts.
 5. Door Pull: Manufacturer's heavy-duty cast-stainless-steel pull at out-swinging doors that complies with regulatory requirements for accessibility. Provide units on both sides of doors at compartments designated as accessible. Mount with through-bolts.
- B. Anchorages and Fasteners: Manufacturer's standard exposed fasteners of stainless steel, finished to match the items they are securing, with theft-resistant-type heads. Provide sex-type bolts for through-bolt applications. For concealed anchors, use stainless-steel, hot-dip galvanized-steel, or other rust-resistant, protective-coated steel compatible with related materials.

2.4 FABRICATION

- A. Fabrication, General: Fabricate toilet compartment components to sizes indicated. Coordinate requirements and provide cutouts for through-partition toilet accessories where required for attachment of toilet accessories.
- B. Floor-Anchored Units: Provide manufacturer's standard corrosion-resistant anchoring assemblies with leveling adjustment nuts at pilasters for structural connection to floor. Provide shoes at pilasters to conceal anchorage.
- C. Door Size and Swings: Unless otherwise indicated, provide 24-inch- wide, in-swinging doors for standard toilet compartments and 36-inch- wide, out-swinging doors with a minimum 32-inch- wide, clear opening for compartments designated as accessible.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas and conditions, with Installer present, for compliance with requirements for fastening, support, alignment, operating clearances, and other conditions affecting performance of the Work.
1. Confirm location and adequacy of blocking and supports required for installation.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. General: Comply with manufacturer's written installation instructions. Install units rigid, straight, level, and plumb. Secure units in position with manufacturer's recommended anchoring devices.
 - 1. Maximum Clearances:
 - a. Pilasters and Panels: 1/2 inch.
 - b. Panels and Walls: 1 inch.
- B. Floor-Anchored Units: Set pilasters with anchors penetrating not less than 2 inches (into structural floor unless otherwise indicated in manufacturer's written instructions. Level, plumb, and tighten pilasters. Hang doors and adjust so tops of doors are level with tops of pilasters when doors are in closed position.
- C. Urinal Screens: Attach with anchoring devices to suit supporting structure. Set units level and plumb, rigid, and secured to resist lateral impact.

3.3 ADJUSTING

- A. Hardware Adjustment: Adjust and lubricate hardware according to hardware manufacturer's written instructions for proper operation. Set hinges on in-swinging doors to hold doors open approximately 30 degrees from closed position when unlatched. Set hinges on out-swinging doors[**and doors in entrance screens**] to return doors to fully closed position.

END OF SECTION

SECTION 10 28 00 – TOILET AND BATH ACCESSORIES

PART 1 - GENERAL

- 1.1 SECTION INCLUDES
 - A. Accessories for toilet rooms.
 - B. Grab bars.
- 1.2 ADMINISTRATIVE REQUIREMENTS
 - A. Coordinate the work with the placement of internal wall reinforcement, concealed ceiling supports, and reinforcement of toilet partitions to receive anchor attachments.
- 1.3 SUBMITTALS
 - A. See Section 00 72 00 - General Requirements, for submittal procedures.
 - B. Product Data: Provide data on accessories describing size, finish, details of function, attachment methods.
- 1.4 QUALITY ASSURANCE
 - A. Regulatory Requirements: Comply with the following:
 - 1. ICC A117.1 "Accessible and Usable Buildings and Facilities."
 - 2. ADA Accessibility Guidelines (ADAAG).
 - 3. Applicable state and local codes.
- 1.5 DELIVERY, STORAGE AND HANDLING
 - A. Packing and Shipping: Deliver materials to site in Manufacturer's original unopened packaging with labels intact. Protect finished surfaces with removable wrapping or coating which will not bond when exposed to sunlight.
 - B. Storage: Adequately protect against damage while stored at site.
 - C. Handling: Comply with Manufacturer's instructions

PART 2 - PRODUCTS

- 2.1 MANUFACTURERS
 - A. Toilet Accessories:
 - 1. Bobrick: www.bobrick.com (Basis of Design)
 - 2. American Specialties, Inc: www.americanspecialties.com.
 - 3. A & J Washroom Accessories Inc: www.ajwashroom.com.
 - 4. Bradley Corporation: www.bradleycorp.com.
 - 5. Substitutions: Section 016000 - Product Requirements.
- 2.2 MATERIALS
 - A. Accessories - General: Shop assembled, free of dents and scratches and packaged complete with anchors and fittings, steel anchor plates, adapters, and anchor components for installation.
 - 1. Grind welded joints smooth.
 - 2. Fabricate units made of metal sheet or seamless sheets, with flat surfaces.
 - B. Keys: Provide 2 keys for each accessory to Owner; master key all lockable accessories.
 - C. Stainless Steel Sheet: ASTM A666, Type 304.
 - D. Stainless Steel Tubing: ASTM A269, Type 304 or 316.
 - E. Adhesive: Two component epoxy type, waterproof.
 - F. Fasteners, Screws, and Bolts: Hot-dip galvanized, tamper-proof, security type.
 - G. Expansion Shields: Fiber, lead, or rubber as recommended by accessory manufacturer for component and substrate.
- 2.3 FINISHES
 - A. Stainless Steel: No. 4 satin brushed finish, unless otherwise noted.
- 2.4 TOILET ROOM ACCESSORIES
 - A. Refer to schedule on Drawings.

PART 3 - EXECUTION

- 3.1 EXAMINATION
 - A. Examine subsurface to receive Work and report detrimental conditions in writing to GC. Commencement of Work will be construed as acceptance of subsurface
 - B. Verify exact location of accessories for installation.
 - C. Verify that field measurements are as indicated on drawings.

- 3.2 PREPARATION
 - A. Deliver inserts and rough-in frames to site for timely installation.
 - B. Provide templates and rough-in measurements as required.

- 3.3 INSTALLATION
 - A. Install accessories in accordance with manufacturers' instructions.
 - B. Install plumb and level, securely and rigidly anchored to substrate.
 - C. Install grab bars to withstand a downward load of at least 250 lbf, when tested according to method in ASTM F 446.
 - D. Coordinate accessory locations with framing contractor for installation of concealed blocking for all wall-mounted units.
 - E. Coordinate accessory locations with mechanical lines to avoid conflicts with recessed units.
 - F. Mounting Heights and Locations: As required by accessibility regulations and as indicated on drawings.

- 3.4 CLEANING
 - A. Clean exposed surfaces of toilet accessories using methods acceptable to manufacturer.
 - B. Replace damaged toilet and bath accessories prior to Substantial Completion.

END OF SECTION

SECTION 12 36 61 - SIMULATED STONE COUNTERTOPS

PART 1 - GENERAL

- 1.1 RELATED DOCUMENTS
 - A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- 1.2 SUMMARY
 - A. Section Includes:
 - 1. Solid-surface-material countertops and backsplashes.
 - 2. Quartz agglomerate countertops and backsplashes.
- 1.3 ACTION SUBMITTALS
 - A. Product Data: For countertop materials and sinks.
 - B. Shop Drawings: Show locations of each item, dimensioned plans and elevations, large-scale details, attachment devices, and other components.
 - 1. Show details full size.
 - 2. Show locations and sizes of cutout and holes for plumbing fixtures installed in countertops.
 - C. Samples for Initial Selection: For each type of material exposed to view.
- 1.4 PROJECT CONDITIONS
 - A. Field Measurements: Verify dimensions of countertops by field measurements after base cabinets are installed but before countertop fabrication is complete.
- 1.5 COORDINATION
 - A. Coordinate locations of utilities that will penetrate countertops or backsplashes.

PART 2 - PRODUCTS

- 2.1 SOLID-SURFACE-MATERIAL COUNTERTOPS
 - A. Configuration: Provide countertops with the following front and backsplash style:
 - 1. Front: Configuration as indicated.
 - 2. Backsplash: Match counter top.
 - 3. End splash: Matching backsplash.
 - B. Countertops: 1/2-inch- thick, solid surface material with front edge built up with same material.
 - C. Backsplashes: 1/2-inch- thick, solid surface material.
 - D. Fabrication: Fabricate tops in one piece with shop-applied edges and backsplashes unless otherwise indicated. Comply with solid-surface-material manufacturer's written instructions for adhesives, sealers, fabrication, and finishing.
 - 1. Fabricate with loose backsplashes for field assembly.
 - 2. Install integral sink bowls in countertops in the shop.
- 2.2 QUARTZ AGGLOMERATE COUNTERTOPS
 - A. Configuration: Provide countertops with the following front and backsplash style:
 - 1. Front: Configuration as indicated.
 - 2. Backsplash: Match counter top.
 - 3. End splash: Matching backsplash.
 - B. Countertops: 1/2-inch- thick, quartz agglomerate with front edge built up with same material.
 - C. Backsplashes: 1/2-inch- thick, quartz agglomerate.
 - D. Fabrication: Fabricate tops in one piece with shop-applied edges[and backsplashes] unless otherwise indicated. Comply with quartz agglomerate manufacturer's written instructions for adhesives, sealers, fabrication, and finishing.
 - 1. Fabricate with loose backsplashes for field assembly.
- 2.3 COUNTERTOP MATERIALS
 - A. Plywood: Exterior softwood plywood complying with DOC PS 1, Grade C-C Plugged, touch sanded.
 - B. Adhesives: Adhesives shall not contain urea formaldehyde.

- C. Solid Surface Material: Homogeneous solid sheets of filled plastic resin complying with ANSI SS1.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. E. I. du Pont de Nemours and Company.
 - b. Formica Corporation.
 - c. LG Chemical, Ltd.
 - d. Swan Corporation (The).
 - e. Wilson art International.
 - 2. Type: Provide Standard Type unless Special Purpose Type is indicated.
 - 3. Integral Sink Bowls: Comply with ISSFA-2 and ANSI Z124.3, Type 5 or Type 6, without a precoated finish.
 - 4. Colors and Patterns: As scheduled.
- D. Quartz Agglomerate: Solid sheets consisting of quartz aggregates bound together with a matrix of filled plastic resin and complying with the "Physical Characteristics of Materials" Article of ANSI SS1.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Cambria.
 - b. Cosentino USA.
 - c. E. I. du Pont de Nemours and Company.
 - d. LG Chemical, Ltd.
 - 2. Colors and Patterns: As scheduled

2.4 HARDWARE

- A. Grommets for Cable Passage through Countertops: 2-3/8-inch OD, black, molded-plastic grommets and matching plastic caps with slot for wire passage.
 - 1. Basis of Design: Hafele; Item No. 429.99.324.

2.5 FABRICATION

- A. Shop-cut openings to maximum extent possible to receive hardware, appliances, plumbing fixtures, electrical work, and similar items. Locate openings accurately and use templates or roughing-in diagrams to produce accurately sized and shaped openings. Sand edges of cutouts to remove splinters and burrs.
 - 1. Seal edges of openings in countertops with a coat of varnish.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install countertops level to a tolerance of 1/8 inch in 8 feet.
- B. Fasten countertops by screwing through corner blocks of base units into underside of countertop. Pre-drill holes for screws as recommended by manufacturer. Align adjacent surfaces and, using adhesive in color to match countertop, form seams to comply with manufacturer's written instructions. Carefully dress joints smooth, remove surface scratches, and clean entire surface.
 - 1. Install backsplashes and end splashes to comply with manufacturer's written instructions for adhesives, sealers, fabrication, and finishing.
 - 2. Seal edges of cutouts in particleboard sub tops by saturating with varnish.

END OF SECTION

SECTION 31 10 00 – SITE CLEARING

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Removing trees and other vegetation.
 - 2. Clearing and grubbing.
 - 3. Topsoil stripping.
 - 4. Removing above-grade site improvements.
 - 5. Remove below grade improvements.
 - 6. Remove existing fill.
- B. Related Sections include the following:
 - 1. Division 31 Section "Earthwork" for soil materials, excavating, backfilling, and site grading.

1.3 DEFINITIONS

Topsoil: Natural or cultivated surface-soil layer containing organic matter and sand, silt, and clay particles; friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects more than 2 inches in diameter; and free of weeds, roots, and other deleterious materials.

1.4 MATERIALS OWNERSHIP

Except for materials indicated to be stockpiled or to remain Owner's property, cleared materials shall become Contractor's property and shall be removed from the site.

1.5 PROJECT CONDITIONS

- A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-clearing operations.
 - 1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
 - 2. Provide alternate routes around closed or obstructed traffic ways if required by authorities having jurisdiction.
- B. Improvements on Adjoining Property: Authority for performing indicated removal and alteration work on property adjoining Owner's property will be obtained by Owner. Authority and permits for performing indicated removal and alteration work on adjacent rights-of-way shall be obtained by Contractor.
- C. Protect improvements on adjacent and Owners property.
- D. Salvable Improvements: Carefully remove items indicated to be salvaged and store on Owner's premises where indicated.
- E. Notify utility locator service for area where Project is located before site clearing.
- F. Restore damaged improvements to their original condition, as acceptable to parties having jurisdiction.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

Satisfactory Soil Materials: Requirements for satisfactory soil materials are specified in Division 31 Section "Earthwork."

PART 3 - EXECUTION

3.1 PREPARATION

- A. Protect and maintain benchmarks and survey control points, benchmarks, monuments, property line pins, and other reference points from disturbance during construction. If disturbed or destroyed, restore or replace at no cost to Owner.
- B. Provide erosion-control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.
- C. Locate and clearly flag trees and vegetation to remain or to be relocated.
- D. Protect existing site improvements to remain from damage during construction.
 - 1. Restore damaged improvements to their original condition, as acceptable to Owner.

3.2 UTILITIES

- A. Locate, identify, disconnect, and seal or cap off utilities indicated to be removed.
 - 1. Arrange to shut off indicated utilities with utility companies.
- B. Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:
 - 1. Notify Architect not less than two days in advance of proposed utility interruptions.
 - 2. Do not proceed with utility interruptions without Architect's written permission.
- C. Excavate for and remove underground utilities indicated to be removed.
- D. After removing of underground utilities, as indicated, properly cap and/or plug existing lines to remain in accordance with authorities having jurisdiction.

3.4 CLEARING AND GRUBBING

- A. Remove obstructions, trees, shrubs, grass, and other vegetation to permit installation of new construction. Removal includes digging out stumps and obstructions and grubbing roots.
 - 1. Cut minor roots and branches of trees indicated to remain in a clean and careful manner where such roots and branches obstruct installation of new construction.
 - 2. Completely remove stumps, roots, obstructions, and debris extending to a depth of 18 inches below exposed subgrade.
- B. Fill depressions caused by clearing and grubbing operations with satisfactory soil material, unless further excavation or earthwork is indicated.
 - 1. Place fill material in horizontal layers not exceeding 8-inch loose depth, and compact each layer to a density equal to adjacent original ground.

3.5 TOPSOIL STRIPPING

- A. Remove grass before stripping topsoil.

- B. Strip topsoil to whatever depths are encountered in a manner to prevent intermingling with underlying subsoil or other waste materials.
 - 1. Strip surface soil of unsuitable topsoil, including trash, debris, weeds, roots, and other waste materials.
- C. Stockpile topsoil materials away from edge of excavations without intermixing with subsoil. Grade and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 - 1. Do not stockpile topsoil within drip line of remaining trees.
 - 2. Dispose of excess topsoil as specified for waste material disposal.
 - 3. Stockpile surplus topsoil and allow for respreading deeper topsoil.

3.6 SITE IMPROVEMENTS/EXISTING FILL

- A. Remove existing above- and below-grade improvements as indicated and as necessary to facilitate new construction.
- B. Remove slabs, paving, curbs, gutters, and aggregate base as indicated.
 - 1. Unless existing full-depth joints coincide with line of demolition, neatly saw-cut length of existing pavement to remain before removing existing pavement. Saw-cut faces vertically.
- C. Remove existing fill. Refer to Geotechnical Investigation for information regarding suitability for re-use and estimates of location/extent of fill.

3.7 DISPOSAL

- A. Disposal: Remove surplus soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials, including trash and debris, and legally dispose of them off Owner's property.

END OF SECTION

SECTION 31 22 00 – GRADING

PART 1 - GENERAL

1.1 RELATED REQUIREMENTS

- A. Comply with Conditions of the Contract, Division 1 General Requirements, and referenced documents.

1.2 GENERAL DESCRIPTION OF WORK INCLUDED

- A. Coordinate work of this Section with work of other sections as required to properly execute work and as necessary to maintain satisfactory progress of work of other Sections.
- B. Excavate materials to required subgrades as noted on plan by civil engineer.
- C. Removal of existing below grade improvements that occur within excavations.
- D. Filling, backfilling, compaction, and rough grading of site to required subgrades.
- E. Providing offsite suitable fill materials.
- F. Dewatering, until permanent drainage system is operational.
- G. Disposal of excess and unsuitable excavated materials.
- H. Providing adequate dust control measures as necessary to maintain streets in clean condition from excavation site to disposal location.
- I. Providing adequate protective measures for public, workmen, adjacent streets, buildings and utilities.
- J. Lime stabilization for pavement, as specified in the Geotechnical Report, if required.

1.3 REFERENCES

- A. American Society for Testing and Materials: (Latest Editions)
 - 1. ASTM C 33, Concrete Aggregates.
 - 2. ASTM D698, Moisture Density Relations of Soils and Soil Aggregate Mixtures, Using 5.5lb. (2.5 kg.) Rammer and 12in. (304.8mm) Drop.
 - 3. ASTM D 1556, Density of Soil in Place by the Sand Cone Method.
 - 4. ASTM D2167, Density of Soil in Place by the Rubber Balloon Method.
 - 5. ASTM D 2922, Density of Soil and Soil Aggregate in Place by Nuclear Methods (Shallow Depth.)
 - 6. ASTM D 3017, Moisture Control of Soil and Soil Aggregate in Place by Nuclear Methods (Shallow Depth.)

1.4 REGULATORY REQUIREMENTS

- A. Comply with rules, regulations, laws, and ordinances of authorities having jurisdiction.

1.5 QUALITY ASSURANCE

- A. Testing Laboratory Services:

- 1. Permissible Tolerations: Finish excavations, fills, and grade within a tolerance of 0.05 foot above or 0.10 foot below required grades. Do not leave depressions in graded areas.

1.6 SUBSURFACE INVESTIGATION

- A. Owner and Architect make no representation regarding character and extent of soil data or other surface or subsurface data and conditions which may be encountered during work and no guarantee as to accuracy or validity of interpretation of such data or conditions is made or intended.

1.7 PROTECTION

- A. Provide, erect, and maintain all lights, barricades, warning signs, and guards as necessary.
- B. Provide adequate protective measures to protect existing adjacent construction, including buildings, streets, walks, utility lines, the public and workmen.
- C. Protect all reference points, bench marks, and monuments from dislocation, damage, or being destroyed.
- D. Survey adjacent structures and improvements, establishing exact relocations at fixed points to act as bench marks. Clearly identify bench marks and record existing elevations. Locate datum level used to establish bench mark elevations sufficiently distant so as to be not affected by movement resulting from excavation operations.
- E. During excavation, resurvey bench marks, employing a Registered Professional Land Surveyor. Maintain accurate log of surveyed elevations for comparison with original elevations.
- F. Exercise care during excavations as excessive withdrawal of ground water and lowering of ground water table may adversely affect stability and integrity of existing buildings and structures in vicinity or induce settlement in them through loss of ground (soil or earth), or settlement due to lowering of ground water under them.
- G. Damage to buildings, structures, utilities, sidewalks, pavements, and other facilities in vicinity resulting from these operations will be Contractor's responsibility; provide whatever measures as necessary to prevent damages from occurring.
- H. Keep adjacent streets and hauling routes free from soils and debris deposited thereon as results of this work. Clean debris as necessary.
- I. Repair or replace work damaged or destroyed while performing work of this Section.

1.8 PROTECTION OF EXCAVATIONS

- A. Protect excavations to prevent cave-ins or loose dirt from falling into excavations and to ensure against damage to existing streets, paving buildings, other structures, and utility lines when excavation and grading work occurs adjacent to or below same.
- B. Protect bottom of excavations and soil around and beneath foundations from water.
- C. Grade around excavation to prevent surface water runoff into excavated area.
- D. Provide dewatering system as necessary to keep excavations dry at all times until permanent pumping and discharge systems are fully operational.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Controlled Backfill and Engineered Fill: Free-draining granular material with less than 3% passing a No. 200 sieve and less than 30% passing No. 40 sieve, non plastic. All granular backfill shall be approved by the testing laboratory.
- B. Drainage Matting:
- C. Topsoil: Fertile, friable, natural loam surface soil free of subsoil, clay lumps, brush, weeds, roots, stones and other litter.

PART 3 - EXECUTION

3.1 PREPARATION AND LAYOUT

- A. Work shall be laid out by a Registered Professional Land Surveyor. Establish extent of site grading by area and elevation; designate and identify datum elevation. Set required lines and levels.
- B. Verify elevations, dimensions, and actual conditions at site. Refer discrepancies to Architect for interpretation or necessary modifications.
- C. Maintain bench mark, monuments, and other reference points.

3.2 UTILITIES

- A. Before starting site grading, establish location and extent of underground utilities occurring in work area.
- B. Notify utility companies to remove and relocate lines which are in way of site grading.

- C. Remove abandoned utility service lines from areas of site grading; cap, plug or seal such lines and identify their location and grade.
- D. On Project Record Documents accurately locate and record abandoned and active utility lines rerouted or extended.

3.3 PUMPING AND DRAINAGE

- A. Provide adequate provisions for prompt removal of water accumulating in excavations, including temporary sumps, well points, pumps, drain lines, and other equipment or appurtenances as necessary.
- B. Keep excavations free from water at all times and prevent water from interfering with progress or quality of work.
- C. Drain site to temporary sumps and silt settling basins, and remove accumulated water by pumping to storm sewers. Excavate in sequence that will provide drainage to sumps at all times.
- D. When pumping water from excavated areas, take special precautions to avoid undermining of contiguous property by withdrawal of sand, soil, or any other supporting materials from areas below surfaces of such property.

3.4 EXCAVATION

- A. Excavate subsoil in accordance with lines and levels required for construction of site work.

3.5 BACKFILLING

- A. Ensure areas are free from debris, snow, ice and water, and that ground surfaces are not in frozen condition.
- B. Backfill areas to grades, contours, levels, and elevations indicated.
- C. Backfill systematically and as early as possible to allow maximum time for natural settlement and compaction.
- D. Place fill materials in horizontal layers not exceeding 9" loose depth and uniformly compact. Use a method so as not to disturb or damage building drainage systems and waterproofing systems.
- E. Maintain optimum moisture content of backfill materials to attain specified compaction density. Moisten materials as necessary.
- F. Settlement or washing that occurs in backfilled areas prior to acceptance of work shall be repaired and grades reestablished to required elevations and slopes.

3.6 RECONDITIONING SUBGRADE

- A. Prior to beginning paving operations, any vegetation should be removed to a depth of at least 6”.
- B. The exposed surface should then be scarified to a minimum depth of 6” and recompacted to a minimum of 95% of the maximum dry density as determined by ASTM D 698 (Standard Proctor Test) at a moisture content between the optimum moisture value and 4% above optimum, unless other wise specified in the Geotechnical Report.
- C. In the event that additional fill is necessary to bring parking areas to grade, it should be placed in less than 8” loose lifts and compacted as indicated above.
- D. The subgrade should be in a moist condition at the time concrete is deposited thereon.
- E. Using coarse sand (sand cushion) as a leveling material is not allowed.

3.7 GRADING

- A. Establishment of grades: The Contractor shall be responsible for establishment of all grades by means of grade stakes placed at pavement corners at all abrupt changes of grade and elsewhere as required.
- B. Grading: Grade to elevations required by drawings. Remove soft and unstable material which will not readily compact when rolled or tamped. Fill resulting depressions with stable material and roll until required compaction is obtained. At intermediate points for which finish grades are not indicated, finish grades shall be of uniform level or slope between points for which elevations are given. Make certain that finish grades slope away from buildings in all directions to assure positive drainage as specified in the Geotechnical Report.

3.8 SURPLUS MATERIALS

- A. Remove excavated and excess materials from site. Legally dispose of off construction site.

3.9 FIELD QUALITY CONTROL

- A. Ensure compacted fills are tested before proceeding with placement of surface materials.

3.10 CLEANING

- A. Clean debris caused by excavation and backfill work. Keep premises and adjacent streets clean and neat.
- B. Leave stockpile areas completely free of excess fill materials.

END OF SECTION

31 22 00-5

SECTION 31 25 00 - EROSION AND SEDIMENTATION CONTROL

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. This WORK shall consist of temporary measures as needed to control erosion and water pollution. These temporary measures shall include, but not be limited to, berms, dikes, dams, sediment basins, fiber mats, netting, gravel, mulches, grasses, slope drains and other erosion control devices or methods. These temporary measures shall be installed at the location where needed to control erosion and water pollution during the construction of the PROJECT.
- B. Contractor has the ultimate responsibility for providing adequate erosion control and water quality throughout the duration of the project. CONTRACTOR shall include in the DIB price for erosion control and any additional items that may be needed to control erosion and water pollution.

1.02 RELATED SECTIONS

- A. The following is a list of SPECIFICATIONS which may be related to this section:

1. Section 01 30 00, Temporary Facilities and controls
2. Section 31 10 00, Site clearing

1.03 REFERENCES

- A. The following is a list of standards which may be referenced in this section:
 1. California BMP, California Storm water quality Association (CASQA).

1.04 REGULATORY REQUIREMENTS

- A. In the event of conflict between these requirements and erosion and pollution control laws, rules, or regulations of other Federal State, or logical agencies, the more restrictive laws, rules, or regulations shall apply.

1.05 SCHEDULING

- A. Temporary Erosion Control:
 1. When so indicated in the contract documents, or when directed by engineer, contractor shall prepare construction schedules for accomplishing temporary erosion control WORK including all maintenance procedures.
 2. These schedules shall be applicable to clearing grubbing, grading, structural WORK, construction, etc.

- B. Contractor shall submit for acceptance the proposed method of erosion control on haul roads and borrow pits and a plan for disposal of waste material.
- C. Contractor shall be required to incorporate all permanent erosion control features into the PROJECT at the earliest practicable time as outlined in accepted schedule. Temporary erosion control measures shall then be used to correct conditions that develop during construction.
- D. WORK shall not be started until the erosion control schedules and methods of operations have been accepted.

PART 2 PRODUCTS

2.01 MATERIALS

- A. All materials shall be submitted for approval prior to installation.
- B. Materials may be included hay bales, straw, fiber mats, fiber netting, wood cellulose, fiber fabric, gravel, and other suitable materials, and shall be reasonably clean, free of deleterious materials, and certified weed free.
- C. Fertilizer and soil conditioners shall be approved by ENGINEER and in accordance with the City of Irvine Landscape Manual and Standard Plans.

PART 3 EXECUTION

3.01 GENERAL

- A. All temporary and permanent erosion sediment control practices shall be maintained and repaired as needed to ensure continued performance of their intended function.
- B. OWNER will monitor CONTRACTOR's erosion control and WORK methods.
 - 1. If the overall function and intent of erosion control is not being met, OWNER will require CONTRACTOR to provide additional measures as require to obtain desired results.
- C. The erosion control features installed by CONTRACTOR shall be adequately maintained by CONTRACTOR until the PROJECT is accepted.

3.02 PROTECTION OF ADJECENT PROPERTIES

- A. Properties adjacent to the site of a I and disturbance shall be protect from sediment deposition.
- B. Perimeter controls may be required if damage to adjacent properties is likely.

3.03 CONSTRUCTION

- A. Stabilization of Disturbed Areas:
 - 1. Temporary sediment control measures shall be established within five (5) days from time of exposure/disturbance.
- B. Stabilization of Sediment and Erosion Control Measures:
 - 1. Sediment barriers, perimeter dikes and other measures intend to either trap sediment or prevent runoff from flowing over disturbed areas shall be constructed as needed as a first step in grading and be functional before land disturbance takes place.
- C. Storm Sewer Inlet Protection: all storm sewer inlets which are made operable during construction or which drain storm water runoff from a construction site shall be protected from sediment deposition by the use of filters.
- E. Construction Access Routes:
 - 1. Where sediment is transported onto public road surface, the roads shall be cleaned thoroughly at the end of each day.
 - 2. Sediment shall be removed from roads by shoveling or sweeping and be transported to a sediment controlled disposal.
 - 3. Street washing shall be allowed only after sediment is removed in this manner.

3.04 DISPOSITION OF TEMPORARY MEASURES

- A. All temporary erosion and sediment control measures shall be disposed of within thirty (30) days after final site stabilization is achieved or after the temporary measures are no longer needed as determined by OWNER.
- B. Trapped sediment and other disturbed soil areas resulting from the disposition of temporary measures shall be permanently stabilized to prevent further erosion.
- C. Substantial Completion of Erosion Control Measure:
 - 1. At the time specified in the CONTRACT DOCUMENTS, and subject to compliance with specified materials and installation requirements, CONTRACTOR shall receive a Substantial Completion Certificate for temporary erosion control measures.
 - 2. Maintenance of Erosion Control Measures after Substantial Completion: CONTRACTOR shall be responsible for maintaining temporary erosion control measures as specified in CONTACT DOCUMENTS until such time as WORK has been accepted by OWNER as specified in Section 01 77 00, Closeout Procedures.
- D. Final Completion and Acceptance of Erosion Control Measures:

1. After ENGINEER and OWNER have determined that the drainage area has stabilized; CONTRACTOR shall remove all remaining temporary erosion control measures.
2. Any damage to the site shall be repaired to satisfaction of ENGINEER and at no cost to OWNER.

END OF SECTION

SECTION 32 12 16 – HOT-MIX ASPHALT PAVING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, under Division 00 Procurement and Contracting Requirements Section, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Hot-mix asphalt paving.
 - 2. Hot-mix asphalt patching.
 - 3. Hot-mix asphalt paving overlay.
 - 4. Asphalt surface treatments.
 - 5. Cold milling of existing hot-mix asphalt pavement.
- B. Related Sections include the following:
 - 1. Division 31 Section "Earthwork."

1.3 DEFINITIONS

- A. Hot-Mix Asphalt Paving Terminology: Refer to Standard Specification Section 39 "Hot Mix Asphalt".
- B. CALTRANS: State of California Department of Transportation. State Department of Highway Standard Construction Specifications and "Standard Special Provisions."

1.4 SYSTEM DESCRIPTION

- A. Provide hot-mix asphalt paving according to materials, workmanship, and other applicable requirements of standard specifications of CALTRANS or authorities having jurisdiction.
 - 1. Standard Specification: State of California Department of Transportation. State Department of Highway Standard Construction Specifications and "Standard Special Provisions."
 - 2. Measurement and payment provisions and safety program submittals included in standard specifications do not apply to this Section.

1.5 SUBMITTALS

- A. Product Data: For each type of product indicated. Include technical data and tested physical and performance properties.
- B. Job-Mix Designs: For each job mix proposed for the Work.
- C. Material Test Reports: For each paving material.
- D. Material Certificates: For each paving material, signed by manufacturers.

1.6 QUALITY ASSURANCE

- A. Manufacturer and Installer Qualifications:
 - 1. Installer Qualifications: Engage an experienced installer who has completed hot-mix asphalt paving similar in material, design, and extent to that indicated for this Project and with a record of successful in-service performance.
 - 2. Manufacturer Qualifications: Engage a firm experienced in manufacturing hot-mix asphalt similar to that indicated for this Project and with a record of successful in-service performance.
- B. Testing Agency:
 - 1. All testing and inspections required herein will be performed by an independent testing and inspection agency employed by the Owner.
 - 2. Notify the testing and inspection agency not less than 48 hours in advance of all work requiring testing or inspection services.
- C. Regulatory Requirements: Comply with applicable standards of authority having jurisdiction for asphalt paving work.
- D. Asphalt-Paving Publication: Comply with AI MS-22, "Construction of Hot Mix Asphalt Pavements," unless more stringent requirements are indicated. Comply with Standard Specification Section 39 "Hot Mix Asphalt"

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver pavement-marking materials to Project site in original packages with seals unbroken and bearing manufacturer's labels containing brand name and type of material, date of manufacture, and directions for storage.
- B. Store pavement-marking materials in a clean, dry, protected location within temperature range required by manufacturer. Protect stored materials from direct sunlight.

1.8 PROJECT CONDITIONS

- A. Environmental Limitations: Do not apply asphalt materials if subgrade is wet or excessively damp or if the following conditions are not met:
 - 1. Prime and Tack Coats: Minimum surface or air temperature in the shade of 60 deg F.
 - 2. Slurry Coat: Comply with weather limitations of ASTM D 3910.
 - 3. Asphalt Base Course: Minimum surface or air temperature in the shade of 40 deg F and rising at time of placement.
 - 4. Asphalt Surface Course: Minimum surface or air temperature in the shade of 50 deg F at time of placement.
- B. Coordination and Scheduling:
 - 1. Cooperate with other trades and arrange scheduling to avoid damage to other work, including grading, site utilities and piping, exterior concrete, landscaping and irrigation systems.
 - 2. Before commencing pavement operations, ascertain that utility lines, site lighting and wiring, piping, curb and gutter work, general grading and heavy trucking is complete so that such operations will not damage paving work.
 - 3. Mask off and protect exposed building surfaces and abutting concrete from damage or staining by tack coat and paving operations.
- C. CALTRANS Standard Special Provisions: Comply with Standard Specification Section 39 "Hot Mix Asphalt". Revisions discuss weather limitations and placement temperature.

PART 2 - PRODUCTS

2.1 AGGREGATES

- A. General: Use materials and gradations that have performed satisfactorily in previous installations.
- B. Asphalt Concrete Aggregate: Clean, hard, durable particles of crushed stone, crushed slag, crushed gravel, or natural gravel conforming to the requirements of CALTRANS Specification.
- C. Mineral Filler: Rock dust, slag dust, hydrated lime, hydraulic cement, or other suitable mineral material conforming to the requirements of CALTRANS Specification.

2.2 ASPHALT MATERIALS

- A. Asphalt Cement: Conform to the requirements of CALTRANS Specification.
- B. Prime Coat Liquid Asphalt Material: Liquid asphalt material ASTM D 2026, conforming to requirements of CALTRANS specifications.
- C. Prime Coat: Asphalt emulsion prime complying with CALTRANS Specifications.
- D. Tack Coat: AASHTO M 140, emulsified asphalt or AASHTO M 208, cationic emulsified asphalt, slow setting, diluted in water, of suitable grade and consistency for application.
- E. Fog Seal: AASHTO M 140, emulsified asphalt or AASHTO M 208, cationic emulsified asphalt, slow setting, factory diluted in water, of suitable grade and consistency for application.
- F. Water: Potable.

2.3 MIXES

- A. Hot-Mix Asphalt: Dense, hot-laid, hot-mix asphalt plant mixes. Furnish job-mix formulas for each pavement type, conforming to the requirements of CALTRANS Specification. Mix aggregates and bituminous materials in accordance with the requirements of CALTRANS Specification. Use approved job mix formulas. Mix to comply with the following requirements:
 - 1. Provide mixes with a history of satisfactory performance in geographical area where Project is located.
 - 2. Base Course: Grading S.
 - 3. Surface Course: Grading SX.
 - 4. CALTRANS Standard Special Provisions.
- B. Emulsified-Asphalt: Shall conform to AASHTO M140 or CALTRANS specifications.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that subgrade is dry and in suitable condition to support paving and imposed loads.
- B. Proof-roll subbase using heavy, pneumatic-tired rollers to locate areas that are unstable or that require further compaction. Scarify, regrade and recompact surface of subgrade that is pumping or deforming as required to provide true levels, uniform slopes and proper total thickness of paving as required in Earthwork Section.

- C. Proceed with paving only after unsatisfactory conditions have been corrected.

3.2 COLD MILLING

- A. Clean existing pavement surface of loose and deleterious material immediately before cold milling. Remove existing asphalt pavement by cold milling to grades and cross sections indicated.
 - 1. Mill to a depth of a minimum 1 ½-inches or as indicated on the plans.
 - 2. Mill to a uniform finished surface free of gouges, grooves, and ridges.
 - 3. Control rate of milling to prevent tearing of existing asphalt course.
 - 4. Repair or replace curbs, manholes, and other construction damaged during cold milling.
 - 5. Excavate and trim unbound-aggregate base course, if encountered, and keep material separate from milled hot-mix asphalt.
 - 6. Transport milled hot-mix asphalt to asphalt recycling facility.
 - 7. Keep milled pavement surface free of loose material and dust.

3.3 PATCHING

- A. Hot-Mix Asphalt Pavement: Saw cut perimeter of patch and excavate existing pavement section to sound base. Excavate rectangular or trapezoidal patches, extending 12 inches (300 mm) into adjacent sound pavement, unless otherwise indicated. Cut excavation faces vertically. Remove excavated material. Recompact existing unbound-aggregate base course to form new subgrade.
- B. Tack Coat: Apply uniformly to vertical surfaces abutting or projecting into new, hot-mix asphalt paving at a rate of 0.05 to 0.2 gal./sq. yd. (0.2 to 0.8 L/sq. m).
 - 1. Allow tack coat to cure undisturbed before applying hot-mix asphalt paving.
 - 2. Avoid smearing or staining adjoining surfaces, appurtenances, and surroundings. Remove spillages and clean affected surfaces.
- C. Patching: Partially fill excavated pavements with hot-mix asphalt base mix and, while still hot, compact. Cover asphalt base course with compacted, hot-mix surface layer finished flush with adjacent surfaces.

3.4 REPAIRS

- A. Leveling Course: Install and compact leveling course consisting of hot-mix asphalt surface course to level sags and fill depressions deeper than 1 inch (25 mm) in existing pavements.
- B. Crack and Joint Filling: Remove existing joint filler material from cracks or joints to a depth of 1/4 inch (6 mm).
 - 1. Clean cracks and joints in existing hot-mix asphalt pavement.
 - 2. Use emulsified-asphalt slurry to seal cracks and joints less than 1/4 inch (6 mm) wide. Fill flush with surface of existing pavement and remove excess.
 - 3. Use hot-applied joint sealant to seal cracks and joints more than 1/4 inch (6 mm) wide. Fill flush with surface of existing pavement and remove excess.

3.5 SURFACE PREPARATION

- A. General: Immediately before placing asphalt materials, remove loose and deleterious material from substrate surfaces. Ensure that prepared subgrade is ready to receive paving.
 - 1. Sweep loose granular particles from surface of unbound-aggregate base course. Do not dislodge or disturb aggregate embedded in compacted surface of base course.

- B. Herbicide Treatment: Apply herbicide according to manufacturer's recommended rates and written application instructions. Apply to dry, prepared subgrade or surface of compacted-aggregate base before applying paving materials.
- C. Prime Coat: Apply uniformly over surface of compacted unbound-aggregate base course at a rate of 0.15 to 0.50 gal./sq. yd. (0.7 to 2.3 L/sq. m). Apply enough material to penetrate and seal but not flood surface. Allow prime coat to cure for 72 hours minimum.
 - 1. If prime coat is not entirely absorbed within 24 hours after application, spread sand over surface to blot excess asphalt. Use enough sand to prevent pickup under traffic. Remove loose sand by sweeping before pavement is placed and after volatiles have evaporated.
 - 2. Protect primed substrate from damage until ready to receive paving.
- D. Tack Coat: Apply uniformly to surfaces of existing pavement at a rate of 0.05 to 0.20 gal./sq. yd. (0.2 to 0.8 L/sq. m).
 - 1. Allow tack coat to cure undisturbed before applying hot-mix asphalt paving.
 - 2. Avoid smearing or staining adjoining surfaces, appurtenances, and surroundings. Remove spillages and clean affected surfaces.

3.6 PAVING GEOTEXTILE INSTALLATION

- A. Apply asphalt binder uniformly to existing pavement surfaces at a rate of 0.25 gal./sq. yd. (1.0 L/sq. m) per CALTRANS Specifications.
- B. Place paving geotextile promptly according to manufacturer's written instructions. Broom or roll geotextile smooth and free of wrinkles and folds. Overlap longitudinal joints 4 inches (100 mm) and transverse joints 6 inches (150 mm).
 - 1. Protect paving geotextile from traffic and other damage and place hot-mix asphalt paving overlay the same day.

3.7 HOT-MIX ASPHALT PLACING

- A. Machine place hot-mix asphalt on prepared surface, spread uniformly, and strike off. Place asphalt mix by hand to areas inaccessible to equipment in a manner that prevents segregation of mix. Place each course to required grade, cross section, and thickness when compacted.
 - 1. Place hot-mix asphalt base course in number of lifts and thicknesses indicated.
 - 2. Place hot-mix asphalt surface course in single lift.
 - 3. Spread mix at minimum temperature of 235 deg F (113 deg C) per CALTRANS Specification.
 - 4. Begin applying mix along centerline of crown for crowned sections and on high side of one-way slopes, unless otherwise indicated.
 - 5. Regulate paver machine speed to obtain smooth, continuous surface free of pulls and tears in asphalt-paving mat.
- B. Place paving in consecutive strips not less than 10 feet (3 m) wide unless infill edge strips of a lesser width are required.
 - 1. After first strip has been placed and rolled, place succeeding strips and extend rolling to overlap previous strips. Complete a section of asphalt base course before placing asphalt surface course.
- C. Promptly correct surface irregularities in paving course behind paver. Use suitable hand tools to remove excess material forming high spots. Fill depressions with hot-mix asphalt to prevent segregation of mix; use suitable hand tools to smooth surface.

D. CALTRANS Standard Special Provisions.

3.8 JOINTS

- A. Construct joints to ensure a continuous bond between adjoining paving sections. Construct joints free of depressions with same texture and smoothness as other sections of hot-mix asphalt course.
1. Clean contact surfaces and apply tack coat to joints.
 2. Offset longitudinal joints, in successive courses, a minimum of 6 inches (150mm).
 3. Offset transverse joints, in successive courses, 6 to 12 inches (150-300 mm).
 4. Construct transverse joints as described in AI MS-22, "Construction of Hot Mix Asphalt Pavements."
 5. Compact joints as soon as hot-mix asphalt will bear roller weight without excessive displacement.
 6. Compact asphalt at joints to a density within 2 percent of specified course density.

3.9 COMPACTION

- A. General: Begin compaction as soon as placed hot-mix paving will bear roller weight without excessive displacement. Compact hot-mix paving with hot, hand tampers or vibratory-plate compactors in areas inaccessible to rollers.
1. Complete compaction before mix temperature cools to 185 deg F (85 deg C) for unmodified asphalt cement and 230°F (110 deg C) for modified asphalt cement. See Standard Special Provision dated March 4, 2002 revising Section 401 of the 1999 CDOT Standards and Specifications.
- B. Breakdown Rolling: Complete breakdown or initial rolling immediately after rolling joints and outside edge. Examine surface immediately after breakdown rolling for indicated crown, grade, and smoothness. Correct laydown and rolling operations to comply with requirements.
- C. Intermediate Rolling: Begin intermediate rolling immediately after breakdown rolling while hot-mix asphalt is still hot enough to achieve specified density. Continue rolling until hot-mix asphalt course has been uniformly compacted to the following density per CALTRANS Standards.
1. Pavement shall be compacted to a density of 92% to 96% of the maximum theoretical density, determined accordance with governing agency.
- D. Finish Rolling: Finish roll paved surfaces to remove roller marks while hot-mix asphalt is still warm.
- E. Edge Shaping: While surface is being compacted and finished, trim edges of pavement to proper alignment. Bevel edges while asphalt is still hot; compact thoroughly.
- F. Repairs: Remove paved areas that are defective or contaminated with foreign materials and replace with fresh, hot-mix asphalt. Compact by rolling to specified density and surface smoothness.
- G. Protection: After final rolling, do not permit vehicular traffic on pavement until it has cooled and hardened.
- H. Erect barricades to protect paving from traffic until mixture has cooled enough not to become marked.

3.10 INSTALLATION TOLERANCES

- A. Thickness: Compact each course to produce the thickness indicated within the following tolerances:

1. Base Course: Plus or minus ¼ inch (6 mm).
 2. Surface Course: Plus ¼ inch (6 mm), no minus.
- B. Surface Smoothness: Compact each course to produce a surface smoothness within the following tolerances as determined by using a 10-foot (3-m) straightedge applied transversely or longitudinally to paved areas:
1. Base Course: 1/4 inch (6 mm).
 2. Surface Course: 3/16 inch (5 mm).
 3. Crowned Surfaces: Test with crowned template centered and at right angle to crown. Maximum allowable variance from template is 1/4 inch (6 mm).

3.11 ASPHALT CURBS

- A. Construct hot-mix asphalt curbs over compacted pavement surfaces. Apply a light tack coat unless pavement surface is still tacky and free from dust. Spread mix at minimum temperature of 250 deg F (121 deg C).
1. Asphalt Mix: Same as pavement surface-course mix.
- B. Place hot-mix asphalt to curb cross section indicated or, if not indicated, to local standard shapes, by machine or by hand in wood or metal forms. Tamp hand-placed materials and screed to smooth finish. Remove forms after hot-mix asphalt has cooled.

3.12 SURFACE TREATMENTS

- A. Fog Seals: Apply fog seal at a rate of 0.10 to 0.15 gal./sq. yd. (0.45 to 0.7 L/sq. m) to existing asphalt pavement and allow to cure. With a fine sand, lightly dust areas receiving excess fog seal.
- B. Slurry Seals: Apply slurry coat in a uniform thickness according to ASTM D 3910 and allow to cure.
1. Roll slurry seal to remove ridges and provide a uniform, smooth surface.

3.13 FIELD QUALITY CONTROL

- A. Testing Agency: Owner will engage a qualified independent testing and inspecting agency to perform field tests and inspections and to prepare test reports.
1. Testing agency will conduct and interpret tests and state in each report whether tested Work complies with or deviates from specified requirements.
- B. CALTRANS Standard Special Provisions: Comply with latest Standards and Specifications. Revision discuss Compaction Test Section (CTS) for projects over 2,000 tons of hot bituminous pavement.
- C. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.
- D. Thickness: In-place compacted thickness of hot-mix asphalt courses will be determined according to ASTM D 3549.
- E. Surface Smoothness: Finished surface of each hot-mix asphalt course will be tested for compliance with smoothness tolerances.
- F. In-Place Density: Testing agency will take samples of uncompacted paving mixtures and compacted pavement according to ASTM D 979.

1. Reference maximum theoretical density will be determined by averaging results from four samples of hot-mix asphalt-paving mixture delivered daily to site, prepared according to ASTM D 2041, and compacted according to job-mix specifications.
 2. In-place density of compacted pavement will be determined by testing core samples according to ASTM D 1188 or ASTM D 2726.
 - a. One core sample will be taken for every 1000 sq. yd. (836 sq. m) or less of installed pavement, with no fewer than 3 cores taken.
 - b. Field density of in-place compacted pavement may also be determined by nuclear method according to ASTM D 2950 and correlated with ASTM D 1188 or ASTM D 2726.
- G. Remove and replace or install additional hot-mix asphalt where test results or measurements indicate that it does not comply with specified requirements.

3.14 DISPOSAL

- A. Except for material indicated to be recycled, remove excavated materials from Project site and legally dispose of them in an EPA-approved landfill.
1. Do not allow excavated materials to accumulate on-site.

END OF SECTION

SECTION 32 13 13 - CONCRETE PAVING

PART 1 - GENERAL

1.1 SUMMARY

- A. Work Included: Exterior cement concrete pavement for the following:
 - 1. Driveways and roadways.
 - 2. Parking lots.
 - 3. Curbs and gutters.
 - 4. Walkways, steps, ramps.
- B. Related Sections include the following:
 - 1. Divisions 31 Section "Earthwork" for subgrade preparation, grading, and subbase course.
 - 2. Division 32 Section "Pavement Joint Sealants" for joint sealants within concrete pavement and at isolation joints of concrete pavement with adjacent construction.

1.2 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, under Division 00 Procurement and Contracting Requirements Section, apply to this Section.

1.3 REFERENCES

- A. Local Jurisdiction Standard Specifications for Design and Construction, Latest Edition.

1.4 DEFINITIONS

- A. Cementitious Materials: Portland cement alone or in combination with one or more of blended hydraulic cement, expansive hydraulic cement, fly ash and other pozzolans, ground granulated blast-furnace slag, and silica fume.

1.5 SUBMITTALS

- A. Product Data: For each type of manufactured material and product indicated.
- B. Design Mixes: For each concrete pavement mix. Include alternate mix designs when characteristics of materials, project conditions, weather, test results, or other circumstances warrant adjustments.
- C. Material Test Reports: From a qualified testing agency indicating and interpreting test results for compliance of the following with requirements indicated, based on comprehensive testing of current materials:
 - 1. Cementitious materials and aggregates.
 - 2. Fiber reinforcement.
 - 3. Admixtures.
 - 4. Curing compounds.
 - 5. Bonding agent or adhesive.
 - 6. Joint fillers.
- D. Material Certificates: Signed by manufacturers certifying that each of the following materials complies with requirements:
 - 1. Cementitious materials and aggregates.
 - 2. Fiber reinforcement.
 - 3. Admixtures.
 - 4. Curing compounds.
 - 5. Bonding agent or adhesive.
 - 6. Joint fillers.

1.6 QUALITY ASSURANCE

- A. Installer Qualifications: An experienced installer who has completed pavement work similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.

- B. Manufacturer Qualifications: Manufacturer of ready-mixed concrete products complying with ASTM C 94 requirements for production facilities and equipment.
 - 1. Manufacturer must be certified according to the National Ready Mix Concrete Association's Plant Certification Program.
- C. Source Limitations: Obtain each type or class of cementitious material of the same brand from the same manufacturer's plant and each aggregate from one source.
- D. ACI Publications: Comply with ACI 301, "Specification for Structural Concrete," unless modified by the requirements of the Contract Documents.
- F. Concrete Testing Service: The Owner will engage a qualified independent testing agency to perform material testing.
- G. Regulatory Requirements:
 - 1. Comply with County standards for sidewalks, curbs, ramps, gutters, and driveway approaches or aprons, including standard dimensions, profiles, thicknesses, reinforcing, and compressive strength. In the event of conflict between the Contract Documents and the standards, the more stringent requirements will apply.
 - 2. Comply with applicable requirements of ADA Handbook, ANSI A117.1, and local and State codes and ordinances regarding walks, steps, ramps and curb ramps.

1.7 PROJECT CONDITIONS

- A. Traffic Control: Maintain access for vehicular and pedestrian traffic as required for other construction activities.
- B. Field Measurements: Verify dimensions and existing conditions shown on the drawings by taking field measurements. Report discrepancies to the Architect for clarification and make minor adjustments in layout as required by field conditions and as approved by the Architect, at no additional cost to the Owner.

PART 2 - PRODUCTS

2.1 FORMS

- A. Form Materials: Plywood, metal, metal-framed plywood, or other approved panel-type materials to provide full-depth, continuous, straight, smooth exposed surfaces.
 - 1. Use flexible or curved forms for curves of a radius 100 feet or less.
- B. Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and will not impair subsequent treatments of concrete surfaces.

2.2 STEEL REINFORCEMENT

- A. Plain-Steel Welded Wire Fabric: ASTM A 185, fabricated from as-drawn steel wire into flat sheets.
- B. Reinforcement Bars: ASTM A 615/A 615M, Grade 60, deformed.
- C. Joint Dowel Bars: Plain steel bars, ASTM A 615/A 615M, Grade 60. Cut bars true to length with ends square and free of burrs.
- D. Supports for Reinforcement: Chairs, spacers, and other devices for spacing, supporting, and fastening reinforcement bars, welded wire fabric, and dowels in place. Manufacture bar supports according to CRSI's "Manual of Standard Practice" from steel wire, plastic, or precast concrete or fiber-reinforced concrete of greater compressive strength than concrete, and as follows:

1. Equip wire bar supports with sand plates or horizontal runners where base material will not support chair legs.

2.3 COLORED ADMIXTURE

Colored Admixture: L.M. Scofield Co. "Chromix" or Rockwood Industries "Davis Colors", color as selected by Architect. Use for site concrete where indicated on the drawings.

2.4 EXPANSION JOINT FILLER

- A. Sealed Joints: Preformed, compressible fiber or cork filler material complying with ASTM D1751 or D1752, Type II, guaranteed compatible with expansion joint sealant materials, ½" thick unless otherwise indicated. Provide high-impact polystyrene removable "void cap" to create ½" deep reveal for installation of sealant.
- B. Self-Sealing Joints: Preformed, compressible asphalt fiber joint filler complying with ASTM D994, ½" thick unless otherwise indicated. Do not use asphalt fiber filler in joints to receive elastomeric joint sealants.

2.5 CONCRETE MATERIALS

- A. General: Use the same brand and type of cementitious material from the same manufacturer throughout the Project.
- B. Portland Cement: ASTM C 150, Type II.
 1. Fly Ash: ASTM C 618, Class F.
- C. Aggregate: ASTM C 33, uniformly graded, from a single source, with coarse aggregate as follows:
 1. Maximum Aggregate Size: ¾ inches.
 2. Do not use fine or coarse aggregates containing substances that cause spalling.
- D. Water: Potable.

2.6 ADMIXTURES

- A. General: Admixtures certified by manufacturer to contain not more than 0.1 percent water-soluble chloride ions by mass of cement and to be compatible with other admixtures.
- B. Air-Entraining Admixture: ASTM C 260.
- C. Water-Reducing Admixture: ASTM C 494, Type A.
- D. High-Range, Water-Reducing Admixture: ASTM C 494, Type F.
- E. Water-Reducing and Accelerating Admixture: ASTM C 494, Type E.
- F. Water-Reducing and Retarding Admixture: ASTM C 494, Type D.

2.7 CURING MATERIALS

- A. Moisture-Retaining Cover: One of the following, complying with ASTM C 171.
 1. Waterproof paper.
 2. Polyethylene film.
 3. White burlap-polyethylene sheet.
- B. Waterborne Membrane-Forming Curing Compound: ASTM C 309, Type I or II, Class B.
 1. Provide material that has a maximum volatile organic compound (VOC) rating of 350 g/L.

2.8 CONCRETE MIXES

- A. Prepare design mixes, proportioned according to ACI 211.1 and ACI 301, for each type and strength of normal-weight concrete determined by either laboratory trial mixes or field experience.
- B. Use a qualified independent testing agency for preparing and reporting proposed mix designs for the trial batch method.
 - 1. Do not use Owner's field quality-control testing agency as the independent testing agency.
- C. Proportion mixes to provide concrete with the following properties:
 - 1. Compressive Strength (28 Days): 3250 psi.
 - 2. Slump Limit: 4 inches.
 - 3. Maximum water-cement ratio at point of placement: 0.45.
 - 4. Minimum 594 lb. Cement per cubic yard.
- D. Cementitious Materials: Limit percentage, by weight, of cementitious materials other than portland cement according to ACI 301 requirements for concrete exposed to deicing chemicals.
- E. Add air-entraining admixture at manufacturer's prescribed rate to result in concrete at point of placement having an air content of 4.0 to 7.0 percent.

2.9 CONCRETE MIXING

- A. Ready-Mixed Concrete: Comply with requirements and with ASTM C 94.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Proof-roll prepared subbase surface to check for unstable areas and verify need for additional compaction. Proceed with pavement only after nonconforming conditions have been corrected and subgrade is ready to receive pavement.
- B. Remove loose material from compacted subbase surface immediately before placing concrete.

3.2 EDGE FORMS AND SCREED CONSTRUCTION

- A. Set, brace, and secure edge forms, bulkheads, and intermediate screed guides for pavement to required lines, grades, and elevations. Install forms to allow continuous progress of work and so forms can remain in place at least 24 hours after concrete placement.
- B. Clean forms after each use and coat with form release agent to ensure separation from concrete without damage.

3.3 STEEL REINFORCEMENT

- A. General: Comply with CRSI's "Manual of Standard Practice" for fabricating reinforcement and with recommendations in CRSI's "Placing Reinforcing Bars" for placing and supporting reinforcement.
- B. Clean reinforcement of loose rust and mill scale, earth, ice, or other bond-reducing materials.
- C. Arrange, space, and securely tie bars and bar supports to hold reinforcement in position during concrete placement. Maintain minimum cover to reinforcement.
- D. Install welded wire fabric in lengths as long as practicable. Lap adjoining pieces at least one full mesh, and lace splices with wire. Offset laps of adjoining widths to prevent continuous laps in either direction.

3.4 JOINTS

- A. General: Construct construction, isolation, and contraction joints and tool edgings true to line with faces perpendicular to surface plane of concrete. Construct transverse joints at right angles to centerline, unless otherwise indicated.
 - 1. When joining existing pavement, place transverse joints to align with previously placed joints, unless otherwise indicated.
- B. Construction Joints: Set construction joints at side and end terminations of pavement and at locations where pavement operations are stopped for more than one-half hour, unless pavement terminates at isolation joints.
 - 1. Provide preformed galvanized steel or plastic keyway-section forms or bulkhead forms with keys, unless otherwise indicated. Embed keys at least 1-1/2 inches into concrete.
 - 2. Continue reinforcement across construction joints, unless otherwise indicated. Do not continue reinforcement through sides of pavement strips, unless otherwise indicated.
 - 3. Provide tie bars at sides of pavement strips where indicated.
 - 4. Use a bonding agent at locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.
- C. Isolation Joints: Form isolation joints of preformed joint-filler strips abutting concrete curbs, catch basins, manholes, inlets, structures, walks, other fixed objects, and where indicated.
 - 1. Locate expansion joints at intervals of 500 feet (maximum), unless otherwise indicated.
 - 2. Extend joint fillers full width and depth of joint.
 - 3. Terminate joint filler less than 1/2 inch or more than 1 inch below finished surface for joint sealant.
 - 4. Furnish joint fillers in one-piece lengths. Where more than one length is required, lace or clip joint-filler sections together.
 - 5. Protect top edge of joint filler during concrete placement with metal, plastic, or other temporary preformed cap. Remove protective cap after concrete has been placed on both sides of joint.
- D. Install dowel bars and support assemblies at joints where indicated. Lubricate or asphalt-coat one-half of dowel length to prevent concrete bonding to one side of joint.
- E. Contraction Joints: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of the concrete thickness, as follows:
 - 1. Grooved Joints: Form contraction joints after initial floating by grooving and finishing each edge of joint with groover tool to the following radius. Repeat grooving of contraction joints after applying surface finishes. Eliminate groover marks on concrete surfaces.
 - a. Radius: 1/4 inch.
 - 2. Sawed Joints: Form contraction joints with power saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut 1/8-inch- wide joints into concrete when cutting action will not tear, abrade, or otherwise damage surface and before developing random contraction cracks.
- F. Edging: Tool edges of pavement, gutters, curbs, and joints in concrete after initial floating with an edging tool to the following radius. Repeat tooling of edges after applying surface finishes. Eliminate tool marks on concrete surfaces.
 - 1. Radius: 1/4 inch.

3.5 CONCRETE PLACEMENT

- A. Inspection: Before placing concrete, inspect and complete formwork installation, reinforcement steel, and items to be embedded or cast in. Notify other trades to permit installation of their work.
- B. Remove snow, ice, or frost from subbase surface and reinforcement before placing concrete. Do not place concrete on frozen surfaces.
- C. Moisten subbase to provide a uniform dampened condition at the time concrete is placed. Do not place concrete around manholes or other structures until they are at the required finish elevation and alignment.
- D. Comply with requirements and with recommendations in ACI 304R for measuring, mixing, transporting, and placing concrete.
- E. Deposit and spread concrete in a continuous operation between transverse joints. Do not push or drag concrete into place or use vibrators to move concrete into place.
- F. Consolidate concrete by mechanical vibrating equipment supplemented by hand-spading, rodding, or tamping. Use equipment and procedures to consolidate concrete according to recommendations in ACI 309R.
 - 1. Consolidate concrete along face of forms and adjacent to transverse joints with an internal vibrator. Keep vibrator away from joint assemblies, reinforcement, or side forms. Use only square-faced shovels for hand-spreading and consolidation. Consolidate with care to prevent dislocating reinforcement, dowels, and joint devices.
- G. Screed pavement surfaces with a straightedge and strike off. Commence initial floating using bull floats or darbies to form an open textured and uniform surface plane before excess moisture or bleed water appears on the surface. Do not further disturb concrete surfaces before beginning finishing operations or spreading dry-shake surface treatments.
- H. Curbs and Gutters: When automatic machine placement is used for curb and gutter placement, submit revised mix design and laboratory test results that meet or exceed requirements. Produce curbs and gutters to required cross section, lines, grades, finish, and jointing as specified with expansion joints at intervals of approximately 50 feet and tooled control joints at 10' o.c. If results are not approved, remove and replace with formed concrete.
- I. Walks: Minimum 4" thick, with expansion joints at intervals of approximately 50 feet and tooled control joints at intervals equal to width of walks or maximum 5 feet o.c. Tool edges to rounded profile and finish as noted herein or shown on the drawings. Pitch walks ¼" per foot for drainage unless otherwise indicated.
- J. Ramps: Construct ramps similar to walks. Comply with applicable ADA Handbook, ANSI A117.1, and local and State codes and ordinances, including maximum allowable slope not to exceed 1 foot vertical in 12 foot horizontal, with maximum rise not to exceed 30" between level landings.
- K. Steps: Minimum 6" thick at intersection of treads and risers, reinforced as indicated. Slope treads ¼" to nosing, and tool nosings to uniform ½" radius. Finish as specified below.
- L. Paving: Minimum 6" thick unless otherwise indicated. Provide expansion joints at intervals of 100'-0" each way or as indicated on the drawings, and tooled control joints at 12'-0" o.c. Provide fibermesh reinforcing. Place concrete paving over compacted subgrade as specified in Section 02200. Provide minimum 2% slope for drainage unless otherwise indicated.
- M. Approaches: Minimum 6" thick, with #4 rebar spaced 12" o.c.b.w. unless otherwise indicated or required by local public works standards or building codes. Construct to radius of flare indicated, and taper or warp into alignment with adjacent curbs, gutters, and walks. Place approaches over compacted subgrade as specified in section 02200.
- N. Cold-Weather Placement: Comply with ACI 306.1 and as follows. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.

1. When air temperature has fallen to or is expected to fall below 40 deg F, uniformly heat water and aggregates before mixing to obtain a concrete mixture temperature of not less than 50 deg F and not more than 80 deg F at point of placement.
 2. Do not use frozen materials or materials containing ice or snow.
 3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators, unless otherwise specified and approved in mix designs.
- O. Hot-Weather Placement: Place concrete according to recommendations in ACI 305R and as follows when hot-weather conditions exist:
1. Cool ingredients before mixing to maintain concrete temperature at time of placement below 90 deg F. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated to total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.
 2. Cover reinforcement steel with water-soaked burlap so steel temperature will not exceed ambient air temperature immediately before embedding in concrete.
 3. Fog-spray forms, reinforcement steel, and subgrade just before placing concrete. Keep subgrade moisture uniform without standing water, soft spots, or dry areas.

3.6 CONCRETE FINISHING

- A. General: Wetting of concrete surfaces during screeding, initial floating, or finishing operations is prohibited.
- B. Float Finish: Begin the second floating operation when bleed-water sheen has disappeared and the concrete surface has stiffened sufficiently to permit operations. Float surface with power-driven floats, or by hand floating if area is small or inaccessible to power units. Finish surfaces to true planes. Cut down high spots, and fill low spots. Refloat surface immediately to uniform granular texture.
1. Medium-to-Fine-Textured Broom Finish: Draw a soft bristle broom across float-finished concrete surface perpendicular to line of traffic to provide a uniform, fine-line texture.

3.7 CONCRETE PROTECTION AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection and follow recommendations in ACI 305R for hot-weather protection during curing.
- B. Evaporation Retarder: Apply evaporation retarder to concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete, but before float finishing.
- C. Begin curing after finishing concrete, but not before free water has disappeared from concrete surface.
- D. Curing Methods: Cure concrete by moisture curing, moisture-retaining-cover curing, curing compound, or a combination of these as follows:
1. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at least 12 inches, and sealed by waterproof tape or adhesive. Immediately repair any holes or tears during curing period using cover material and waterproof tape.
 2. Curing Compound: Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Maintain continuity of coating and repair damage during curing period.

3.8 PAVEMENT TOLERANCES

A. Comply with tolerances of ACI 117 and as follows:

1. Elevation: 1/4 inch.
2. Thickness: Plus 3/8 inch, minus 1/4 inch.
3. Surface: Gap below 10-foot- long, unlevel straightedge not to exceed 1/4 inch.
4. Lateral Alignment and Spacing of Tie Bars and Dowels: 1 inch.
5. Vertical Alignment of Tie Bars and Dowels: 1/4 inch.
6. Alignment of Tie-Bar End Relative to Line Perpendicular to Pavement Edge: 1/2 inch.
7. Alignment of Dowel-Bar End Relative to Line Perpendicular to Pavement Edge: Length of dowel 1/4 inch per 12 inches.
8. Joint Spacing: 3 inches.
9. Contraction Joint Depth: Plus 1/4 inch, no minus.
10. Joint Width: Plus 1/8 inch, no minus.

3.9 FIELD QUALITY CONTROL

A. Testing Agency: Owner will engage a qualified testing and inspection agency to sample materials, perform tests, and submit test reports during concrete placement. Sampling and testing for quality control may include the following:

1. Sampling Fresh Concrete: Representative samples of fresh concrete shall be obtained according to ASTM C 172, except modified for slump to comply with ASTM C 94.
2. Slump: ASTM C 143; one test at point of placement for each compressive-strength test, but not less than one test for each day's pour of each type of concrete. Additional tests will be required when concrete consistency changes.
3. Air Content: ASTM C 231, pressure method; one test for each compressive-strength test, but not less than one test for each day's pour of each type of air-entrained concrete.
4. Concrete Temperature: ASTM C 1064; one test hourly when air temperature is 40 deg F and below and when 80 deg F and above, and one test for each set of compressive-strength specimens.
5. Compression Test Specimens: ASTM C 31/C 31M; one set of four standard cylinders for each compressive-strength test, unless otherwise indicated.
6. Cylinders shall be molded and stored for laboratory-cured test specimens unless field-cured test specimens are required.
7. Compressive-Strength Tests: ASTM C 39; one set for each day's pour of each concrete class exceeding 5 cu. yd., but less than 25 cu. yd., plus one set for each additional 50 cu. yd.. One specimen shall be tested at 7 days and two specimens at 28 days; one specimen shall be retained in reserve for later testing if required.
8. When frequency of testing will provide fewer than five compressive-strength tests for a given class of concrete, testing shall be conducted from at least five randomly selected batches or from each batch if fewer than five are used.
9. When total quantity of a given class of concrete is less than 50 cu. yd., Architect may waive compressive-strength testing if adequate evidence of satisfactory strength is provided.
10. When strength of field-cured cylinders is less than 85 percent of companion laboratory-cured cylinders, current operations shall be evaluated and corrective procedures shall be provided for protecting and curing in-place concrete.
11. Strength level of concrete will be considered satisfactory if averages of sets of three consecutive compressive-strength test results equal or exceed specified compressive

strength and no individual compressive-strength test result falls below specified compressive strength by more than 500 psi.

- D. Test results shall be reported in writing to Architect, concrete manufacturer, and Contractor within 24 hours of testing. Reports of compressive-strength tests shall contain Project identification name and number, date of concrete placement, name of concrete testing agency, concrete type and class, location of concrete batch in pavement, design compressive strength at 28 days, concrete mix proportions and materials, compressive breaking strength, and type of break for both 7- and 28-day tests.
- E. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted by Architect but will not be used as the sole basis for approval or rejection.
- F. Additional Tests: Testing agency shall make additional tests of the concrete when test results indicate slump, air entrainment, concrete strengths, or other requirements have not been met, as directed by Architect. Testing agency may conduct tests to determine adequacy of concrete by cored cylinders complying with ASTM C 42, or by other methods as directed.

3.10 REPAIRS AND PROTECTION

- A. Remove and replace concrete pavement that is broken, damaged, or defective, or does not meet requirements in this Section.
- B. Drill test cores where directed by Architect when necessary to determine magnitude of cracks or defective areas. Fill drilled core holes in satisfactory pavement areas with portland cement concrete bonded to pavement with epoxy adhesive.
- C. Protect concrete from damage. Exclude traffic from pavement for at least 14 days after placement. When construction traffic is permitted, maintain pavement as clean as possible by removing surface stains and spillage of materials as they occur.
- D. Maintain concrete pavement free of stains, discoloration, dirt, and other foreign material. Sweep concrete pavement not more than two days before date scheduled for Substantial Completion inspections.

END OF SECTION

SECTION 32 13 73 - CONCRETE PAVING JOINT SEALANTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Cold-applied joint sealants.
 - 2. Hot-applied joint sealants.
 - 3. Joint-sealant backer materials.
 - 4. Primers.

1.2 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, under Division 00 Procurement and Contracting Requirements Section, apply to this Section.

1.3 REFERENCES

- A. A. Local Jurisdiction Standard Specifications for Design and Construction, Latest Edition.

1.4 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at project site.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples: For each kind and color of joint sealant required.
- C. Paving-Joint-Sealant Schedule: Include the following information:
 - 1. Joint-sealant application, joint location, and designation.
 - 2. Joint-sealant manufacturer and product name.
 - 3. Joint-sealant formulation.
 - 4. Joint-sealant color.

1.6 INFORMATIONAL SUBMITTALS

- A. Product certificates.

PART 2 - PRODUCTS

2.1 MATERIALS, GENERAL

- A. Compatibility: Provide joint sealants, backing materials, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by joint-sealant manufacturer, based on testing and field experience.

2.2 COLD-APPLIED JOINT SEALANTS

- A. Single-Component, Nonsag, Silicone Joint Sealant: ASTM D 5893/D 5893M, Type NS.
1. Products: Subject to compliance with requirements, **available products that may be incorporated into the Work include, but are not limited to, the following:**
 - a. Crafcro Inc., an ERGON company; RoadSaver Silicone.
 - b. Dow Corning Corporation; 888.
 - c. Pecora Corporation; 301 NS.
 - d. Or Approved Equal
- B. Single-Component, Self-Leveling, Silicone Joint Sealant: ASTM D 5893/D 5893M, Type SL.
1. Products: Subject to compliance with requirements, **available products that may be incorporated into the Work include, but are not limited to, the following:**
 - a. Crafcro Inc., an ERGON company; RoadSaver Silicone SL.
 - b. Dow Corning Corporation; 890-SL.
 - c. Pecora Corporation; 300 SL.
 - d. Or Approved Equal
- C. Multicomponent, Nonsag, Urethane, Elastomeric Joint Sealant: ASTM C 920, Type M, Grade NS, Class 25, for Use T.
1. Products: Subject to compliance with requirements, **available products that may be incorporated into the Work include, but are not limited to, the following:**
 - a. Meadows, W.R.,Inc; Pourthane NS.
 - b. Or Approved Equal
- D. Single Component, Pourable, Urethane, Elastomeric Joint Sealant: ASTM C 920, Type S, Grade P, Class 25, for Use T.
1. Products: Subject to compliance with requirements, **available products that may be incorporated into the Work include, but are not limited to, the following:**
 - a. Meadows, W.R.,Inc; Pourthane SL.
 - b. Or Approved Equal
- E. Multicomponent, Pourable, Urethane, Elastomeric Joint Sealant: ASTM C 920, Type M, Grade P, Class 25, for Use T.
1. Products: Subject to compliance with requirements, **available products that may be incorporated into the Work include, but are not limited to, the following:**
 - a. Pecora Corporation; [Dynatred] [Dynatrol II-SG] [Urexpan NR-200].

- b. Or Approved Equal

2.3 HOT-APPLIED JOINT SEALANTS

- A. Hot-Applied, Single-Component Joint Sealant: ASTM D 6690, Type I.

- 1. Products: Subject to compliance with requirements, **available products that may be incorporated into the Work include, but are not limited to, the following:**
 - a. Crafcro Inc; [**Asphalt Rubber Plus**] [**Asphalt Rubber Plus Type 2**] [**RoadSaver 203**] [**RoadSaver 211**] [**RoadSaver 515**].
 - b. Meadows, W.R.,Inc; [**Sealtight 1190**] [**Sealtight 164**].
 - c. Right Pointe; JTS Asphalt Rubber Modified 043.
 - d. Or Approved Equal.

- B. Hot-Applied, Single-Component Joint Sealant: ASTM D 6690, Type I or Type II.

- 1. Products: Subject to compliance with requirements, **available products that may be incorporated into the Work include, but are not limited to, the following:**
 - a. Crafcro Inc; [**RoadSaver 201**] [**RoadSaver 220**] [**RoadSaver 221**] [**RoadSaver 534**].
 - b. Right Pointe; [**JTS 3405 Parking Lot Sealant 007**] [**JTS 3405 Rubber 009**].
 - c. Or Approved Equal.

- C. Hot-Applied, Single-Component Joint Sealant: ASTM D 6690, Type I, II, or III.

- 1. Products: Subject to compliance with requirements, **available products that may be incorporated into the Work include, but are not limited to, the following:**
 - a. Crafcro Inc; RoadSaver 222.
 - b. Meadows, W.R.,Inc; Sealtight 3405.
 - c. Right Pointe; [**JTS 3405 Regular 003**] [**JTS 3405 Rubber 009**].
 - d. Or Approved Equal.

- D. Hot-Applied, Single-Component Joint Sealant: ASTM D 6690, Type IV.

- 1. Products: Subject to compliance with requirements, **available products that may be incorporated into the Work include, but are not limited to, the following:**
 - a. Crafcro Inc; RoadSaver 231.
 - b. Meadows, W.R.,Inc; Sealtight 3405M.
 - c. Or Approved Equal.

2.4 JOINT-SEALANT BACKER MATERIALS

- A. Round Backer Rods for Cold- and Hot-Applied Joint Sealants: ASTM D 5249, Type 1, of diameter and density required to control sealant depth and prevent bottom-side adhesion of sealant.
- B. Round Backer Rods for Cold-Applied Joint Sealants: ASTM D 5249, Type 3, of diameter and density required to control joint-sealant depth and prevent bottom-side adhesion of sealant.
- C. Backer Strips for Cold- and Hot-Applied Joint Sealants: ASTM D 5249; Type 2; of thickness and width required to control joint-sealant depth, prevent bottom-side adhesion of sealant, and fill remainder of joint opening under sealant.

2.5 PRIMERS

- A. Primers: Product recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated.

PART 3 - EXECUTION

3.1 INSTALLATION OF JOINT SEALANTS

- A. Comply with joint-sealant manufacturer's written installation instructions for products and applications indicated unless more stringent requirements apply.
- B. Cleaning of Joints: Clean out joints immediately to comply with joint-sealant manufacturer's written instructions.
- C. Joint Priming: Prime joint substrates where indicated or where recommended in writing by joint-sealant manufacturer.
- D. Joint-Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions.
- E. Install joint-sealant backings to support joint sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.
 - 1. Do not leave gaps between ends of joint-sealant backings.
 - 2. Do not stretch, twist, puncture, or tear joint-sealant backings.
 - 3. Remove absorbent joint-sealant backings that have become wet before sealant application and replace them with dry materials.
- F. Install joint sealants immediately following backing installation, using proven techniques that comply with the following:
 - 1. Place joint sealants so they fully contact joint substrates.
 - 2. Completely fill recesses in each joint configuration.
 - 3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.
- G. Tooling of Nonsag Joint Sealants: Immediately after joint-sealant application and before skinning or curing begins, tool sealants according to the following requirements to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint:
 - 1. Remove excess joint sealant from surfaces adjacent to joints.
 - 2. Use tooling agents that are approved in writing by joint-sealant manufacturer and that do not discolor sealants or adjacent surfaces.
- H. Provide joint configuration to comply with joint-sealant manufacturer's written instructions unless otherwise indicated.
- I. Clean off excess joint sealant as the Work progresses, by methods and with cleaning materials approved in writing by joint-sealant manufacturers.

END OF SECTION

SECTION 32 17 23 - PAVEMENT MARKING

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

Drawings, General and Supplementary Conditions, and applicable provisions of Division 00 Sections apply to this Section.

1.2 SUMMARY

- A. This Section includes the following: Furnish and install all painted lines, directional arrows, handicapped symbols, or similar markings on paved surfaces, as shown on the drawings or specified herein, or as required to complete the work.
- B. Related Work:
 - 1. Asphaltic concrete paving is specified in Section 321216.
 - 2. Portland cement concrete paving is specified in Section 321313.

1.3 REFERENCES

- A. Reference Standards: Comply with the requirements of the reference standards noted herein, except where more stringent requirements are described herein or otherwise required by the Contract Documents.

1.4 SUBMITTALS

- A. Product Data: Submit manufacturer's published descriptive literature and complete specifications for products specified herein.

1.5 QUALITY ASSURANCE

- A. Qualifications: Pavement marking applicator shall be regularly engaged in this type of work, and shall provide adequate, experienced manpower and proper equipment to complete the work.
- B. Regulatory Requirements: Comply with applicable provisions of California State Department of Highways Specification.

1.6 DELIVERY, STORAGE AND HANDLING

- A. Packing and Shipping: Deliver materials in manufacturer's original, unopened containers, with labels intact and legible.

1.7 PROJECT CONDITIONS

- A. Environmental Requirements: Do not apply pavement marking when ambient air and pavement surface temperature is below 40°F, or when moisture in any form is present on the pavement surface.

PART 2 – PRODUCTS

2.1 MATERIALS

- A. Traffic Marking Paint: Alkyd-based, ready-mixed, cold-applied traffic marking paint complying with FS TT-P-115E and AASHTO M-248, Type S or N as determined by traffic requirements, white or yellow color as designated on the plans for striping and lane markings, white and blue at international handicapped parking symbols. Acceptable products include Devoe "Traffic Line" and Sherwin Williams "ProMar Traffic Marking Paint."
- B. Traffic stripes and pavement markings shall comply with State of California Standard Specifications, Section 84, except that thermoplastic material shall not be allowed. All pavement marking stencils shall match City of Irvine stencils (Hawkins). Pavement markers shall comply with State of California Standard Specifications.

PART 3 – EXECUTION

3.1 EXAMINATION

- A. Verification of Conditions: Examine areas and conditions under which the work of this Section will be performed. Do not proceed with the work until unsatisfactory conditions have been corrected. Commencement of work implies acceptance of all areas and conditions.

3.2 PREPARATION

- A. Surface Preparation: Allow fresh pavement surfaces to weather at least 30 days prior to application of traffic marking paint.

3.3 APPLICATION

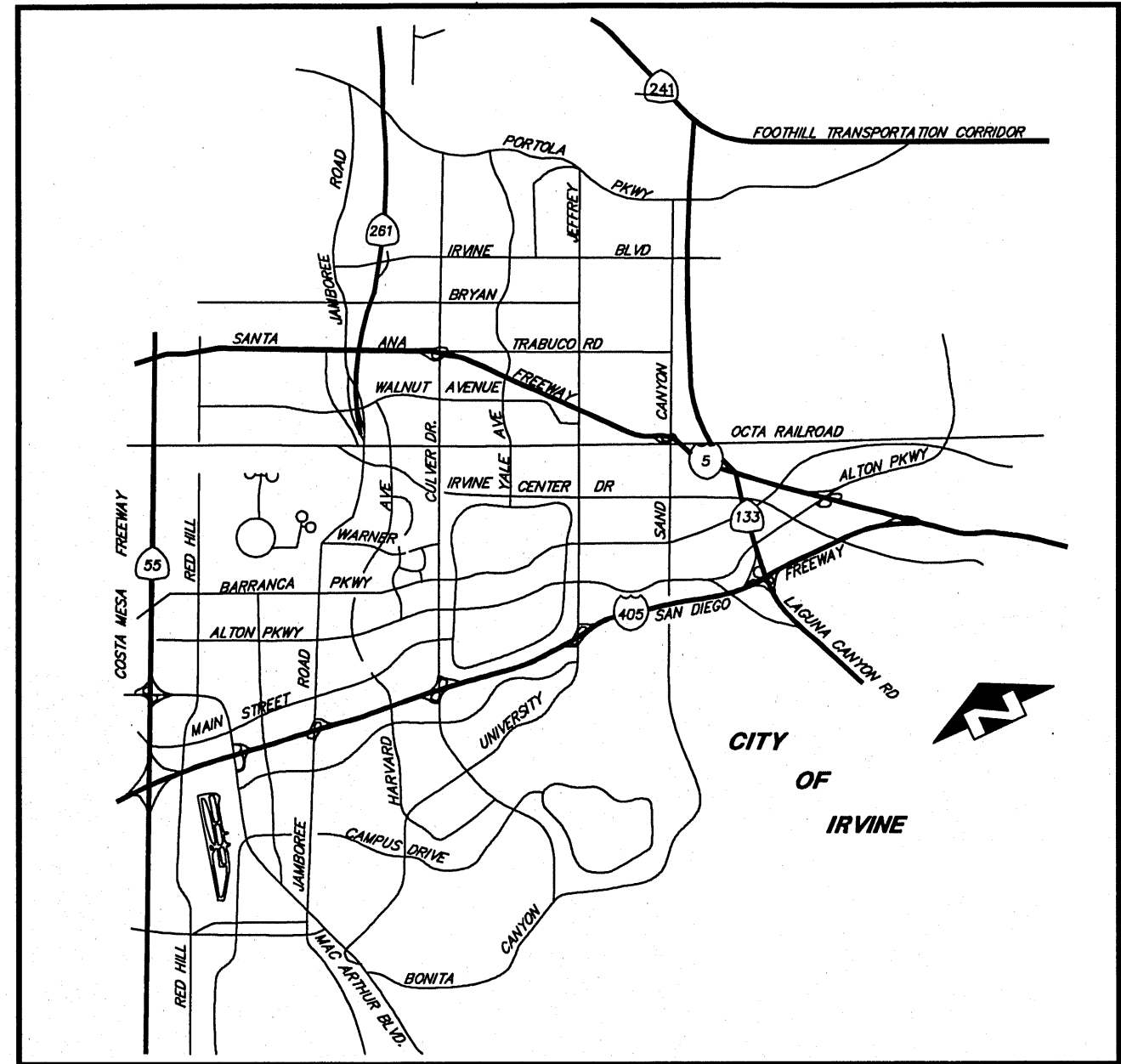
- A. Traffic Marking Paint: Unless otherwise indicated, apply traffic marking paint in nominal 4" wide stripes at the rate of 350 lf/gal, or to wet thickness of 15 mils (0.015").
- B. Patterns and Symbols:
 - 1. Unless otherwise indicated, apply traffic markings in nominal 4" wide stripes with clear and sharp dimensions. See drawings for striping patterns, directional arrows and symbols.
 - 2. Unless otherwise indicated, use yellow markings at lane striping and directional symbols, white markings at parking striping and white and blue markings at international handicapped symbols.
 - 3. Comply with ANSI 117.1 and ADA requirements for graphic symbols, stall widths, and access aisles at handicapped parking spaces. Provide approved templates for symbols and directional arrows.

END OF SECTION

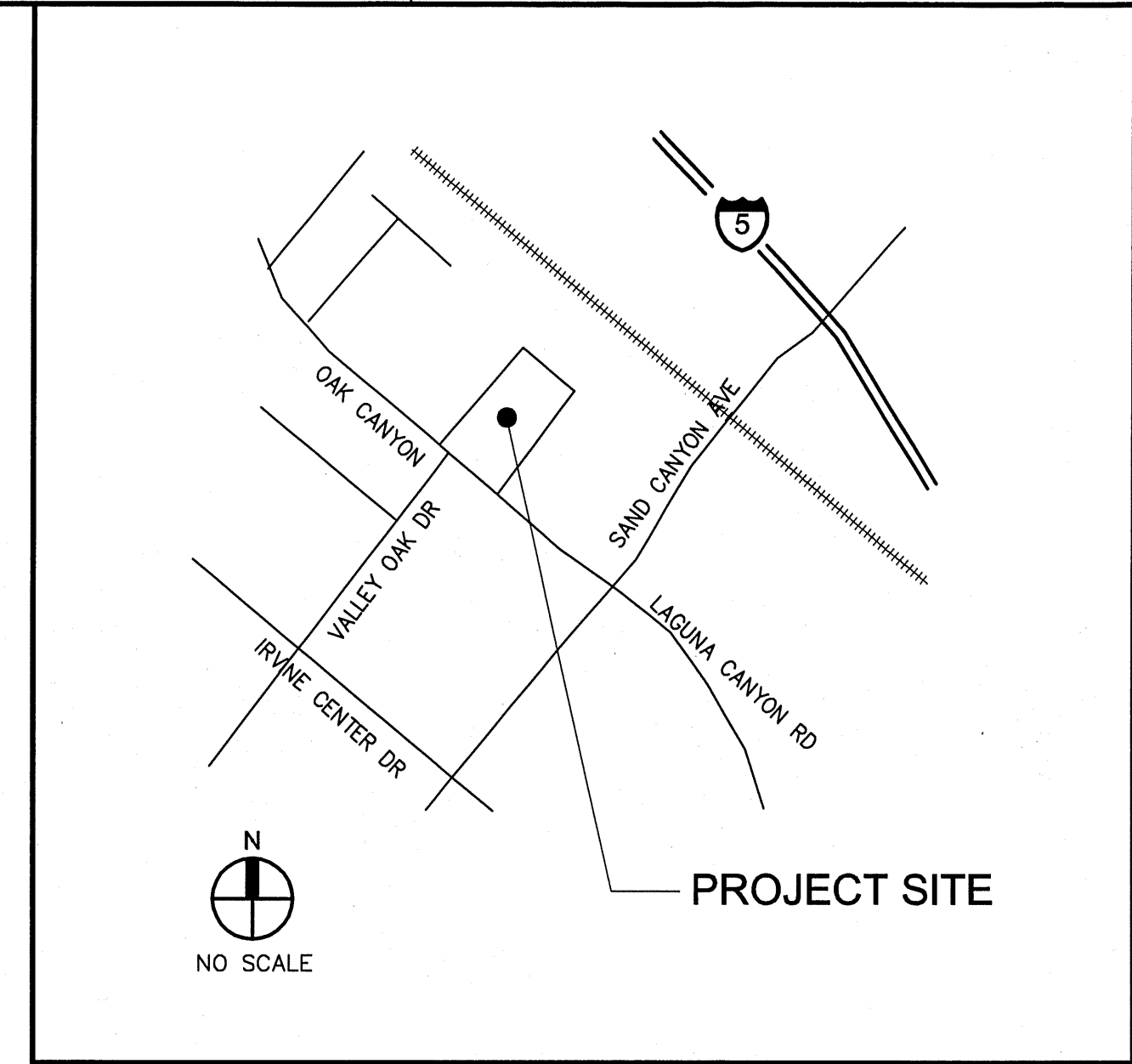
THE CITY OF IRVINE



BUILDING PLANS



VICINITY MAP



LOCATION MAP

WARE MALCOMB
Leading Design for Commercial Real Estate

architectural
planning
interiors
graphics
civil engineering

10 redman
irvine, california 92618
p-949.460.0128
f-949.463.1981

PROJECT INFORMATION REQUIREMENTS

PROJECT LOCATION: 6427 OAK CANYON, IRVINE, CA 92623

PROJECT DESCRIPTION

BUILDING AND SITE DISABLED ACCESS UPGRADES FOR 3 BUILDINGS TO INCLUDE BUILDING ENTRY UPGRADES, PARKING LOT RE-STRIPING TO PROVIDE NEW HANDICAP STALLS AND RESTROOM RENOVATION IN BLDG 1 TO MEET THE REQUIREMENTS OF CALIFORNIA TITLE 24 AND THE ADA.

SPECIAL CONDITIONS OF LAND USE APPROVAL

SPECIAL CONDITIONS RELATING TO THIS PROJECT ARE ESTABLISHED IN N/A

SEE SHEET N/A UNDER THE HEADING LAND USE CONDITIONS OF APPROVAL FOR COMPLETE CONDITIONS OF APPROVAL.

USE(S) OCCUPANCY (IES) AND FLOOR AREAS(S)

OSF BUILDING 1
OFFICE (B = 39,433 SF)
TOTAL = 39,433 SF (BUILDING SQUARE FOOTAGE TO BE VERIFIED WITH THE CITY)

FLOOR AREA OF PROPOSED WORK

INTERIOR TENANT IMPROVEMENT: 1,600 S.F.
EXTERIOR RAMPS, STAIR, RAILING UPGRADE: 4,020 S.F.
PARKING LOT MODIFICATIONS: 650 S.F.

NUMBER OF STORIES 1 STORY

MEZZANINES NOT APPLICABLE

TYPE OF CONSTRUCTION VB

FIRE PARTITION WALLS NOT PART OF THIS SCOPE

FIRE BARRIER WALLS NOT PART OF THIS SCOPE

FIRE WALL NOT PART OF THIS SCOPE

HORIZONTAL ASSEMBLIES NOT PART OF THIS SCOPE

SPRINKLERS UNSPRINKLERED

AN NOT PART OF THIS SCOPE AUTOMATIC SPRINKLER SYSTEM SHALL BE PROVIDED UNDER SEPARATE APPROVAL THROUGH THE ORANGE COUNTY FIRE AUTHORITY. SPRINKLERS ARE PROVIDED

TO COMPLY WITH THE CITY OF IRVINE MUNICIPAL CODE SECTION 5-9-401 FOR BUILDING HAVING A GROSS AREA EXCEEDING 5,000 SQUARE FEET.

TO COMPLY WITH THE CITY OF IRVINE MUNICIPAL CODE SECTION 5-9-401 FOR BUILDING HAVING A GROSS AREA EXCEEDING 5,000 SQUARE FEET, AND AS SUBSTITUTION FOR RATED CONSTRUCTION.

TO COMPLY WITH THE CITY OF IRVINE MUNICIPAL CODE SECTION 5-9-401 FOR BUILDING HAVING A GROSS AREA EXCEEDING 5,000 SQUARE FEET, AND TO JUSTIFY AN INCREASE IN HEIGHT /OR AREA (SEE ANALYSIS BELOW)

PROVIDE ALTERNATE EXPLANATION INCLUDING ALL RELEVANT CODE REFERENCES

ALLOW HEIGHT AND AREA ANALYSIS PER CBC SECTION 504:

NOT PART OF THIS SCOPE

PARKING SUMMARY
EXISTING PARKING STALLS N/A SPACES
CONSISTENT WITH ZONING CODE 4-8-2, TWO (2) PARKING STALLS WILL BE LOST DUE TO ADA PARKING UPGRADE

TOTAL PARKING PROVIDED N/A SPACES

ACCESSIBLE PARKING
TOTAL REQUIRED N/A SPACES
TOTAL PROVIDED N/A SPACES
TOTAL ACCESSIBLE REQUIRED N/A SPACES
TOTAL ACCESSIBLE PROVIDED N/A SPACES

APPLICABLE STATE CODES (WITH CITY OF IRVINE AMENDMENTS)

| | |
|---|------|
| CALIFORNIA BUILDING CODE | 2013 |
| CALIFORNIA RESIDENTIAL CODE | 2013 |
| CALIFORNIA GREEN BUILDING STANDARDS CODE | 2013 |
| CALIFORNIA MECHANICAL CODE | 2013 |
| CALIFORNIA ELECTRICAL CODE | 2013 |
| CALIFORNIA PLUMBING CODE | 2013 |
| CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS | 2013 |

WATER CONSERVING PLUMBING FIXTURE VERIFICATION/RETROFIT:

BUILDINGS FOR WHICH AN INITIAL FINAL INSPECTION WAS RECEIVED ON OR BEFORE JANUARY 1, 1994 SHALL COMPLY WITH THE CITY OF IRVINE'S INFORMATION BULLETIN # 321. WAS THE INITIAL FINAL INSPECTION ON THE PROPERTY UNDERGOING THE PROPOSED TENANT IMPROVEMENT RECEIVED PRIOR TO JANUARY 1, 1994: NO

CALIFORNIA GREEN BUILDING STANDARDS CODE

PROVISIONS OF THE CALIFORNIA GREEN BUILDING STANDARDS CODE APPLY TO ALL NEW LOW-RISE RESIDENTIAL BUILDINGS (THREE STORIES AND LESS INCLUDING HOTELS AND MOTELS) AND ALL NON-RESIDENTIAL TENANT IMPROVEMENT WITH VALUATION EQUAL OR GREATER THAN \$200,000 AND ADDITIONS EQUAL OR GREATER THAN 1,000 SQUARE FEET.

SEE SHEET TO BE DETERMINED FOR COMPLETED CITY OF IRVINE GREEN BUILDING STANDARDS NOTES.

CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS

PROVISIONS OF THE CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARD APPLY TO THIS PROJECT SEE SHEET TBD FOR COMPLETE COMPLIANCE DOCUMENTATION.

SPECIAL INSPECTION AND STRUCTURAL OBSERVATION

THIS PROJECT IS SUBJECT TO BOTH SPECIAL INSPECTIONS AND STRUCTURAL OBSERVATION PER CALIFORNIA BUILDING CODE (CBC) CHAPTER 17 AND SHALL FOLLOW THE REQUIREMENTS AS DEFINED IN CITY OF IRVINE INFORMATION BULLETINS NO. 278 AND 251.

SEE SHEET N/A FOR COMPLETED PROJECT SPECIFIC CITY OF IRVINE SPECIAL INSPECTION PROGRAM FORM.

SEE SHEET N/A FOR COMPLETED PROJECT SPECIFIC CITY OF IRVINE SPECIAL OBSERVATION PROGRAM FORM.

CITY OF IRVINE MUNICIPAL CODE

[NOTE: COMPLETE IMC TEXT IS AVAILABLE ON THE INTERNET AT WWW.MUNICODE.COM] THE DESIGN AND CONSTRUCTION OF THIS PROJECT SHALL COMPLY WITH ALL APPLICABLE IRVINE MUNICIPAL CODE PROVISIONS INCLUDING BUT NOT LIMITED TO:

CONSTRUCTION WORK HOURS [IMC SECT. 6-8-205]
MON-FRI 7 AM TO 7 PM
SAT 9 AM TO 6 PM
NO WORK ON SUNDAYS OR FEDERAL HOLIDAYS

SECURITY DESIGN STANDARDS [IMC SECT. 5-9-520 AND 5-9-528]
SEE SHEET N/A FOR APPLICABLE COMPLETED SECURITY CODE PROVISIONS.

ROOFING [IMC 5-9-401 I. & 5-9-402 E.]

ROOF COVERING CLASSIFICATION SHALL MEET MINIMUM CLASS A.

ATTIC AND UNDERFLOOR VENT COVERS [IMC 5-9-401 H. & 5-9-402 D.]

ROOF AND UNDERFLOOR VENT OPENINGS SHALL BE COVERED WITH NON-COMBUSTIBLE, CORROSION RESISTANT, METAL WIRE MESH OR OTHER MATERIALS HAVING OPENINGS OF 1/16 INCH MINIMUM TO 1/8 INCH MAXIMUM. (CBC 706A.2) SEE DETAIL.

OFF-SITE FABRICATION

ALL OFF-SITE FABRICATION OF STRUCTURAL STEEL COMPONENTS INCLUDING STEEL STAIRS AND PRE-CAST CONCRETE SHALL BE DONE IN AN APPROVED FABRICATOR SHOP AS REQUIRED BY CITY OF IRVINE INFORMATION BULLETIN NO. 311. SEE BULLETIN FOR DETAILS AND REQUIRED DOCUMENTATION REQUIRED AT THE RECEIPT OF ANY SHIPMENT OF OFF-SITE FABRICATED ITEMS.

PRE-CONSTRUCTION MEETING REQUIREMENT

ALL CONSTRUCTION PROJECTS INVOLVING ADDITIONS TO NON-RESIDENTIAL STRUCTURES SHALL NOT COMMENCE UNTIL A PRE-CONSTRUCTION MEETING HAS BEEN HELD. THESE MEETINGS, WHILE NOT REQUIRED BY CITY CODE FOR TENANT IMPROVEMENTS NOT ADDING AREA, ARE BENEFICIAL FOR MAJOR TENANT IMPROVEMENTS OR ANY RESTAURANT INSTALLATIONS. TO SCHEDULE A PRE-CONSTRUCTION MEETING CONTACT ROGER CARTON, NON-RESIDENTIAL INSPECTIONS SUPERVISOR AT (949)724-6331.

DEFERRED SUBMITTALS

THIS PROJECT HAS BEEN PERMITTED WITHOUT REVIEW AND/OR APPROVAL OF THE FOLLOWING DEFERRED SUBMITTALS. PLANS APPROVED BY THE CITY SHALL BE OBTAINED FOR EACH DEFERRED ITEM LISTED BELOW PRIOR TO COMMENCING ANY WORK WITHIN THE SCOPE OF SUCH DEFERRAL. DEFERRALS MUST BE REVIEWED AND ACCEPTED BY THE ARCHITECT OR ENGINEER OF RECORD PRIOR TO SUBMITTING FOR REVIEW WITH THE CITY.

- 1.
- 2.
- 3.

ADDITIONS AND ALTERATIONS:

PRIOR TO USE, OCCUPANCY OR FINAL INSPECTION, EXISTING OR RETROFITTED ADDRESSING MEETING THE HEIGHT, CONTRAST AND FONT REQUIREMENTS OF SECTION 5-9-517 ITEM L OF THE CITY OF IRVINE MUNICIPAL CODE SHALL BE VERIFIED BY THE CITY INSPECTOR.

FIRE DEPARTMENT NOTES:

- FOR ASSISTANCE WITH FIRE-RELATED PLAN REVIEW ISSUES OR TECHNICAL QUESTIONS, PLEASE CALL (714) 573-6108. FOR FIRE-RELATED INSPECTION QUESTIONS OR ISSUES, PLEASE CONTACT YOUR OCFA INSPECTOR DIRECTLY OR OCFA INSPECTION SCHEDULING AT (714) 573-6150 FOR ASSISTANCE.
- THE PROJECT SHALL COMPLY WITH THE CURRENTLY ADOPTED CALIFORNIA BUILDING CODE, CALIFORNIA FIRE CODE, AND OTHER CODES, STANDARDS, REGULATIONS AND REQUIREMENTS AS ENFORCED BY THE ORANGE COUNTY FIRE AUTHORITY. APPROVAL OF THESE PLANS SHALL NOT PERMIT THE VIOLATION OF ANY CODE OR LAW.
- FOR PROJECTS INVOLVING NEW STRUCTURES, ADDITIONS TO EXISTING STRUCTURES, INSTALLATION OF GATES/WALLS/FENCES, OR ALTERATION OF VEHICULAR ACCESS, A FIRE MASTER PLAN SHALL BE SUBMITTED TO AND APPROVED BY THE OCFA PRIOR TO SUBMITTAL OF ARCHITECTURAL PLANS. AN APPROVED FIRE MASTER PLAN SHALL BE SUBMITTED WITH THE ARCHITECTURAL PLANS.
- ALL WEATHER FIRE ACCESS ROADS SHALL BE APPROVED BY THE OCFA AND BE IN PLACE BEFORE ANY COMBUSTIBLE MATERIALS ARE PLACED ON THE SITE. ACCESS ROADS SHALL BE MAINTAINED CLEAR OF OBSTRUCTIONS DURING AND AFTER CONSTRUCTION.
- ADDRESS NUMBERS SHALL BE PROVIDED FOR ALL NEW AND EXISTING BUILDINGS, BE A MINIMUM SIX INCHES HIGH, CONTRAST WITH THEIR BACKGROUND, AND BE PLAINLY VISIBLE FROM THE ROADWAY THE BUILDING IS ADDRESSED ON OR AS OTHERWISE ALLOWED BY OCFA GUIDELINE B-09.
- BUILDINGS UNDER CONSTRUCTION OR DEMOLITION SHALL CONFORM TO CFC CHAPTER 14. NO SMOKING OR COOKING IS ALLOWED IN STRUCTURES WHERE COMBUSTIBLE MATERIALS ARE EXPOSED OR WITHIN 25' OF COMBUSTIBLE MATERIALS STORAGE AREAS. CUTTING, WELDING, OR OTHER HOT WORK SHALL BE IN CONFORMANCE WITH CFC CHAPTER 26.
- LOCATIONS AND CLASSIFICATIONS OF EXTINGUISHERS SHALL BE IN ACCORDANCE WITH THE CFC AND CCR TITLE 19. AT LEAST ONE EXTINGUISHER SHALL BE PROVIDED DURING CONSTRUCTION ON EACH FLOOR AT EACH STAIRWAY, IN EACH STORAGE AND CONSTRUCTION SHED, IN LOCATIONS WHERE FLAMMABLE OR COMBUSTIBLE LIQUIDS ARE STORED OR USED, OR WHERE SIMILAR HAZARDS ARE PRESENT. BEFORE FINAL OCCUPANCY, AT LEAST ONE 2A:10B:C EXTINGUISHER SHALL BE PROVIDED SO THAT NO POINT IS MORE THAN 75' TRAVEL DISTANCE FROM THE EXTINGUISHER. EXTINGUISHERS SHALL BE LOCATED ALONG THE PATH OF EGRESS TRAVEL AND IN A READILY VISIBLE AND ACCESSIBLE LOCATION, WITH THE BOTTOM OF THE EXTINGUISHER AT LEAST 4" ABOVE THE FLOOR. ADDITIONAL EXTINGUISHERS MAY BE REQUIRED BY THE INSPECTOR AND FINAL PLACEMENT IS SUBJECT TO APPROVAL.
- WALL, FLOOR AND CEILING FINISHES AND DECORATIVE MATERIALS SHALL NOT EXCEED THE FLAME SPREAD CLASSIFICATIONS IN CBC/CFC CHAPTER 8. DECORATIVE MATERIALS SHALL BE PROPERLY TREATED BY A PRODUCT OR PROCESS APPROVED BY THE STATE FIRE MARSHAL. SUCH ITEMS SHALL BE APPROVED AND INSPECTED PRIOR TO INSTALLATION.
- KNOX BOXES/KEY CABINETS SHALL BE PROVIDED FOR ALL POOL ENCLOSURES, GATES IN THE PATH OF FIREFIGHTER TRAVEL TO STRUCTURES, SECURED PARKING LEVELS, DOORS GIVING ACCESS TO ALARM PANELS AND/OR ANNUNCIATORS, AND ANY OTHER STRUCTURES OR AREAS WHERE IMMEDIATE ACCESS IS REQUIRED OR IS UNDULY DIFFICULT.
- DUMPSTERS AND TRASH CONTAINERS EXCEEDING 1.5 CUBIC YARDS SHALL NOT BE STORED IN BUILDINGS OR PLACED WITHIN 5 FEET OF COMBUSTIBLE WALLS, OPENINGS OR COMBUSTIBLE ROOF EAVE LINES UNLESS PROTECTED BY AN APPROVED SPRINKLER SYSTEM OR LOCATED IN A TYPE I OR IIA STRUCTURE SEPARATED BY 10 FEET FROM OTHER STRUCTURES. CONTAINERS LARGER THAN 1 CUBIC YARD SHALL BE OF NON-COMBUSTIBLE MATERIALS OR SIMILARLY PROTECTED OR SEPARATED. CFC 304.3
- EXITS, EXIT SIGNS, FIRE ALARM PANELS, HOSE CABINETS, FIRE EXTINGUISHER LOCATIONS, AND STANDPIPE CONNECTIONS SHALL NOT BE CONCEALED BY CURTAINS, MIRRORS, OR OTHER DECORATIVE MATERIAL. THE EGRESS PATH SHALL REMAIN FREE AND CLEAR OF ALL OBSTRUCTIONS AT ALL TIMES. NO STORAGE IS PERMITTED IN AISLES.
- EXIT DOORS SHALL BE OPENABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT. DOORS SHALL NOT BE PROVIDED WITH THUMB-TURN LOCKS OR DEADBOLTS THAT DO NOT UNLATCH IN TANDEM WITH THE NORMAL OPERATING LEVER. RATED DOORS SHALL BE SELF-CLOSING AND LATCHING; SUCH DOORS SHALL NOT BE EQUIPPED WITH DOOR STOPS OR OTHERWISE PROPPED OPEN.
- SPRINKLER AND ALARM SYSTEMS SHALL BE PROVIDED WHEN REQUIRED BY CBC/CFC CHAPTER 9 AND LOCAL ORDINANCE. IN STRUCTURES OF UNDETERMINED USE, THE MINIMUM FIRE SPRINKLER DESIGN DENSITY REQUIRED SHALL BE ORDINARY HAZARD (GROUP 2) WITH A DESIGN AREA OF 3000 SQUARE FEET.
- EXISTING SPRINKLER AND ALARM SYSTEMS IN SPACES UNDERGOING REMODELING SHALL BE EVALUATED BY A LICENSED CONTRACTOR KNOWLEDGEABLE IN SUCH SYSTEMS TO DETERMINE WHETHER CHANGES WILL BE NECESSARY TO MAINTAIN THESE SYSTEMS IN CONFORMANCE WITH APPLICABLE STANDARDS. IF MODIFICATIONS ARE NECESSARY, PLANS SHALL BE SUBMITTED TO THE OCFA FOR REVIEW AND APPROVAL PRIOR TO MODIFICATION OF THE SYSTEM. SPRINKLER AND ALARM SYSTEMS SHALL BE SUPERVISED BY A UL-LISTED CENTRAL ALARM STATION.
- WHERE COMMERCIAL-TYPE FOOD HEATING OR COOKING EQUIPMENT THAT PRODUCES GREASE-LADEN VAPORS IS PRESENT, AN AUTOMATIC EXTINGUISHING SYSTEM SHALL BE PROVIDED AND SHALL COMPLY WITH CFC, CMC, AND NFPA 17A. REVIEW AND APPROVAL OF A HOOD AND DUCT EXTINGUISHING SYSTEM PLAN BY THE OCFA IS REQUIRED PRIOR TO INSTALLATION, MODIFICATION, REARRANGEMENT, OR USE OF COOKING EQUIPMENT.
- HAZARDOUS MATERIALS EQUIPMENT, PROCESSES, STORAGE, DISPENSING, OR USE SHALL COMPLY WITH CBC AND CFC REGULATIONS AND SHALL BE REVIEWED AND APPROVED BY THE OCFA PRIOR TO SUCH MATERIALS OR EQUIPMENT BEING BROUGHT ON SITE.
- STORAGE AREAS GREATER THAN 500 SQ.FT. WITH HIGH HAZARD MATERIALS STORED HIGHER THAN SIX FEET AND OTHER MATERIALS STORED HIGHER THAN TWELVE FEET ARE NOT PERMITTED WITHOUT FIRST SUBMITTING PLANS TO AND OBTAINING APPROVAL FROM THE OCFA.
- A NEW HVAC UNIT EXCEEDING A 2,000 CFM CAPACITY SHALL BE PROVIDED WITH A DUCT SMOKE DETECTOR. THIS DETECTOR SHALL SHUT DOWN ONLY THE AFFECTED INDIVIDUAL HVAC UNIT UPON SMOKE DETECTION. THIS DETECTOR MUST ALSO BE INTERFACED TO AN EXISTING FIRE ALARM SYSTEM. THE DETECTOR SHALL ONLY PROVIDE A SUPERVISORY SIGNAL AT THE FIRE ALARM PANEL UPON SMOKE DETECTION.

SHEET INDEX:

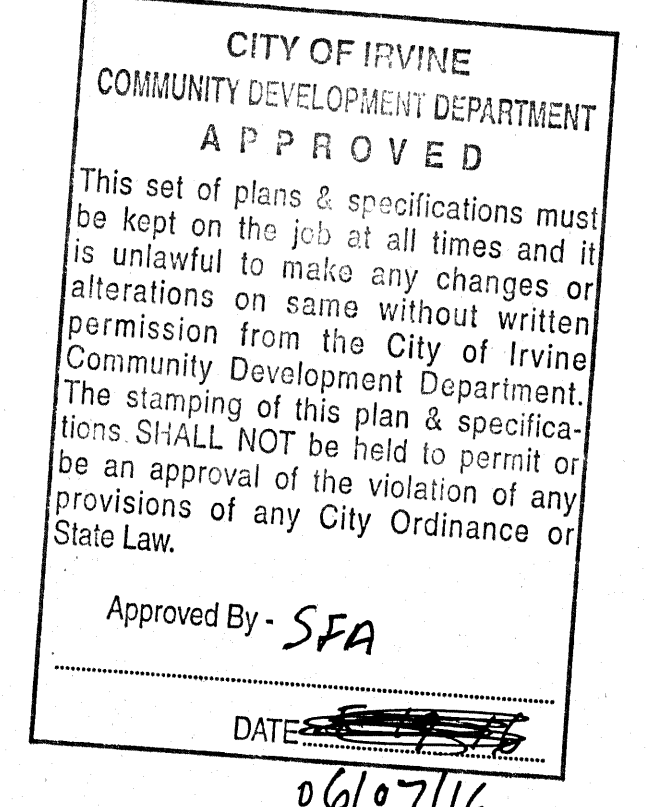
SEE SHEET A01a FOR SHEET INDEX.

STORM WATER POLLUTION PREVENTION NOTES

STORMWATER POLLUTION PREVENTION DEVICES AND PRACTICES SHALL BE INSTALLED AND/OR INSTITUTED AS NECESSARY TO ENSURE COMPLIANCE TO THE CITY OF IRVINE WATER QUALITY STANDARDS CONTAINED IN CHAPTER 3. WATER, OF DIVISION 8 OF TITLE 6 OF THE IRVINE MUNICIPAL CODE AND ANY EROSION CONTROL PLAN ASSOCIATED WITH THIS PROJECT. ALL SUCH DEVICES AND PRACTICES SHALL BE MAINTAINED, INSPECTED AND/OR MONITORED TO ENSURE ADEQUACY AND PROPER FUNCTION THROUGHOUT THE DURATION OF THE CONSTRUCTION PROJECT.

COMPLIANCE TO THE WATER QUALITY STANDARDS AND ANY EROSION AND SEDIMENT CONTROL PLAN ASSOCIATED WITH THIS PROJECT INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING REQUIREMENTS:

- AN EFFECTIVE COMBINATION OF EROSION AND SEDIMENT CONTROL MEASURES (BMPs) SHALL BE IMPLEMENTED TO PROTECT THE EXPOSED PORTIONS OF THE SITE FROM EROSION AND TO PREVENT SEDIMENT DISCHARGES.
- SEDIMENTS AND OTHER POLLUTANTS SHALL BE RETAINED ON SITE UNTIL PROPERLY DISPOSED OF, AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEET FLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSES OR WIND.
- STOCKPILES OF EARTH AND OTHER CONSTRUCTION-RELATED MATERIALS SHALL BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND AND WATER FLOW.
- FUELS, OILS, SOLVENTS, AND OTHER TOXIC MATERIALS SHALL BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM, NOR BE ALLOWED TO SETTLE OR INFILTRATE INTO SOIL.
- EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO THE PUBLIC WAY OR ANY OTHER DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ON SITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTES.
- TRASH AND CONSTRUCTION SOLID WASTES SHALL BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OF RAINWATER AND DISPERSAL BY WIND.
- SEDIMENTS AND OTHER MATERIALS MAY NOT BE TRACKED FROM THE SITE BY VEHICULAR TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS MUST BE STABILIZED SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC WAY. ACCIDENTAL DEPOSITS SHALL BE SWEEPED UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.
- STORMWATER POLLUTION PREVENTION DEVICES AND/OR PRACTICES SHALL BE MODIFIED AS NEEDED AS THE PROJECT PROGRESSES TO ENSURE EFFECTIVENESS.

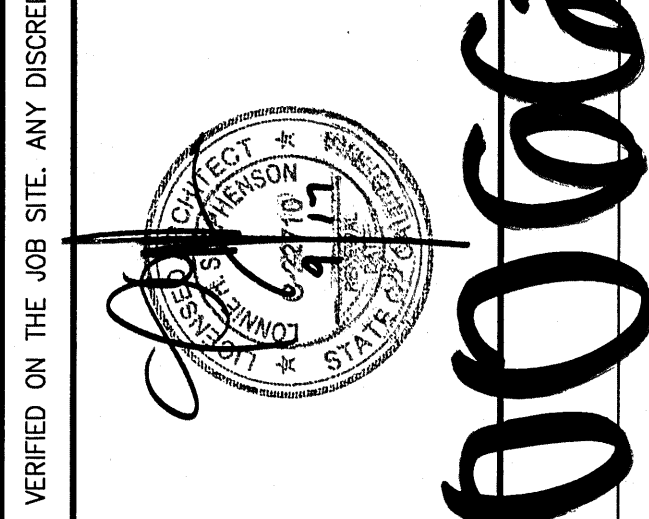


RECYCLING:

AT LEAST 50% OF CONSTRUCTION WASTE MATERIALS ARE TO BE RECYCLED.

BUILDING DEPARTMENT NOTES:

- 1. PLUMBING TO BE FIELD VERIFIED.



ADA FACILITY IMPROVEMENTS OPERATIONS SUPPORT FACILITY OSF BUILDING 1
6427 OAK CANYON
IRVINE, CALIFORNIA

| DATE | REMARKS |
|------------|----------------------|
| 3/30/2016 | PLAN CHECK SUBMITTAL |
| 04/14/2016 | PLAN CHECK COMMENTS |
| 05/25/2016 | PLAN CHECK COMMENTS |

COVER SHEET

PA / PM: JCARROLL
DRAWN BY: EG
JOB NO.: IRV15-0195-00

SHEET
A0.1



ADA FACILITY IMPROVEMENTS

CIP 361602 OPERATIONS SUPPORT FACILITY OSF BUILDING 1

6427 OAK CANYON
IRVINE, CALIFORNIA 92623

WARE MALCOLM
Leading Design for Commercial Real Estate

architecture
interiors
graphics
civil engineering
10 edelman
irvine, california 92618
p 949.660.9128
f 949.661.1581

ABBREVIATIONS

GENERAL PROJECT NOTES

PROJECT DATA

SHEET INDEX

| | | | |
|---------|---------------------------------|----------|---------------------------------|
| A | And | ID. | Inside Diameter (Dim.) |
| Z | Angle | INSUL | Insulation |
| @ | All | INT. | Interior |
| C | Centerline | | |
| ~ | Diameter or Round | Jan. | Janitor |
| # | Pound or Number | JKT. | Kitchen |
| (E) | Existing | K.O. | Knock Out |
| ACOUS. | Acoustical | LAB. | Laboratory |
| ACT. | Acoustical Tile | LAM. | Laminated |
| AD. | Area Drain | LAV. | Lavatory |
| ADJ. | Adjustable | LKR. | Locker |
| AF. | Above Finish Floor | LT. | Light |
| AGGR. | Aggregate | LT. | Light |
| AL. | Aluminum | MAX. | Maximum |
| APPROX. | Approximate | M.C. | Medicine |
| ARCH. | Architectural | MECH. | Mechanical |
| ASB. | Asbestos | MEMB. | Membrane |
| ASPH. | Asphalt | MET. | Metal |
| BO. | Board | MFR. | Manufacturer |
| BLTUM. | Bituminous | MH. | Manhole |
| BUD. | Building | MIN. | Minimum |
| BLK. | Block | MIR. | Mirror |
| BLKG. | Blocking | MISC. | Miscellaneous |
| SM. | Beam | M.O. | Masonry Opening |
| B.C. | Bottom of Concrete | M.T.D. | Mounted |
| B.O.M. | Bottom of Mullion | MUL. | Mullion |
| B.O.P. | Bottom of Panel | N. | North |
| B.O.R. | Bottom of Reveal | N.I.C. | Not in Contract |
| BOT. | Bottom | NO. | Number |
| B/S. | Building Standard | NOM. | Nominal |
| | | N.T.S. | Not To Scale |
| CAB. | Cabinet | O.A. | Overall |
| C.B. | Catch Basin | OBS. | Obscure |
| CEM. | Cement | O.C. | On Center |
| CER. | Ceramic | O.D. | Outside Diameter (Dim.) |
| CFCL. | CONT. Furnished/CONT. Installed | OFCL. | Owner Furnished/CONT. Installed |
| CPCL. | CONT. Furnished/Owner Installed | OFCL. | Owner Furnished/Owner Installed |
| C.I. | Cast Iron | OFF. | Office |
| C.G. | Corner Guard | OPNG. | Opening |
| CLG. | Ceiling | OPP. | Opposite |
| CLKG. | Clanking | | |
| CLO. | Closet | PRCST. | Pre-cast |
| CLR. | Clear | PL | Plate |
| C.O. | Closed Opening | P.LAM. | Plastic Laminate |
| COL. | Column | PLAS. | Plaster |
| C.O.M. | Center of Mullion | PLYWD. | Plywood |
| CON. | Concrete | PR. | Pier |
| CONN. | Connection | PT. | Pipe |
| CONSTR. | Construction | P.T.D. | Paper Towel Dispenser |
| CONT. | Continuous | P.P. | Paper Towel |
| CONTR. | Contractor | P.T.R. | Paper Towel Receptacle |
| C.O.R. | Center of Reveal | P.V. | Panel Joint |
| CORR. | Corridor | Q.T. | Quarry Tile |
| CPT. | Carpet | | |
| CTSK. | Countersunk | R. | Riser |
| CTR. | Counter | R.D. | Roof Drain |
| C.W. | Cold Water | RAD. | Radius |
| D. | Deep | R.D. | Roof Drain |
| DBL. | Double | REF. | Reference |
| DEPT. | Department | REFR. | Refrigerator |
| D.F. | Drinking Fountain | REGTR. | Register |
| DET. | Detail | REFR. | Refrigerator |
| DI. | Diameter | REGTR. | Register |
| DIAG. | Diagonal | REQ. | Required |
| DIFF. | Diffuser | RESIL. | Resilient |
| DM. | Dimension | RM. | Room |
| DISP. | Dispenser | R.O. | Rough Opening |
| DN. | Down | RWD. | Redwood |
| D.O. | Door Opening | R.W.L. | Rain Water Leader |
| DR. | Drawer | S. | South |
| DWR. | Downspout | S.C.D. | Seat Cover Dispenser |
| DS. | Downspout | SCHED. | Schedule |
| D.S.P. | Dry Standpipe | S.E.D. | Snap Dispenser |
| DWG. | Drawing | SECT. | Section |
| E. | East | SH. | Shelf |
| EA. | Each | SHR. | Shower |
| E.J. | Expansion Joint | SHT. | Sheet |
| EL. | Elevation | SHR. | Shower |
| ELEC. | Electrical | SM. | Similar |
| ELEV. | Elevator | S.N.D. | Sanitary Napkin Disp. |
| EMER. | Emergency | S.N.R. | Sanitary Napkin Recept. |
| ENCL. | Enclosure | SPEC. | Specification |
| E.P. | Electrical Panelboard | SQ. | Square |
| EQ. | Equipment | S.S.T. | Stainless Steel |
| EQPT. | Equipment | S.S.K. | Service Sink |
| E.W.C. | Electric Water Cooler | STD. | Standard |
| EXST. | Existing | STL. | Steel |
| EXP. | Expansion | STOR. | Storage |
| EXT. | Exterior | STR. | Structural |
| | | SUSP. | Suspended |
| | | SYS. | Symmetrical |
| F.A. | Fire Alarm | TRD. | Tread |
| F.B. | Fire Bar | T.B. | Top of Bar |
| F.D. | Fire Drain | T.C. | Top of Curb |
| FDN. | Foundation | TEL. | Telephone |
| F.E. | Fire Extinguisher | T. & G. | Tongue and Groove |
| F.E.C. | Fire Extinguisher Cab | THK. | Thickness |
| F.H.C. | Fire Hose Cabinet | T.O.C. | Top of Concrete |
| FN. | Finish | T.O.P. | Top of Panel |
| FL. | Floor | T.O.R. | Top of Reveal |
| FLASH. | Flashing | T.O.P. | Top of Panel |
| FLUOR. | Fluorescent | T.O.R.C. | Top of Deep Recess |
| F.O.C. | Face of Concrete | T.O.M. | Top of Mullion |
| F.O.F. | Face of Finish | T.P. | Top of Pavement |
| F.O.M. | Face of Mullion | T.P.D. | Toilet Paper Dispenser |
| F.O.S. | Face of Stud | T.V. | Television |
| FRF. | Firproof | T.W. | Top of Wall |
| F.S. | Full Size | TYP. | Typical |
| FT. | Foot or Feet | UNF. | Unfinished |
| FTG. | Footing | UNF. | Unfinished |
| FUR. | Furring | UNT. | Unless Otherwise Noted |
| FUT. | Future | UR | Urinal |
| GA. | Gauge | VERT. | Vertical |
| GB. | Grab Bar | VEST. | Vestibule |
| GL. | Glass | | |
| GND. | Grade | | |
| GR. | Ground | | |
| GYP. | Gypsum | W. | West |
| | | W. | With |
| | | W.C. | Water Closet |
| | | WD. | Wood |
| H.B. | Hose Bibb | W/O. | Without |
| H.C. | Hollow Core | WF | Waterproof |
| HWD. | Hardware | WSC. | Wainscot |
| H.M. | Hollow Metal | WT. | Weight |
| HR. | Hour | | |
| HGT. | Height | | |

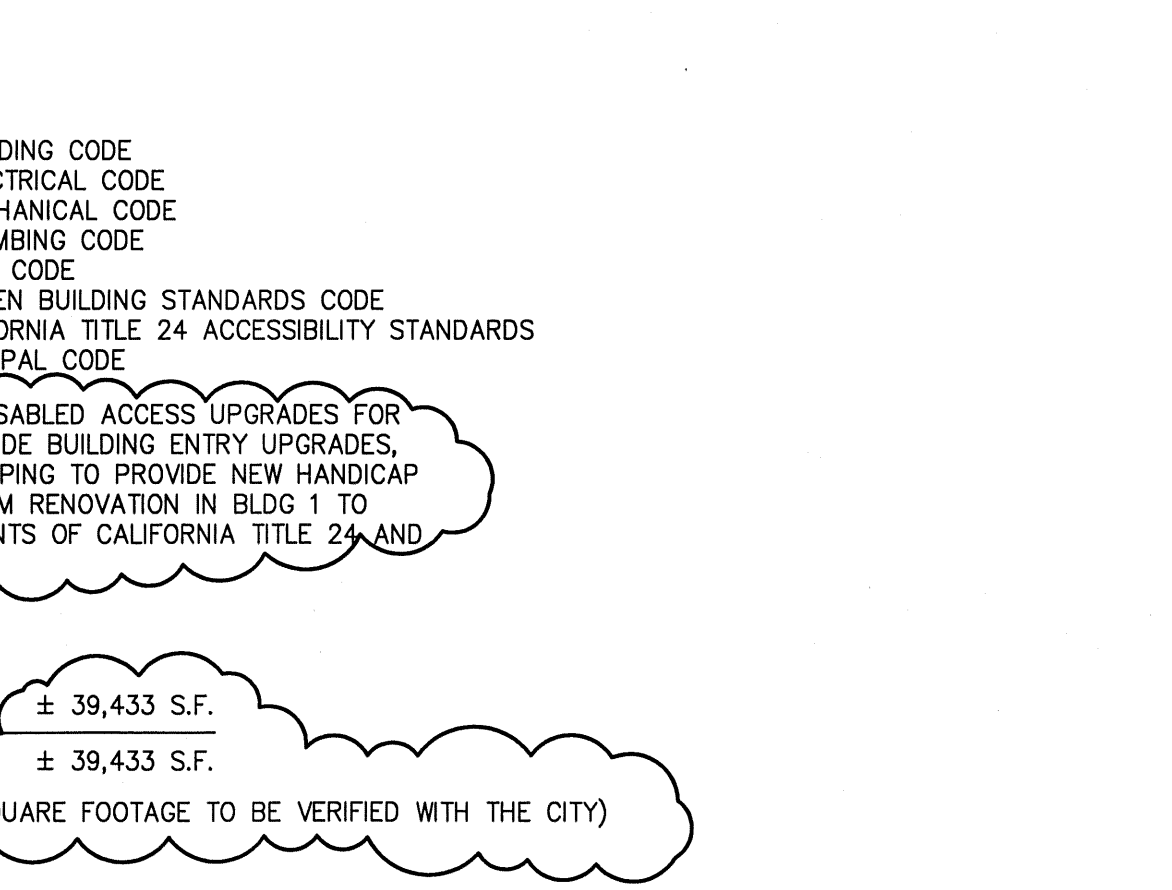
- GENERAL NOTES:**
- DRAWINGS OF EXISTING CONDITIONS HAVE BEEN COMPILED FROM EXISTING DATA SUPPLIED BY THE OWNER TO THE ARCHITECT. THE ARCHITECT MAKES NO WARRANTY, EITHER EXPRESS OR IMPLIED, FOR THE ACCURACY OF THE COMPLETENESS OF THE EXISTING INFORMATION PROVIDED. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND NOTIFY THE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES OR CONFLICTS THAT MIGHT ARISE IN THE COURSE OF THE DEMOLITION WORK.
 - VERIFY LOCATIONS OF EXISTING MECHANICAL, PLUMBING AND ELECTRICAL UTILITIES. LOCATE AND PROTECT UTILITIES TO REMAIN. DISCONNECT, REMOVE BACK TO NEAREST JUNCTION BOX OR PANEL, AS REQUIRED, AND CAP DESIGNATED UTILITIES WITHIN THE DEMOLITION AREA. REFER TO THE MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFO.
 - EXISTING ELECTRICAL AND TELEPHONE OUTLETS LOCATED ON DEMOLISHED WALLS ARE TO BE REMOVED INCLUDING CONDUIT AND WRING BACK TO JUNCTION BOX. LOCATIONS ARE TO BE PATCHED AND REPAIRED TO BE FLUSH WITH ADJACENT WALL SURFACE.
 - WHERE PLUMBING FIXTURES ARE BEING REMOVED OR WHERE EXPOSED PLUMBING PIPES OCCUR, CAP LINES BEHIND FINISHED SURFACES. PATCH AND REPAIR AS REQUIRED.
 - ALL EXISTING CONSTRUCTION WHERE INDICATED INCLUDING ELECTRICAL, TELEPHONE, PLUMBING AND MECHANICAL DEVICES NOT OTHERWISE INDICATED ON THESE CONSTRUCTION DRAWINGS SHALL BE REMOVED IN A CAREFUL MANNER SO AS NOT TO DAMAGE ADJOINING CONSTRUCTION.
 - IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHETHER SHOWN HEREON OR NOT AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR ALL EXPENSE OF REPAIR OR REPLACEMENT OF UTILITIES OR OTHER PROPERTY DAMAGED BY OPERATIONS IN CONJUNCTION WITH THE EXECUTION OF HIS WORK.
 - ALL EXISTING BUILDING UTILITIES SHALL REMAIN IN OPERATION DURING CONSTRUCTION. PROVIDE ROUTING OF UTILITIES SERVING ADJACENT AREAS THAT ARE TO MAINTAIN UNINTERRUPTED SERVICE. ANY TEMPORARY SUSPENSION OF SERVICE SHALL BE COORDINATED AND APPROVED BY THE FACILITY MANAGER, NOT LESS THAN 24-HOURS IN ADVANCE.
 - THE CONTRACTOR WILL VERIFY AND CONFORM TO ALL REQUIREMENTS OF ALL UTILITY COMPANIES UNLESS OTHERWISE NOTED IN THE PLANS AND SPECIFICATIONS.
 - THE DEMOLITION PLAN KEYNOTES ARE DIAGRAMMATIC AND GENERAL IN NATURE. THE INTENT IS TO ILLUSTRATE THE COMPLETE DEMOLITION OF THE SPACES INDICATED UNLESS NOTED OTHERWISE. FIELD VERIFICATION OF EXISTING CONDITIONS AND SPECIFIC QUANTITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
 - REMOVAL AND DISPOSAL OF DEMOLITION DEBRIS IS THE RESPONSIBILITY OF THE CONTRACTOR. VERIFY THE HAULING ROUTE THROUGH THE BUILDING, THE DEMOLITION STAGING AREA, AND THE LOCATION OF THE DUMPSTERS WITH THE OWNER PRIOR TO THE START OF DEMOLITION. DISPOSAL OF RUBBISH SHALL BE DONE IN A LEGAL MANNER.
 - THE OWNER RESERVES THE RIGHT TO SALVAGE ANY DEMOLISHED ITEM. VERIFY ITEMS TO BE SALVAGED WITH THE OWNER PRIOR TO THE START OF DEMOLITION. REMOVE, PROTECT, CLEAN, REPAIR FOR REUSE AND TURN OVER SUCH ITEMS AS DIRECTED BY THE OWNER.
 - IN ORDER TO INSTALL SOME OF THE NEW WORK (INCLUDING, BUT NOT LIMITED TO MECHANICAL, PLUMBING OR ELECTRICAL) IT WILL BE NECESSARY FOR THE CONTRACTOR AND HIS SUBCONTRACTORS TO REMOVE AND REPLACE (OR REFINISH) EXISTING WALLS, FLOORS, OR CEILING IN THE AREAS OF THE BUILDING NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL INCLUDE ALL RELATED COSTS IN HIS BASE BID, WHETHER SHOWN ON THESE PLANS OR NOT.
 - PROTECT ADJACENT SPACES NOT SCHEDULED FOR DEMOLITION. PATCH AND REPAIR DAMAGED FINISHES, ITEMS AND FIXTURES TO REMAIN AND/OR REPLACE IN KIND TO MATCH EXISTING FROM DAMAGE DURING THE PROGRESS OF THE WORK. PROVIDE TEMPORARY SAFETY BARRIERS REQUIRED BY CODE AND AS INDICATED TO INSURE PUBLIC SAFETY AND TO ALLOW BUILDING OCCUPANCY. CONTRACTOR TO SUBMIT FOR APPROVAL, BARRIER LOCATIONS, AND METHOD OF CONSTRUCTION TO THE ARCHITECT PRIOR TO INSTALLATION.
 - NO STRUCTURAL ELEMENTS ARE INCLUDED IN THIS SCOPE OF WORK.
 - PROVIDE DUST BARRIERS AROUND OPENINGS, TO AND FROM THE CONSTRUCTION AREA. PROVIDE ALL MEANS NECESSARY TO INHIBIT DUST FROM ENTERING OTHER PORTIONS OF THE FACILITY. SUBMIT BARRIER LOCATIONS TO THE ARCHITECT FOR APPROVAL, PRIOR TO INSTALLATION.
 - PROVIDE ADEQUATE SHORING, BRACING, BARRICADES AND PROTECTIVE MEASURES AS REQUIRED TO SAFELY EXECUTE THE WORK IN THE CONSTRUCTION AREA AND THE AREAS ADJACENT TO THE CONSTRUCTION AREA. CEASE OPERATIONS AND NOTIFY THE ARCHITECT IMMEDIATELY IF THE STRUCTURE APPEARS TO BE ENDANGERED. DO NOT RESUME OPERATIONS UNTIL CORRECTIVE MEASURES HAVE BEEN TAKEN.
 - CONTRACTOR SHALL MAINTAIN REQUIRED MEANS OF EGRESS AND ENSURE THAT EXIT ROUTES ARE SIGNED, LIGHTED AND PROTECTED IN ACCORDANCE WITH CODE REQUIREMENTS. RELOCATE EXISTING AND/OR PROVIDE SMOKE PROTECTORS AND LIFE SAFETY EQUIPMENT FOR ADEQUATE COVERAGE.
 - PROVIDE TEMPORARY NON-COMBUSTIBLE CONSTRUCTION BARRIERS WHERE REQUIRED BY CODE AND THE GOVERNING FIRE AUTHORITY. MINIMUM REQUIREMENTS:
 - FULL HEIGHT WALL FROM FLOOR TO CEILING.
 - STUDS AT 24" O.C., WITH 5/8" TYPE "X" GYPSUM BOARD.
 - NON-COMBUSTIBLE ACCESS DOOR WITH (3) HINGES AND SPRING CLOSER.
 - SURVEY EXISTING FLOORS AND CLEARLY MARK ON FLOOR SURFACE THE LOCATIONS OF ALL BEAMS AND JOISTS. MARK ALL CORE DRILL PENETRATIONS AND RECEIVE STRUCTURAL ENGINEER'S APPROVAL PRIOR TO DRILLING CONCRETE.
 - CUT RIGID MATERIALS USING MASONRY SAW OR CORE DRILL. PNEUMATIC TOOLS ARE NOT ALLOWED WITHOUT PRIOR APPROVAL.
 - ALL CORE DRILLING OR OTHER NOISY WORK SHALL BE SCHEDULED 48-HOURS IN ADVANCE WITH THE OWNER.
 - APPLY CEMENT BASE FLOOR PATCH AS REQUIRED TO FILL DINGS, NAIL HOLES, CHIPS AND CRACKS.
 - AT FLOOR AREAS SCHEDULED TO RECEIVE NEW FLOOR COVERING, REMOVE EXISTING FLOOR COVERING AND PREPARE SUBSTRATE FOR NEW FLOOR COVERING PER SPECIFICATIONS AND MANUFACTURER'S REQUIREMENTS.
 - AT ABANDONED PENETRATIONS OF FIRE RATED WALLS, CEILING OR FLOOR CONSTRUCTION, COMPLETELY VOID WITH FIRE RATED MATERIAL TO FULL THICKNESS OF THE PENETRATED ELEMENT. ALL PATCHING OF EXISTING WORK TO REMAIN SHALL MATCH FINISH PER SCHEDULE OR WHERE UNSCHEDULED TO MATCH EXISTING FINISHES TO REMAIN, AND SHALL MEET OR EXCEED FIRE RATING INDICATED ON FLOOR PLAN AND AS REQUIRED BY THE FIRE/LIFE SAFETY INSPECTOR.
 - COORDINATE EXISTING SPRINKLER LINE AND HEAD LOCATION WITH NEW PLAN. SUBMIT SPRINKLER SHOP DRAWINGS TO ARCHITECT FOR REVIEW WITH THE CITY FIRE DEPARTMENT.
 - CONTRACTOR IS RESPONSIBLE FOR BUILDING SECURITY DURING DEMOLITION PHASE. PROTECT ALL OPENINGS FROM WEATHER CONDITIONS AND SECURE THEM TO PREVENT VANDALISM.
 - DO NOT PERFORM ANY WORK THAT WILL VOID WARRANTIES OF EXISTING WEATHER EXPOSED OR MOISTURE RESISTANT ELEMENTS WITHOUT PRIOR APPROVAL FROM THE OWNER.
 - ARCHITECT ASSUMES NO RESPONSIBILITY RELATING TO ANY TOXIC MATERIALS, INCLUDING ASBESTOS, AND ASSUMES NO RESPONSIBILITY TO ITS EXISTENCE OR REMOVAL. THE OWNER WILL TAKE ACTION FOR DIRECTLY CONTRACTING WITH A CONSULTANT OR SPECIALIST, LICENSED BY THE STATE, FOR SUCH SERVICES SHOULD THOSE SERVICES BE REQUIRED ON THE PROJECT.
 - IF THE EXISTING BUILDING CONSTRUCTION IS CLASSIFIED SUCH THAT FIREPROOFING INSULATION IS PRESENT, THEN THE CONTRACTOR PRIOR TO STARTING ANY WORK, SHALL VERIFY THE CURRENT FIRE-RESISTANCE RATING(S) OF THE EXISTING BUILDING ELEMENT(S). IF THE EXISTING FIREPROOFING INSULATION IS DAMAGED/AFFECTED DURING THE COURSE OF THE WORK, AS DEFINED BY THIS PROJECT SCOPE, THEN THE CONTRACTOR SHALL PATCH/REPAIR THE FIREPROOFING INSULATION TO A CONDITION THAT SHALL MATCH OR EXCEED THE ORIGINAL FIRE-RESISTANCE RATING(S) OF THE EXISTING BUILDING ELEMENT(S).
 - CONTRACTOR TO RELOCATE AND REUSE EXISTING DOORS AND HARDWARE WHERE POSSIBLE.
 - EXISTING DOORS TO REMAIN U.O.N.

BUILDING DEPARTMENT: _____ CITY OF IRVINE

BUILDING CODES: _____ 2013 CALIFORNIA BUILDING CODE
2013 CALIFORNIA ELECTRICAL CODE
2013 CALIFORNIA MECHANICAL CODE
2013 CALIFORNIA PLUMBING CODE
2013 CALIFORNIA FIRE CODE
2013 CALIFORNIA GREEN BUILDING STANDARDS CODE
2013 STATE OF CALIFORNIA TITLE 24 ACCESSIBILITY STANDARDS
CITY OF IRVINE MUNICIPAL CODE

PROJECT SCOPE: _____ BUILDING AND SITE DISABLED ACCESS UPGRADES FOR 3 BUILDINGS TO INCLUDE BUILDING ENTRY UPGRADES, PARKING LOT RE-STRIPING TO PROVIDE NEW HANDICAP STALLS AND RESTROOM RENOVATION IN BLDG 1 TO MEET THE REQUIREMENTS OF CALIFORNIA TITLE 24 AND THE ADA.

BUILDING AREA (EXISTING)
BUILDING 1 ADMINISTRATION BLDG
OFFICE (B) ± 39,433 S.F.
TOTAL ± 39,433 S.F.
(EXISTING BUILDING SQUARE FOOTAGE TO BE VERIFIED WITH THE CITY)



| ARCHITECTURAL | | (10 SHEETS) |
|---------------|--|-------------|
| A0.1 | COVER SHEET | |
| A0.1a | TITLE SHEET | |
| A0.2 | GENERAL NOTES | |
| A0.3 | ACCESSIBILITY NOTES & DETAILS | |
| A0.3a | ACCESSIBILITY NOTES & DETAILS | |
| A0.1 | BUILDING 1 - DEMOLITION PLAN | |
| A2.1 | BUILDING 1 - FLOOR PLAN | |
| A5.1 | BUILDING 1 - FLOOR FINISH AND REFLECTED CEILING PLAN | |
| A6.1 | BUILDING 1 ENLARGED RESTROOM PLANS, ELEVATIONS AND DETAILS | |

| CIVIL | | (7 SHEETS) |
|-------|---|------------|
| 1 | TITLE SHEET | |
| 2 | GENERAL NOTES & OVERALL SITE AND KEY MAP | |
| 3 | SITE PLAN & GRADING PLAN - BUILDING 1 & 4 | |
| 4 | SITE PLAN & GRADING PLAN - BUILDING 3 | |
| 5 | SITE DETAILS | |
| 6 | DEMOLITION PLAN - BUILDING 1 & 4 | |
| 7 | DEMOLITION PLAN - BUILDING 3 | |

| PLUMBING (FOR REFERENCE ONLY) | | (1 SHEET) |
|-------------------------------|---|-----------|
| P2-1 | BUILDING NO.1 - ADMINISTRATION PLAN AND DETAILS | |

| MECHANICAL (FOR REFERENCE ONLY) | | (2 SHEETS) |
|---------------------------------|--|------------|
| M2-1 | BUILDING NO.1 - ADMINISTRATION MECHANICAL FLOOR PLAN & ROOF PLAN | |
| M-3 | HVAC UPGRADE | |

| ELECTRICAL (FOR REFERENCE ONLY) | | (2 SHEETS) |
|---------------------------------|---|------------|
| E-2 | BUILDING NO.1 - LIGHTING & POWER PLAN | |
| E3-1 | BUILDING NO.1 - LIGHTING PLAN, POWER & TELEPHONE PLAN AND NOTES | |

DRAWING NOTES:

- UNLESS OTHERWISE NOTED OR INDICATED, ALL DIMENSIONS ON THESE DOCUMENTS SHALL BE TO FACE OF CURB, FACE OF CONCRETE OR MASONRY, FACE OF FINISH OR CENTERLINE OF GRIDS.
- ALL VERTICAL DIMENSIONS SHOWN ARE FROM FLOOR SLAB, U.O.N.
- DIMENSIONS SHOWN IN FIGURES TAKE PRECEDENCE OVER DIMENSIONS SCALED FROM DRAWINGS. LARGE SCALE DRAWINGS AND DETAILS TAKE PRECEDENCE OVER SMALLER SCALE DRAWINGS.
- THE TERM "ALIGN", AS USED IN THESE DOCUMENTS, SHALL MEAN TO ACCURATELY LOCATE FINISHES IN THE SAME PLANE.
- "TYPICAL" AS USED IN THESE DOCUMENTS SHALL MEAN THAT THE CONDITION IS THE SAME OR REPRESENTATIVE FOR ALL SIMILAR CONDITIONS THROUGHOUT, U.O.N.
- DETAILS ARE USUALLY KEYED AND NOTED "TYPICAL" ONLY ONCE, WHEN THEY FIRST OCCUR AND ARE REPRESENTATIVE OF ALL SIMILAR CONDITIONS THROUGHOUT, U.O.N.
- COLUMN CENTERLINES (GRID LINES) ARE SHOWN FOR DIMENSIONING PURPOSES.
- WHERE CONSTRUCTION DETAILS ARE NOT SHOWN OR NOTED FOR ANY PART OF THE WORK, THE DETAILS SHALL BE THE SAME AS FOR OTHER SIMILAR WORK IN THE SAME BUILDING.

INTERIOR / EXTERIOR NOTES:

- WHERE ELECTRICAL, MECHANICAL AND/OR PLUMBING ITEMS, SUCH AS LIGHTS, DUCTS, PIPING, DOWNSPOUTS, ETC. ARE TO PENETRATE ANY BUILDING FOOTINGS, SLABS, FLOORS, STRUCTURAL FRAMING, WALL PARTITIONS, CEILING, ETC., IT IS REQUIRED THAT AN APPROPRIATELY SIZED OPENING OR CLEARANCE BE FURNISHED. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL ITEMS WITH THE CONSTRUCTION DOCUMENTS PRIOR TO THE INSTALLATION OF STRUCTURAL, MECHANICAL, PLUMBING AND ELECTRICAL WORK. ANY CONFLICT OR DISCREPANCY WITHIN CONSTRUCTION DOCUMENTS SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION FOR CLARIFICATION.
- CONTRACTOR, ALONG WITH MECHANICAL CONTRACTOR, SHALL PROVIDE AND LOCATE ACCESS DOORS/PANELS IN WALL & CEILING CONSTRUCTION AS REQUIRED TO PROVIDE ACCESS TO MECHANICAL, FIRE SPRINKLER, PLUMBING & ELECTRICAL WORK. CONTRACTOR SHALL SUBMIT A PLAN OF ALL PROPOSED ACCESS PANEL LOCATIONS TO ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION.
- ALL PENETRATIONS AT RATED CONSTRUCTION SHALL BE PROTECTED TO MAINTAIN RATING.
- WHERE OCCURS, CONTRACTOR SHALL PATCH ANY EXISTING WALLS AND/OR CEILING AS NEEDED TO REPAIR/REINFORCE THE LEASE SPACE AND REPAIR ALL DAMAGES CAUSED BY CONTRACTOR.
- INTERIOR WALLS AND CEILING SHALL BE INSTALLED IN ACCORDANCE TO STATE & LOCAL CODES, INCLUDING REQUIREMENTS FOR FLAME SPREAD AND SMOKE DENSITY RATINGS FOR FINISH MATERIALS.
- WHEN USED, ALL NOISE BARRIER BATTS (SOUND INSULATION) AND INSULATION BATTS SHALL BE NON-COMBUSTIBLE AND SHALL NOT CONTAIN OR UTILIZE OZONE DEPLETING COMPOUNDS.
- ALL NEW CONSTRUCTION MATERIALS SHALL BE 100% ASBESTOS-FREE.
- OUR FIELD VERIFICATION IS BASED ON THOSE BUILDING ELEMENTS WHICH ARE IMMEDIATELY AND READILY VISIBLE WITHOUT THE USE OF DEMOLITION OR REMOVAL OF ANY PERMANENT ELEMENTS.

| JOB SITE NOTES: | |
|-----------------|---|
| 1. | WHERE EXISTING TENANTS/BUSINESSES ARE ADJACENT TO THE JOB SITE/TENANT, THE CONTRACTOR SHALL MINIMIZE CONSTRUCTION NOISE - EXTREME NOISE CONSTRUCTION SHALL OCCUR AT NON-TYPICAL BUSINESS HOURS. CONTRACTOR SHOULD NOTIFY BUILDING REPRESENTATIVE OF SPECIAL CIRCUMSTANCES IN ADVANCE PRIOR TO WORK. |
| 2. | THE CONTRACTOR AT HIS OWN EXPENSE, SHALL KEEP THE PROJECT AND SURROUNDING AREA FREE FROM DUST AND DEBRIS. THE WORK SHALL BE IN CONFORMANCE WITH THE AIR AND WATER POLLUTION CONTROL STANDARDS AND REGULATIONS OF THE STATE DEPARTMENT OF HEALTH. |
| 3. | CONSTRUCTION DEBRIS AND WASTES SHALL BE DEPOSITED AT AN APPROPRIATE SITE. THE CONTRACTOR SHALL INFORM THE BUILDING REPRESENTATIVE OF THE LOCATION OF DISPOSAL SITES. |
| 4. | CONTRACTOR SHALL BE RESPONSIBLE FOR THE GENERAL CLEANING OF THE JOB AFTER ITS COMPLETION. WHERE APPLICABLE, CLEANING SHALL INCLUDE, BUT NOT BE LIMITED TO, THE EXTERIOR AND INTERIOR OF THE BUILDING, THE PATH OF TRAVEL TO THE JOB SITE, PARKING LOTS, ELEVATORS, LOBBIES, AND CORRIDOR CARPETS. |
| 5. | THE CONTRACTOR SHALL PROVIDE PEDESTRIAN PROTECTION, WHERE REQUIRED PER STATE AND LOCAL CODES. |
| 6. | IF TRENCHES OR EXCAVATIONS 5'-0" OR MORE IN DEPTH ARE REQUIRED, OBTAIN ISSUANCE OF A BUILDING OR GRADING PERMIT. |
| 7. | NO HAZARDOUS MATERIALS SHALL BE USED OR STORED WITHIN THE BUILDING WHICH DOES NOT COMPLY WITH THE LOCAL FIRE AUTHORITY AND STATE & COUNTY REQUIREMENTS. |
| 8. | CONTRACTOR SHALL BE RESPONSIBLE FOR BLOCKING OFF SUPPLY AND RETURN AIR GRILLES, DIFFUSERS & DUCTS TO KEEP DUST FROM ENTERING INTO BUILDING AIR DISTRIBUTION SYSTEMS. |
| 9. | BUILDINGS UNDERGOING CONSTRUCTION, ALTERATION OR DEMOLITION SHALL BE DONE SO IN ACCORDANCE WITH STATE & LOCAL CODES. |
| 10. | THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO ENSURE THE SAFETY OF THE OCCUPANTS AND WORKERS AT ALL TIMES. |
| 11. | THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE SECURITY OF THE BUILDING AND SITE WHILE JOB IS IN PROGRESS AND UNTIL THE JOB IS COMPLETED. |

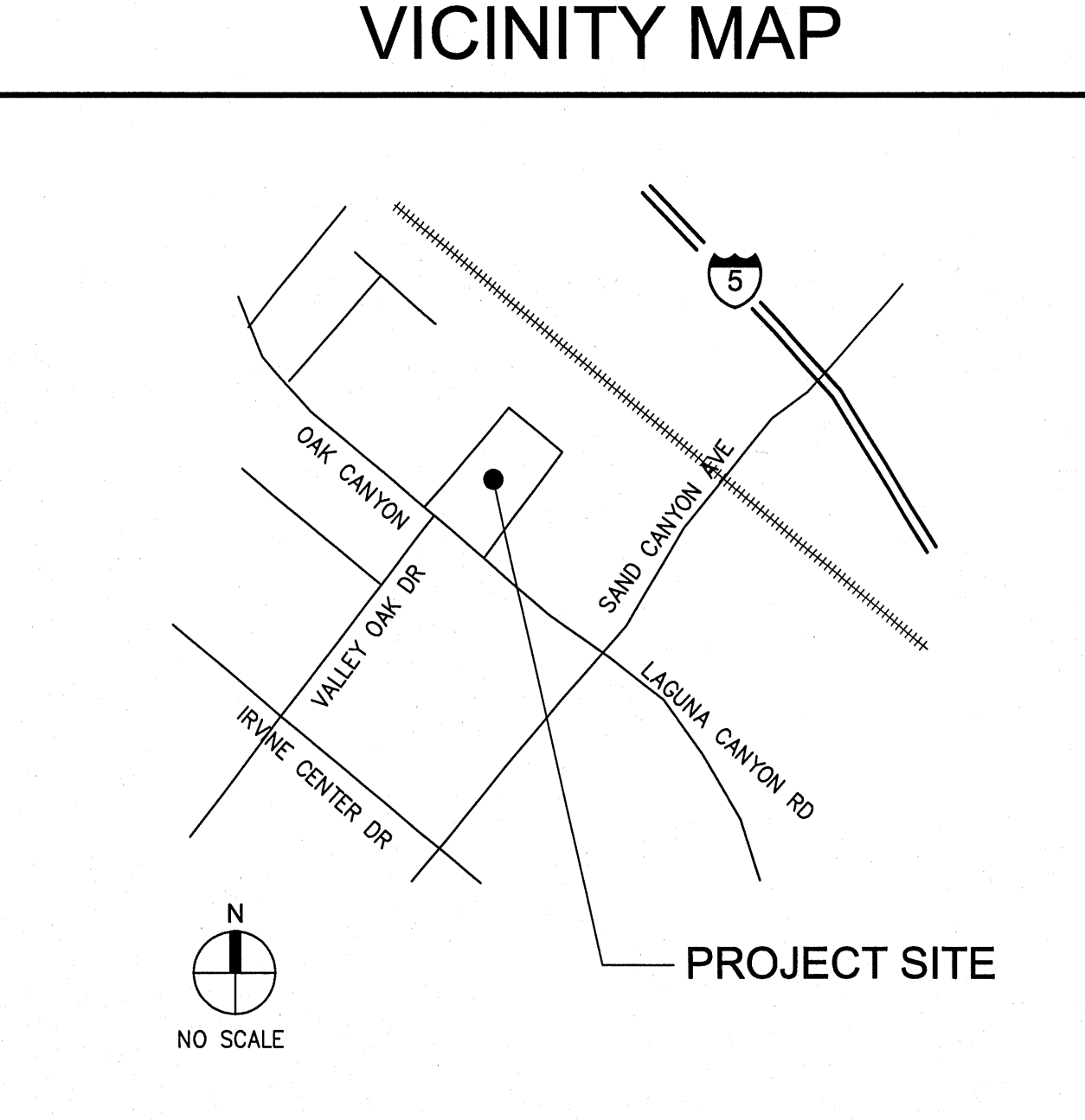
CLIENT
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT
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IRVINE, CA

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| SYMBOLS LEGEND | |
|----------------|--|
| | ALIGN |
| | OFFICE |
| | ROOM NAME |
| | ROOM NUMBER |
| | NEW DOOR |
| | DOOR NUMBER (REFER TO DOOR SCHEDULE) |
| | EXISTING DOOR |
| | FIRE EXTINGUISHER CABINET W/ FIRE EXTINGUISHER |
| | WALL-MOUNTED FIRE EXTINGUISHER |
| | KEYNOTE INDICATOR |
| | EQUIPMENT TAG |
| | REVISION CLOUD & DELTA NUMBER |
| | DETAIL REFERENCE |
| | SHEET NUMBER |
| | DETAIL SECTION REFERENCE |
| | SHEET NUMBER |
| | SECTION REFERENCE |
| | SHEET NUMBER |
| | ELEVATION REFERENCE |
| | SHEET NUMBER |
| | ELEVATION VIEW |
| | ELEVATION REFERENCE |
| | SHEET NUMBER |
| | WALL MATERIAL TYPE |
| | TYPE NUMBER |
| | FLOOR MATERIAL TYPE |
| | TYPE NUMBER |
| | MISC. MATERIAL TYPE |
| | TYPE NUMBER |



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TITLE SHEET

| DATE | REVISIONS |
|------------|----------------------|
| 3/30/2016 | PLAN CHECK SUBMITTAL |
| 04/14/2016 | PLAN CHECK COMMENTS |

PA / PM: JCARROLL
DRAWN BY: EG
JOB NO.: IRV15-0195-00

A0.1a

SHEET

8 MAY 2016

PLAN CHECK SUBMITTAL SET - 05-16-2016

FINISH NOTES

- 1. NO FINISH SUBSTITUTIONS MAY BE MADE UNLESS APPROVED BY ARCHITECT.
2. CONTRACTOR MUST NOTIFY THE ARCHITECT OF ANY DISCREPANCY IN PLANS.
3. INSTALL MATERIALS ACCORDING TO MANUFACTURER'S SUGGESTED INSTALLATION...

CEILING NOTES

- 1. SEE ELECTRICAL ENGINEERING DRAWINGS FOR SPECIFICATIONS OF NEW BUILDING STANDARD LIGHT FIXTURES, SWITCHES, EXIT SIGNS, ETC.
2. ALL REPLACEMENT FLOURESCENT LAMPS TO MATCH BUILDING STANDARD - SAME COLOR AND MANUFACTURER.
3. FIELD VERIFY EXISTING CEILING GRID LOCATION AND NOTIFY ARCHITECT OF ANY DISCREPANCIES ON PLANS...

PARTITION PLAN NOTES

- 1. CONTRACTOR AND ARCHITECT TO REVIEW & APPROVE CHALK LINES OF PARTITION LAYOUT PRIOR TO COMMENCEMENT OF PARTITION CONSTRUCTION.
2. CONTRACTOR TO VERIFY DIMENSIONS FOR ALL PLUMBING PARTITION.
3. EXTEND ALL STUDS AND WALL MATERIALS TO CONSTRUCTION ABOVE, U.O.N.

MILLWORK NOTES

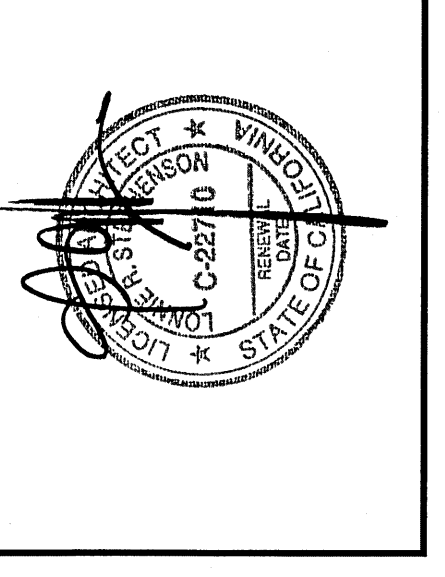
- 1. CONTRACTOR MUST NOTIFY ARCHITECT / DESIGNER OF ANY DISCREPANCY IN PLANS. FINISH ITEMS CLEARLY SHOWN IN PLANS, BUT OMITTED FROM SCHEDULES OR LEGENDS MUST STILL BE PROVIDED AND INSTALLED BY CONTRACTOR.
2. SHOP DRAWINGS MUST BE PROVIDED FOR APPROVAL PRIOR TO FABRICATION TO THE ARCHITECT. CABINETMAKER SHALL USE ON SITE FIELD FRAMING DIMENSIONS...

DOOR NOTES

- 1. VERIFY THAT ALL DOORS AND DOOR HARDWARE MEET THE REQUIREMENTS OF ALL GOVERNING CODES & STANDARDS. NOTIFY THE ARCHITECT IMMEDIATELY IN CASE OF DISCREPANCY.
2. FIELD MEASURE, AS REQUIRED, ALL DOORS PRIOR TO FABRICATION.
3. PROVIDE A SIGN ON OR NEAR THE MAIN EXIT DOOR READING: "THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED".

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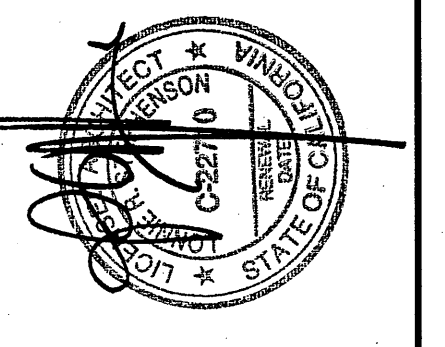
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ADA FACILITY IMPROVEMENTS
OPERATIONS SUPPORT FACILITY
OSF BUILDING 1
6427 OAK CANYON
IRVINE, CALIFORNIA

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GENERAL NOTES
REMARKS
DATE 3/29/2016
DATE PA / PM: JCARROLL
DRAWN BY: EG
JOB NO.: IRV15-0195-00
SHEET A0.2
PLAN CHECK SUBMITTAL SET - 05-16-2016



| CITY OF IRVINE | |
|----------------------------|----------------------|
| PLANNING & SAFETY DIVISION | |
| DATE | 3/30/2016 |
| REMARKS | PLAN CHECK SUBMITTAL |
| DATE | |
| REMARKS | |

| ACCESSIBILITY DETAILS | |
|-----------------------|---------------|
| PA / PM: | JCARROLL |
| DRAWN BY: | 000 |
| JOB NO.: | IRV15-0195-00 |
| SHEET | |

ACCESSIBILITY NOTES

- ALL ITEMS ARE FOR REFERENCE ONLY. ANY ITEM NOT SHOWN SHALL BE REFERENCED IN THE 2013 CALIFORNIA BUILDING CODE, CHAPTER 11.
- ANY DISCREPANCIES CONTAINED HEREIN DO NOT RELIEVE THE CONTRACTOR OR OWNER FROM COMPLYING WITH CURRENT CALIFORNIA ACCESSIBILITY STANDARDS.
- THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE CURRENT CALIFORNIA AND FEDERAL ACCESSIBILITY STANDARDS.
- REFER TO 2013 CALIFORNIA BUILDING CODE, CHAPTER 11, FOR CURRENT AND UP TO DATE INFORMATION.

DOORS, DOORWAYS & GATES ⑥

SCALE: 1/4"=1'-0"

PROTRUDING OBJECTS ⑪

SCALE: 1/4"=1'-0"

MOUNTING HEIGHTS ⑬

SCALE: 1/4"=1'-0"

FLOOR OR GROUND SURFACES & CHANGES IN LEVEL ⑭

SCALE: N.T.S.

WATER CLOSET LOCATION

SIZE OF CLEARANCE AT WATER CLOSETS

WALL HUNG TYPE

STALL TYPE

HEIGHT AND DEPTH OF URINALS

CLEAR WIDTH OF DOORWAYS

HINGED DOOR

SLIDING DOOR

FOLDING DOOR

FRONT APPROACH, PULL SIDE

FRONT APPROACH, PUSH SIDE

HINGE APPROACH, PULL SIDE

HINGE APPROACH, PUSH SIDE

LATCH APPROACH, PULL SIDE

LATCH APPROACH, PUSH SIDE

UNOBSTRUCTED FORWARD REACH

OBSTRUCTED HIGH FORWARD REACH

UNOBSTRUCTED HIGH SIDE REACH

OBSTRUCTED HIGH SIDE REACH

REACH RANGES ⑮

SCALE: 1/4"=1'-0"

CIRCULAR TURNING SPACE

T-SHAPED TURNING SPACE

SIZE AND POSITION OF CLEAR FLOOR SPACE

(A) FORWARD

(B) PARALLEL

MANEUVERING CLEARANCE IN AN ALCOVE, PARALLEL APPROACH

MANEUVERING CLEARANCE IN AN ALCOVE, FORWARD APPROACH

CLEAR FLOOR OR GROUND SPACE ⑯

SCALE: 1/2"=1'-0"

TOE CLEARANCE

KNIFE CLEARANCE

KNEE AND TOE CLEARANCE ⑰

SCALE: 1/4"=1'-0"

WHEELCHAIR ACCESSIBLE TOILET COMPARTMENT DOORS

ALTERNATE DOOR LOCATION

DOOR PERMITTED TO SWING OVER HATCHED PORTION OF MANEUVERING SPACE

DOOR PERMITTED TO SWING OVER HATCHED PORTION OF MANEUVERING SPACE

DOOR PERMITTED TO SWING OVER HATCHED PORTION OF MANEUVERING SPACE

MANEUVERING SPACE WITH SIDE-OPENING DOOR

MANEUVERING SPACE WITH END-OPENING DOOR

MANEUVERING CLEARANCE AT MANUAL SWINGING DOORS AND GATES

HINGE APPROACH, PULL SIDE

HINGE APPROACH, PUSH SIDE

LATCH APPROACH, PULL SIDE

LATCH APPROACH, PUSH SIDE

MANEUVERING CLEARANCE AT RECESSED DOORS AND GATES

PULL SIDE

PUSH SIDE

PUSH SIDE, DOOR PROVIDED WITH BOTH CLOSER AND LATCH

DOORS, DOORWAYS & GATES ⑰

SCALE: 1/4"=1'-0"

CLEAR WIDTH OF AN ACCESSIBLE ROUTE

180 DEGREE TURN

180 DEGREE TURN (EXCEPTION) CLEAR WIDTH AT TURN

CLEAR WIDTH ⑱

SCALE: 1/4"=1'-0"

CLEAR FLOOR OR GROUND SPACE ⑲

SCALE: 1/2"=1'-0"

WATER CLOSETS AND TOILET COMPARTMENTS & URINALS ⑳

SCALE: 1/4"=1'-0"

GRAB BARS ㉑

SCALE: N.T.S.

DOORS, DOORWAYS & GATES ㉒

SCALE: 1/4"=1'-0"

DOORS, DOORWAYS & GATES ㉓

SCALE: 1/4"=1'-0"

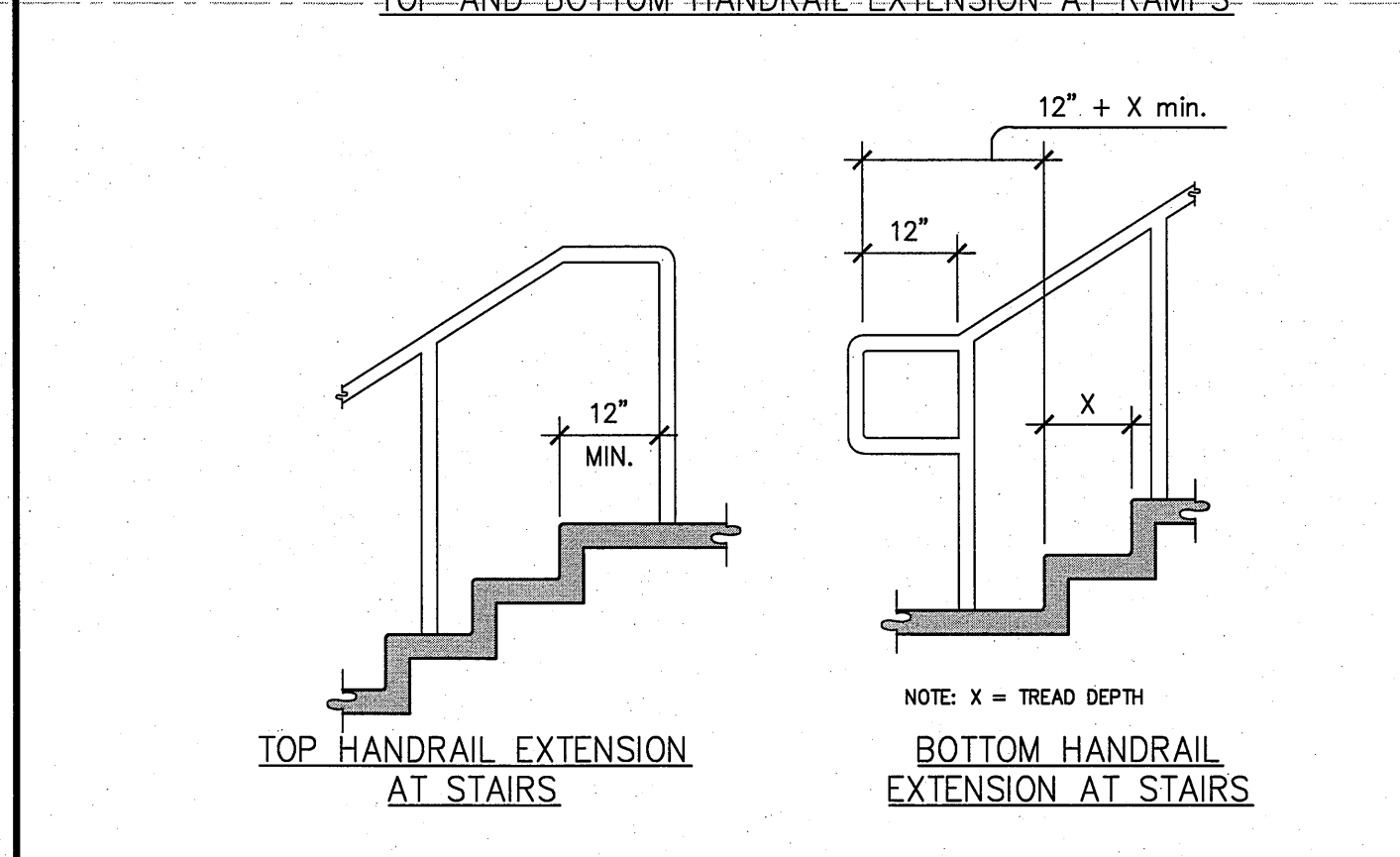
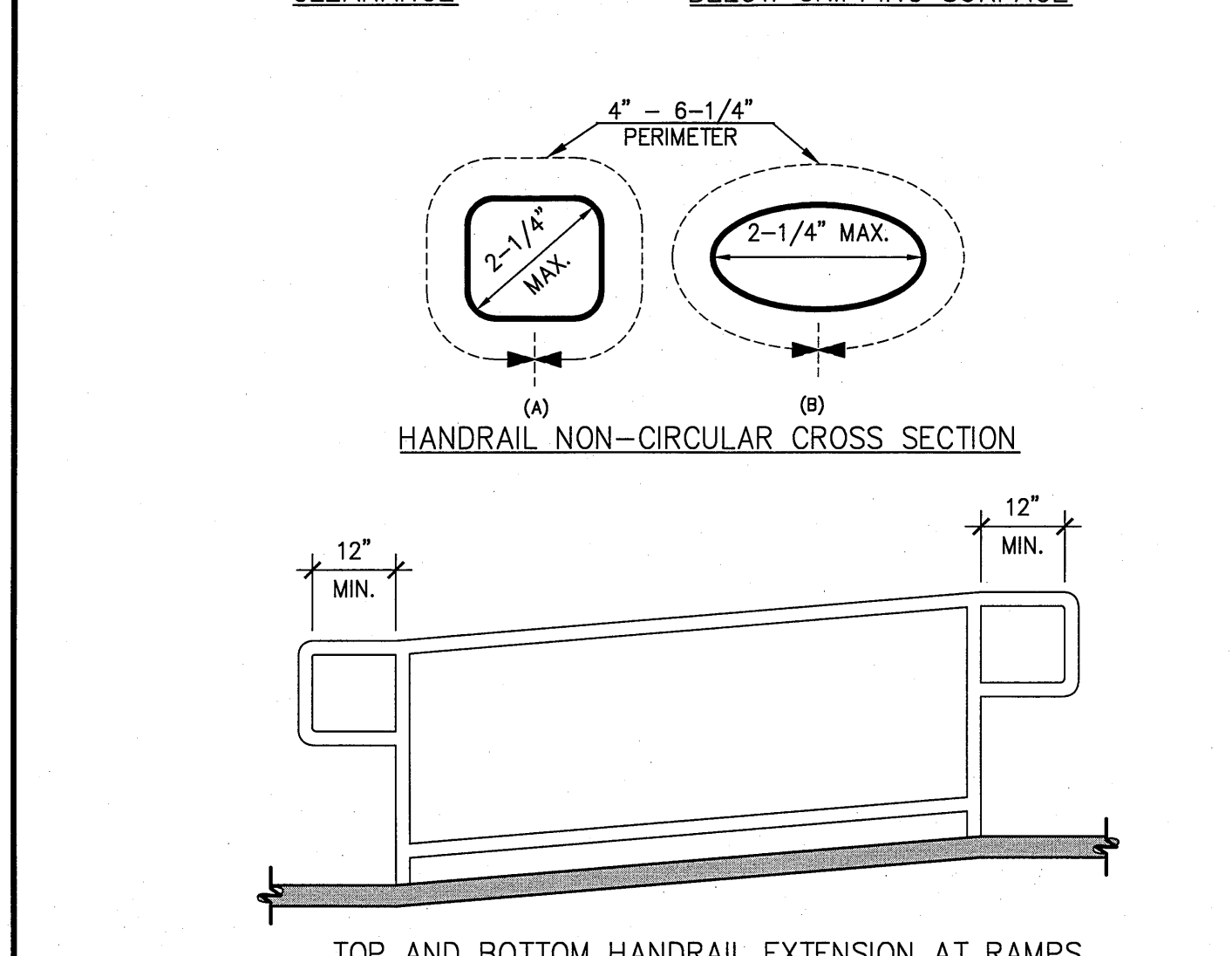
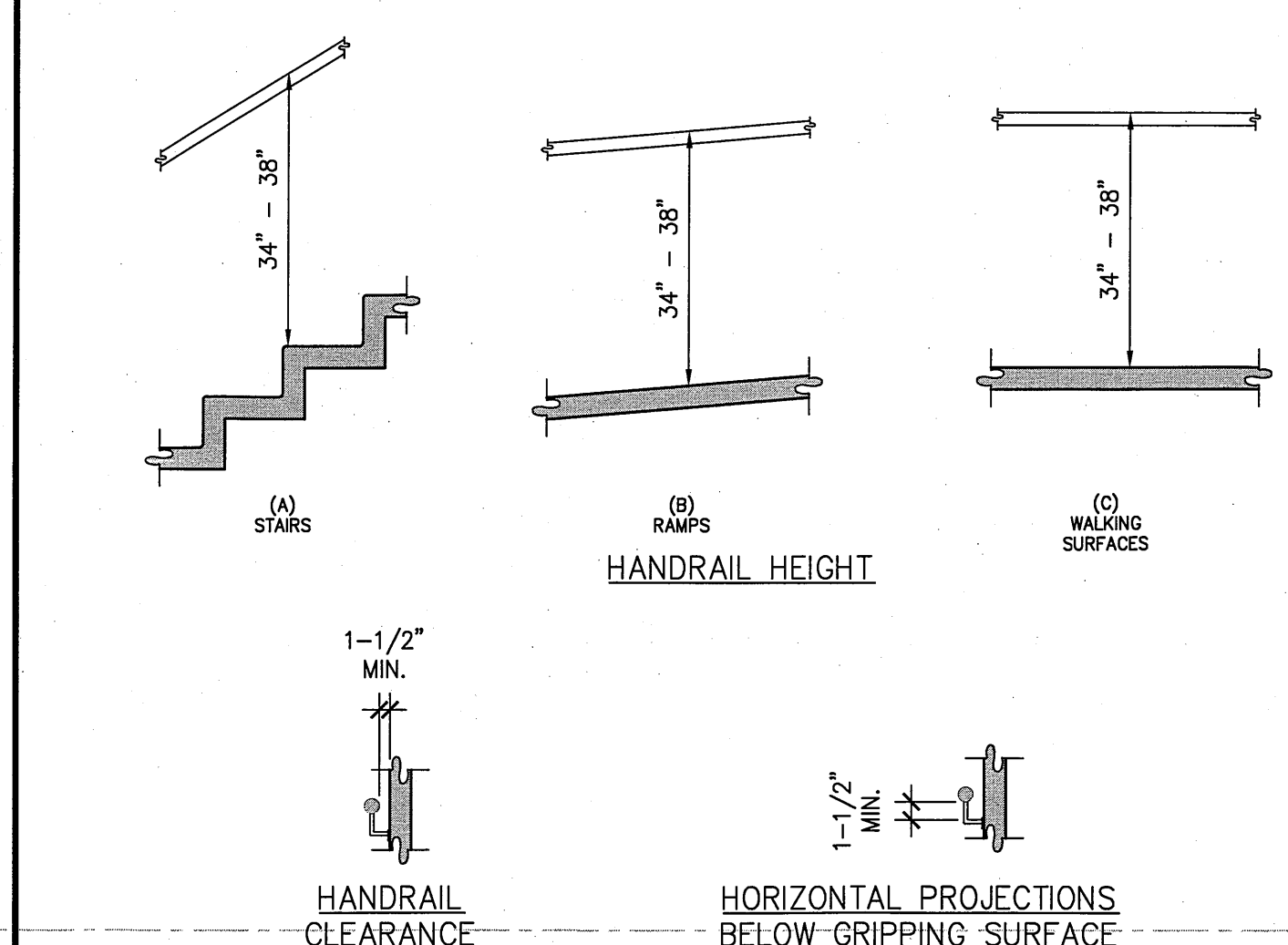
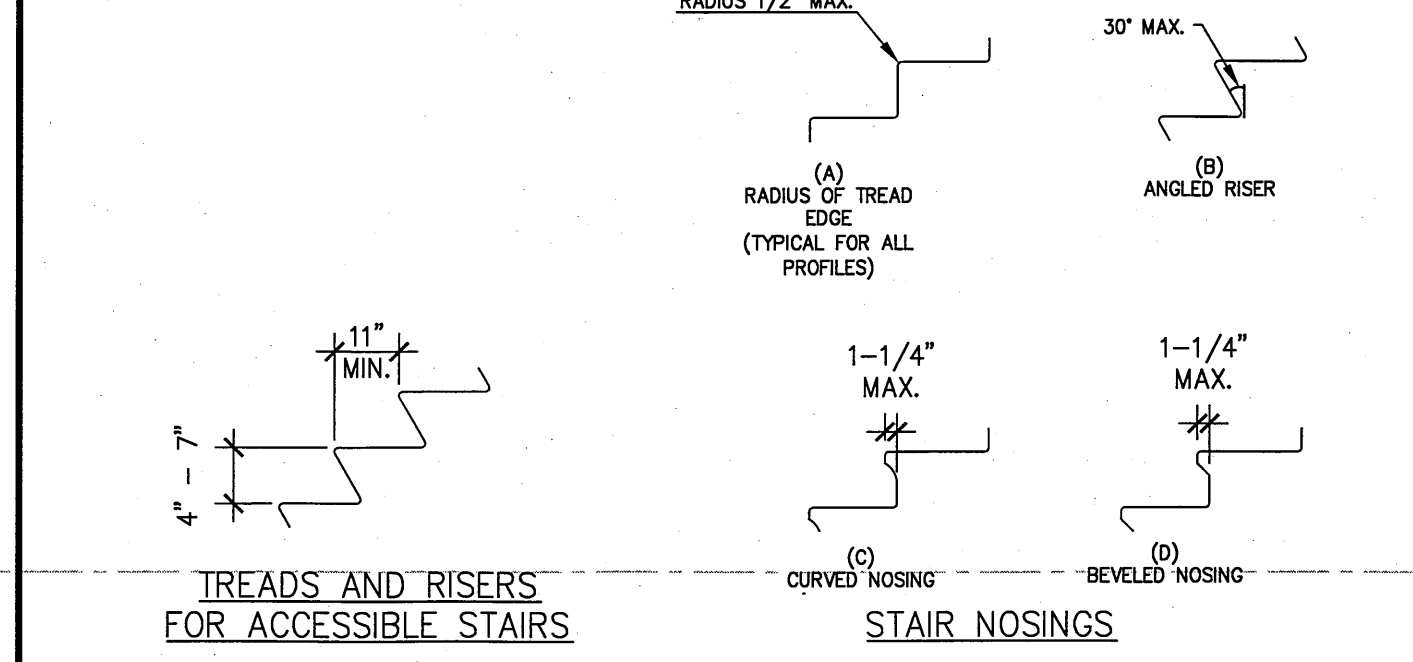
DOORS, DOORWAYS & GATES ㉔

SCALE: 1/4"=1'-0"

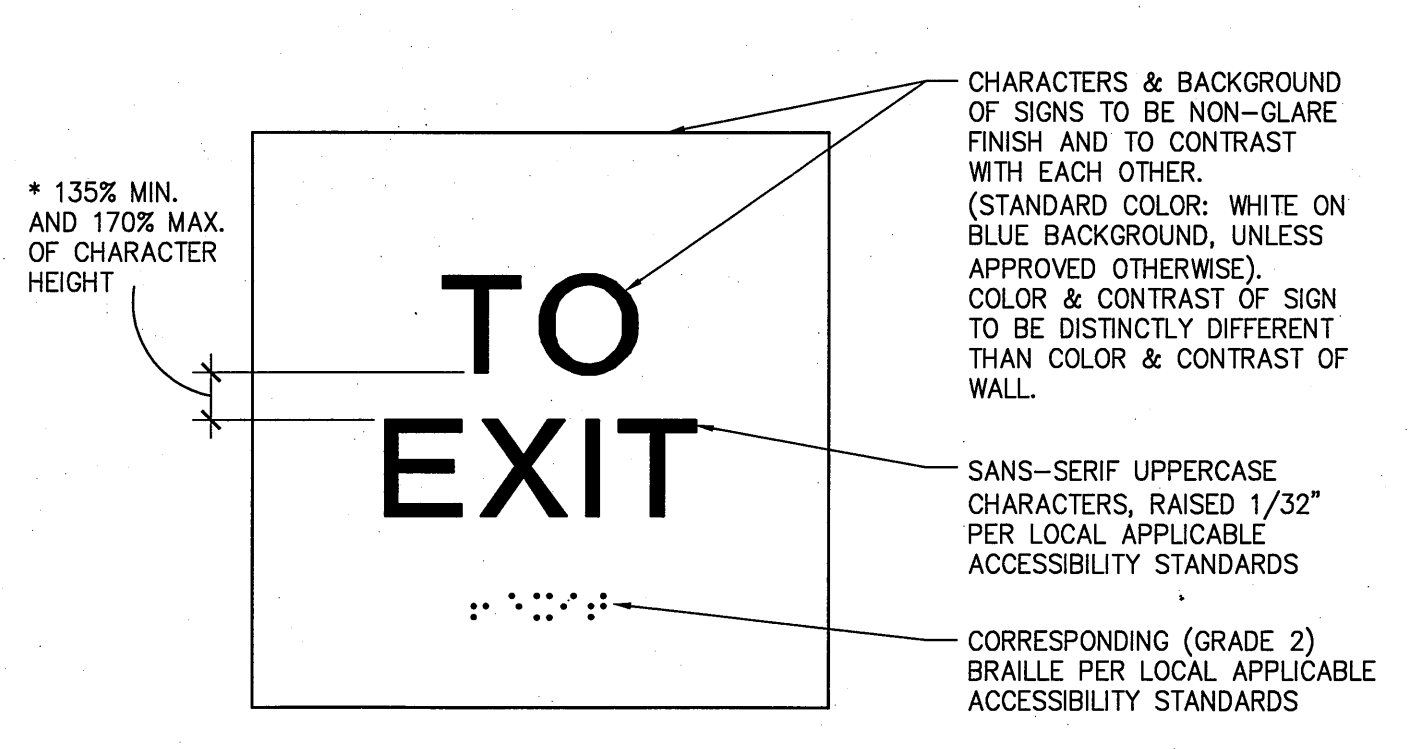
GRAB BARS ㉕

SCALE: N.T.S.

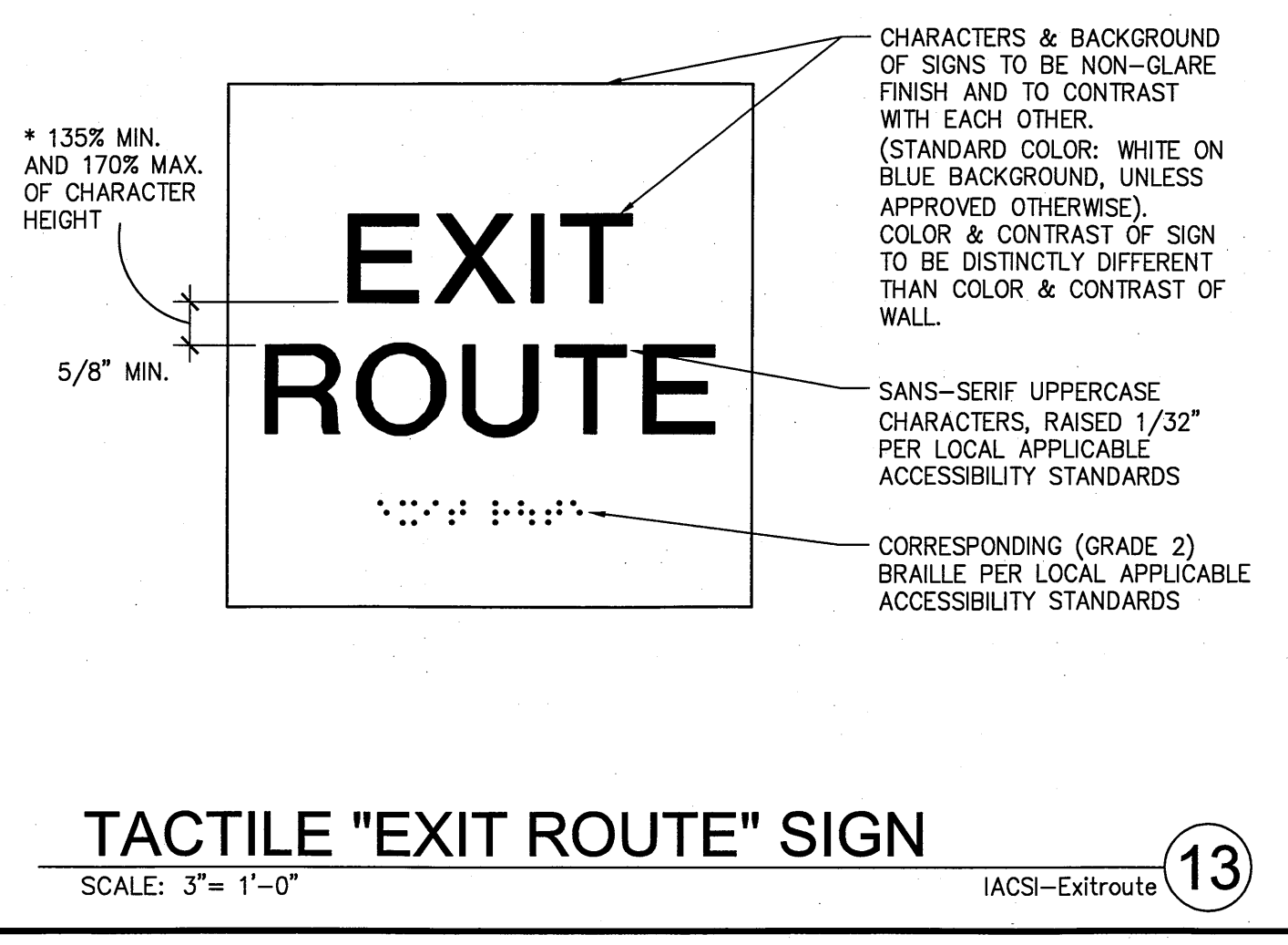
NOTES:
 1. OPEN RISERS ARE NOT PERMITTED.
 2. TREAD SURFACES SHALL COMPLY WITH (FLOOR OR GROUND SURFACES & CHANGES IN LEVEL) DETAIL.
 3. INTERIOR STAIRS SHALL HAVE THE UPPER APPROACH AND LOWER TREAD MARKED BY A STRIPE PROVIDING CLEAR VISUAL CONTRAST. EXTERIOR STAIRS SHALL HAVE THE UPPER APPROACH AND ALL TREADS MARKED BY A STRIPE PROVIDING CLEAR VISUAL CONTRAST. THE STRIPE SHALL BE A MINIMUM OF 2 INCHES (51 MM) WIDE TO A MAXIMUM OF 4 INCHES (102 MM) WIDE PLACED PARALLEL TO, AND NOT MORE THAN 1 INCH (25 MM) FROM, THE NOSE OF THE STEP OR UPPER APPROACH. THE STRIPE SHALL EXTEND THE FULL WIDTH OF THE STEP OR UPPER APPROACH AND SHALL BE OF MATERIAL THAT IS AT LEAST AS SLIP RESISTANT AS THE OTHER TREADS OF THE STAIR. A PAINTED STRIPE SHALL BE ACCEPTABLE. GROOVES SHALL NOT BE USED TO SATISFY THIS REQUIREMENT.
 4. HANDRAIL GRIPPING SURFACES SHALL BE CONTINUOUS ALONG THEIR LENGTH AND SHALL NOT BE OBSTRUCTED ALONG THEIR TOPS OR SIDES. THE BOTTOM OF THE HANDRAIL GRIPPING SURFACES SHALL NOT BE OBSTRUCTED FOR MORE THAN 20 PERCENT OF THEIR LENGTH. WHERE PROVIDED, HORIZONTAL PROJECTIONS SHALL OCCUR 1-1/2" (38 MM) MINIMUM BELOW THE BOTTOM OF THE HANDRAIL GRIPPING SURFACE.
 5. HANDRAIL GRIPPING SURFACES WITH CIRCULAR CROSS SECTIONS SHALL HAVE AN OUTSIDE DIAMETER OF 1-1/4" (32 MM) MINIMUM AND 2" MAXIMUM.
 6. HANDRAIL GRIPPING SURFACES AND ANY SURFACES ADJACENT TO THEM SHALL BE FREE OF SHARP OR ABRASIVE ELEMENTS AND SHALL HAVE ROUNDED EDGES.
 7. HANDRAILS SHALL NOT ROTATE WITH THEIR FITTINGS.



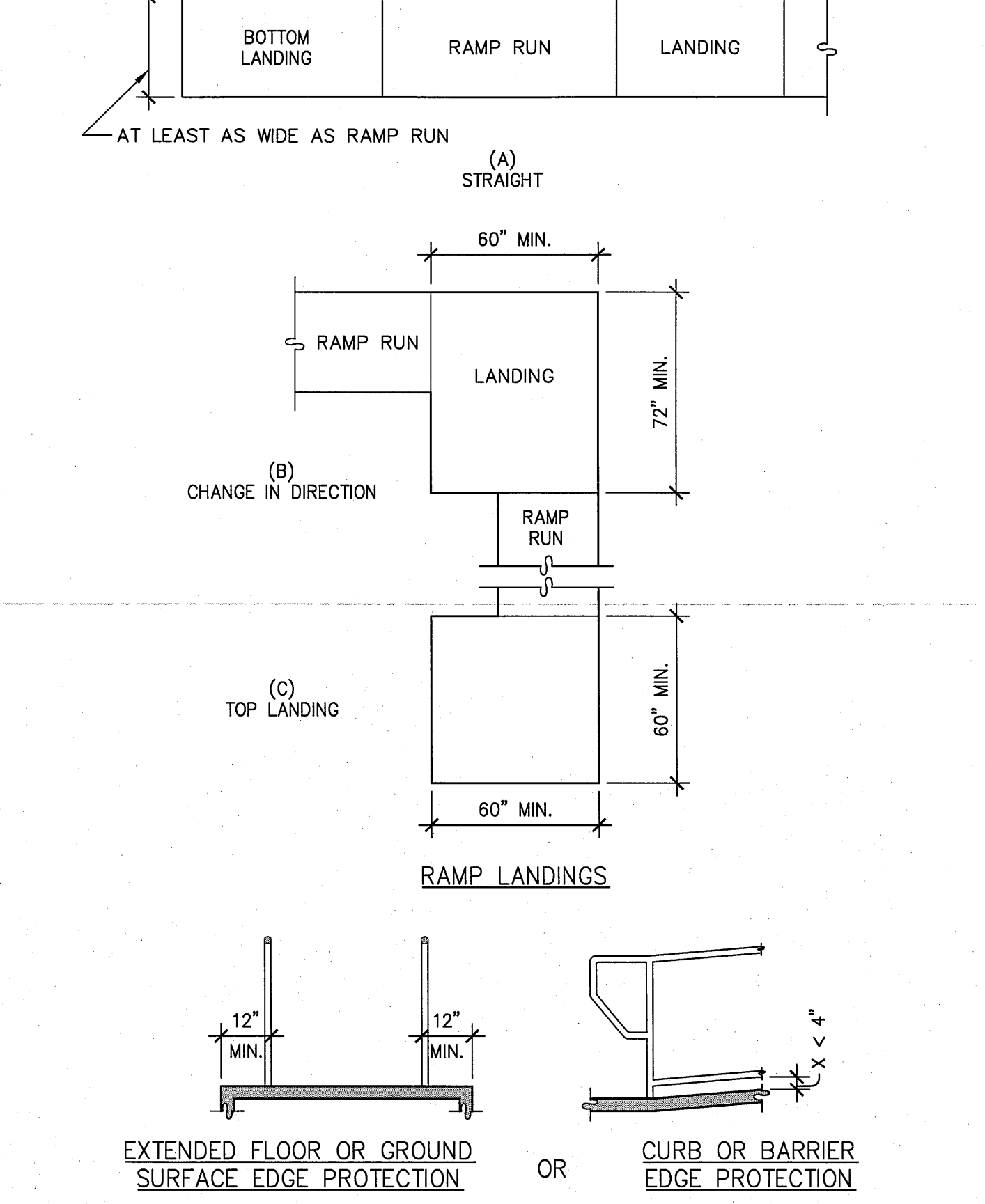
STAIRWAYS AND HANDRAILS
 SCALE: N.T.S. IACMI-Handrails_CBC-01 (20)



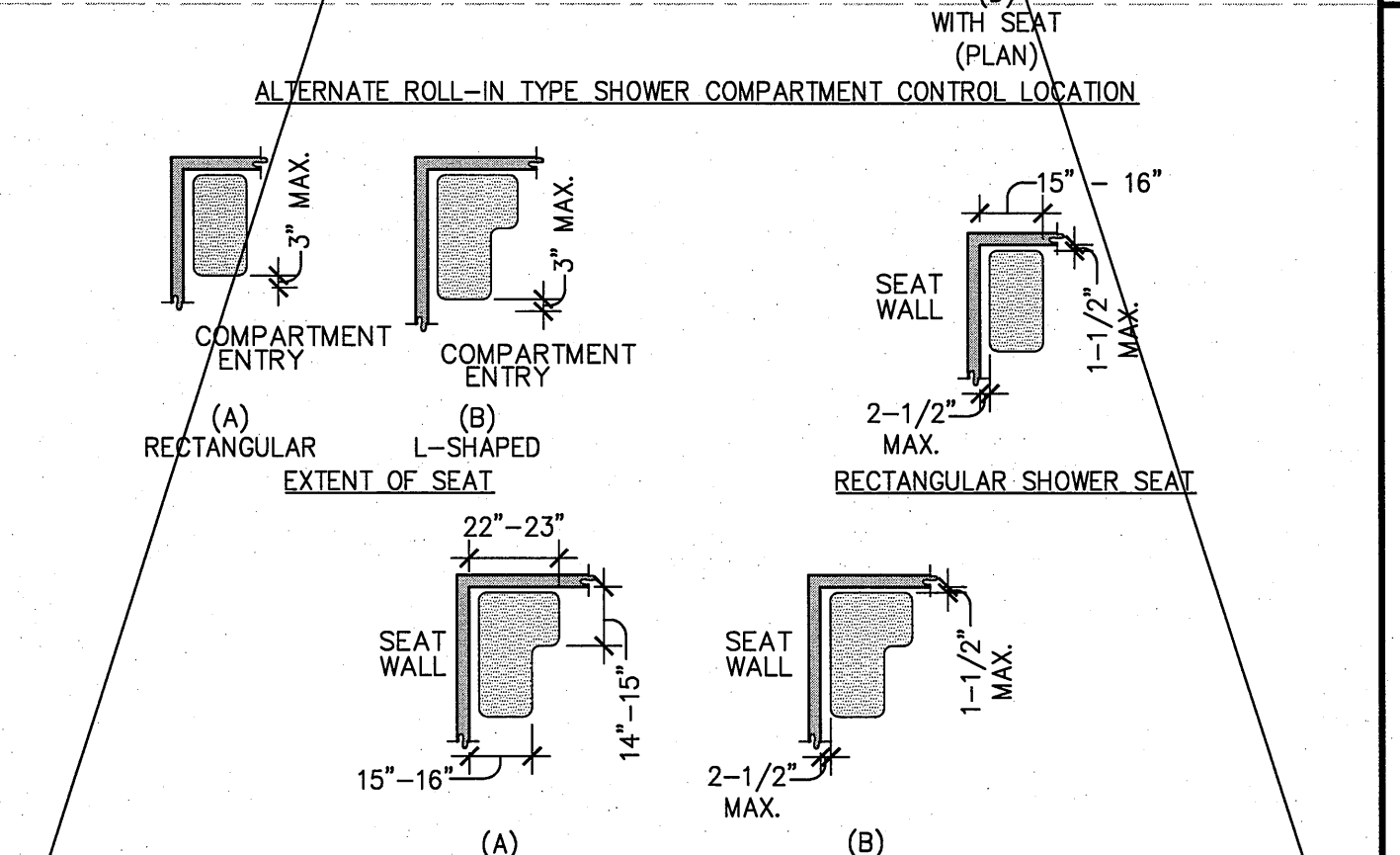
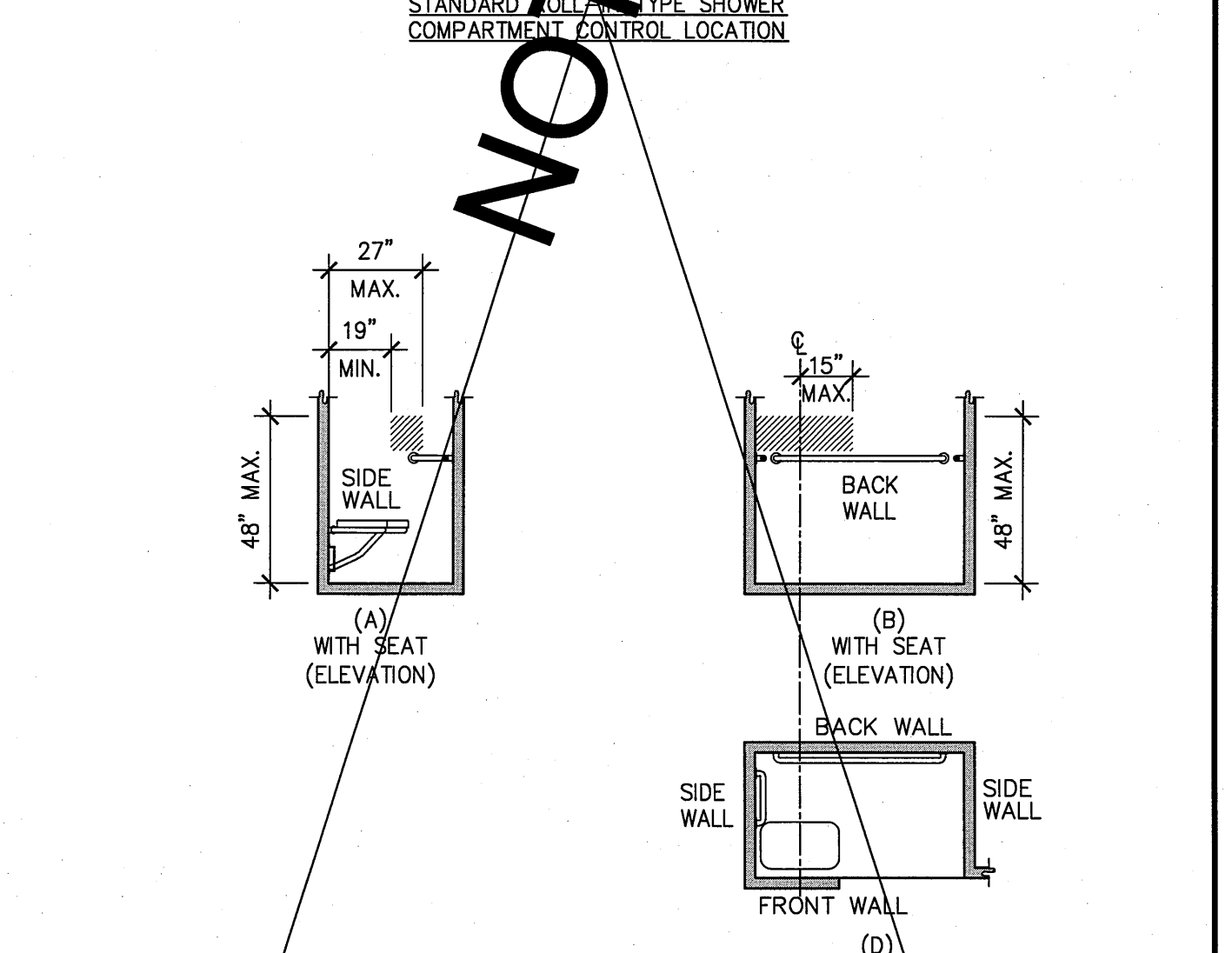
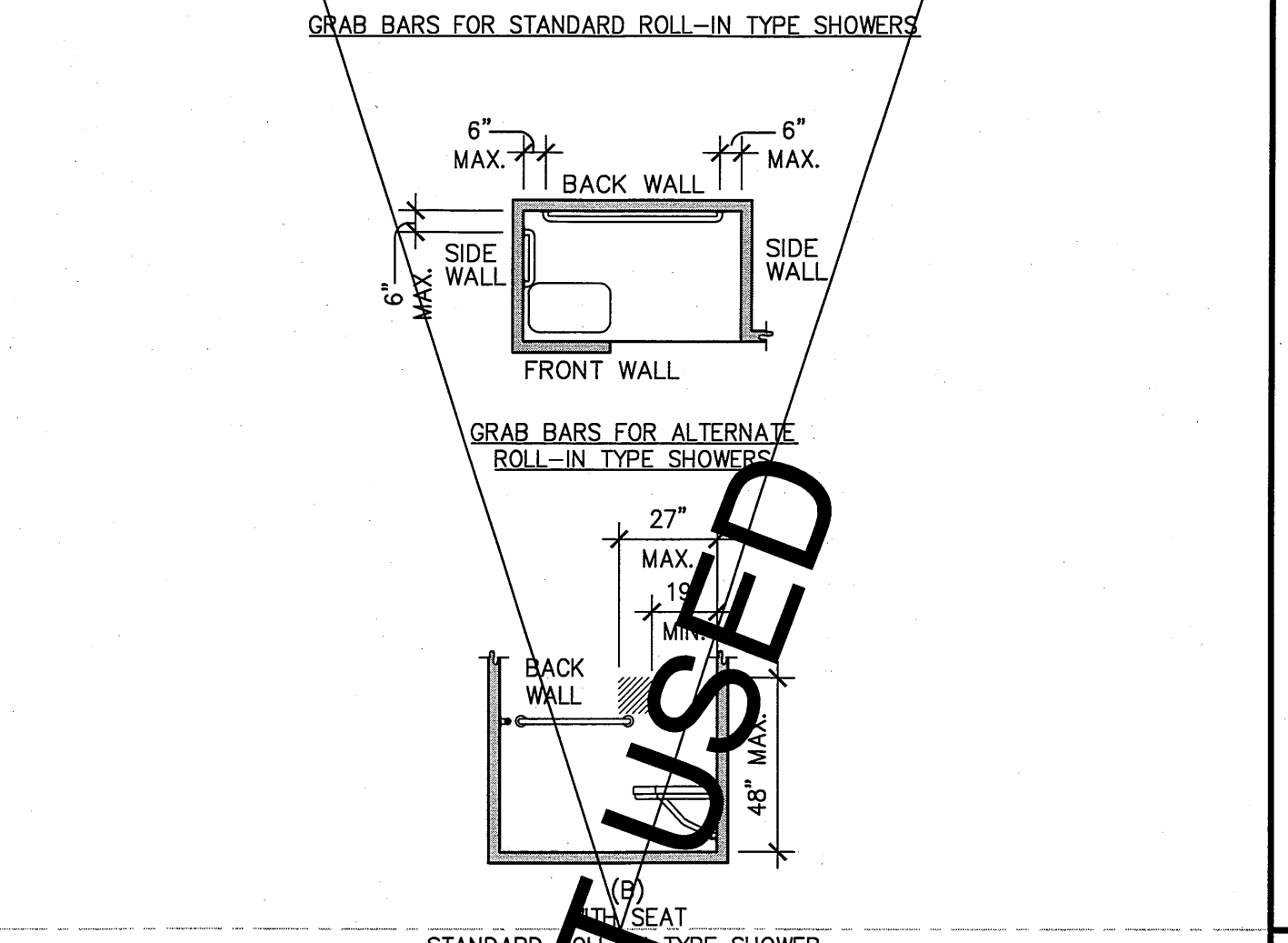
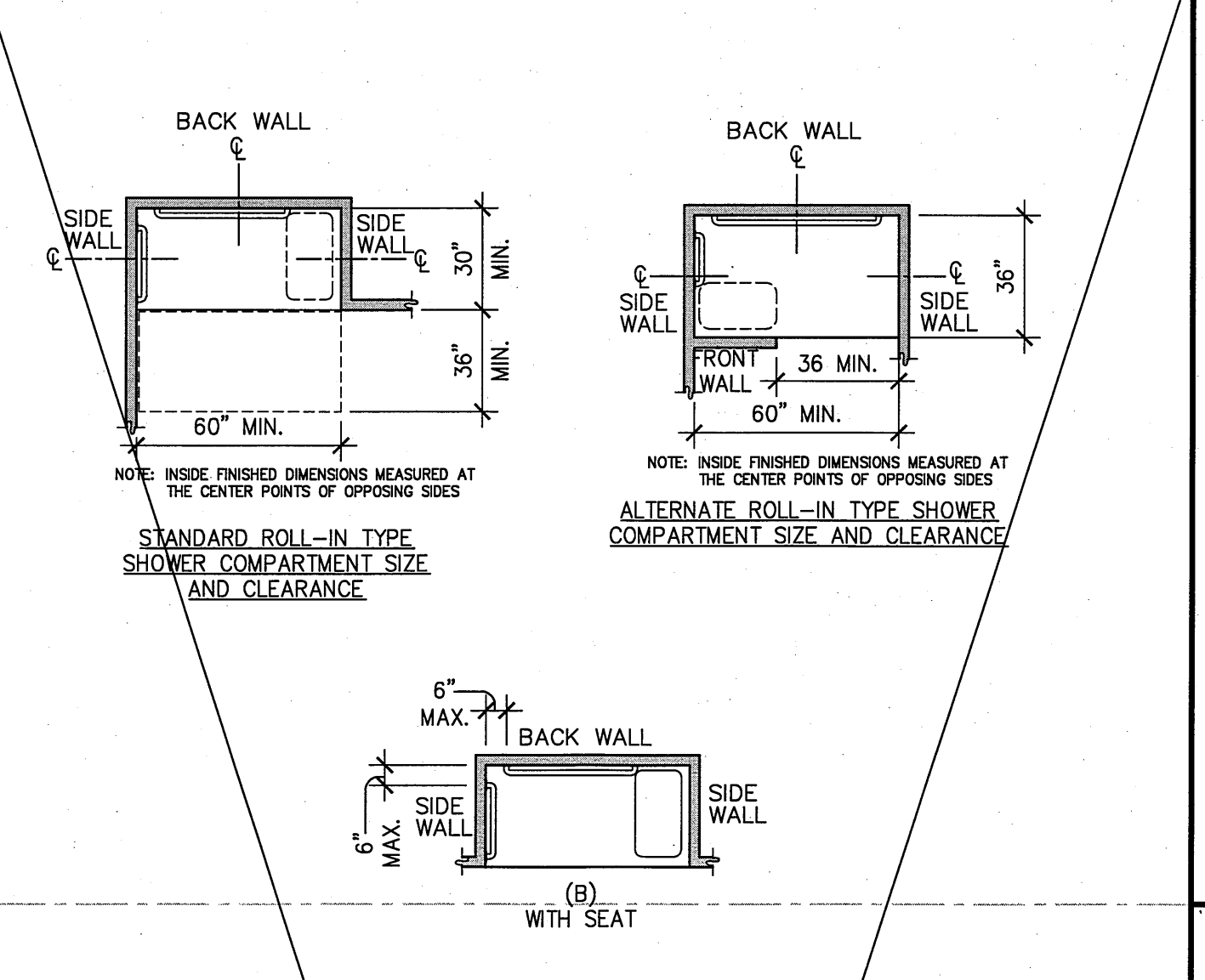
TACTILE "TO EXIT" SIGN
 SCALE: 3" = 1'-0" IACSI-Toexit (12)



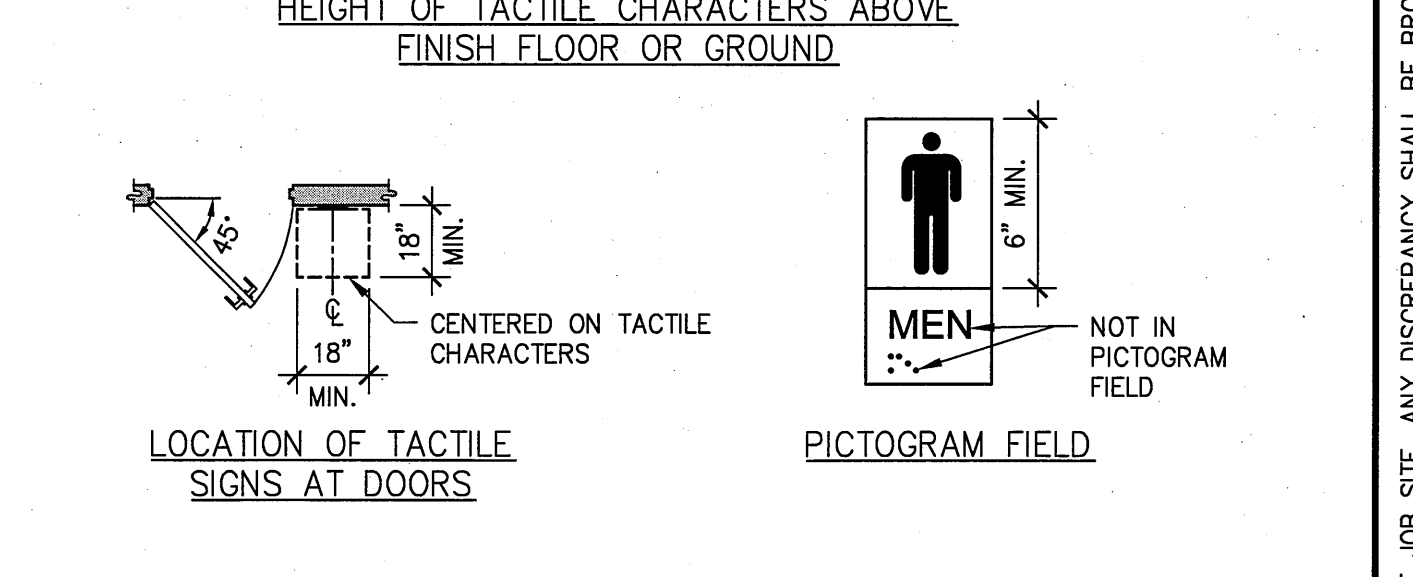
TACTILE "EXIT ROUTE" SIGN
 SCALE: 3" = 1'-0" IACSI-Exitroute (13)



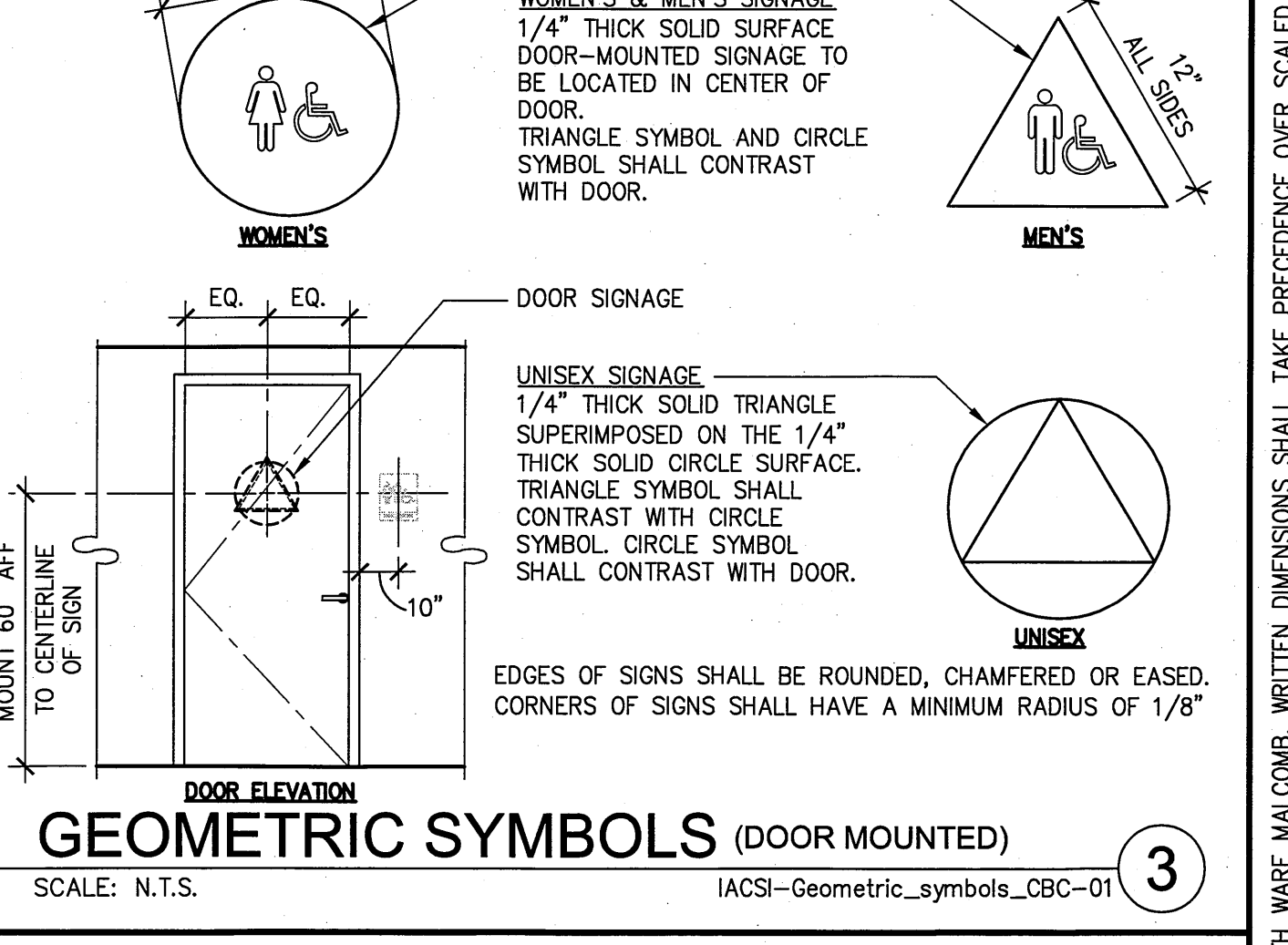
RAMPS
 SCALE: N.T.S. EACMI-Ramps_CBC-01 (15)



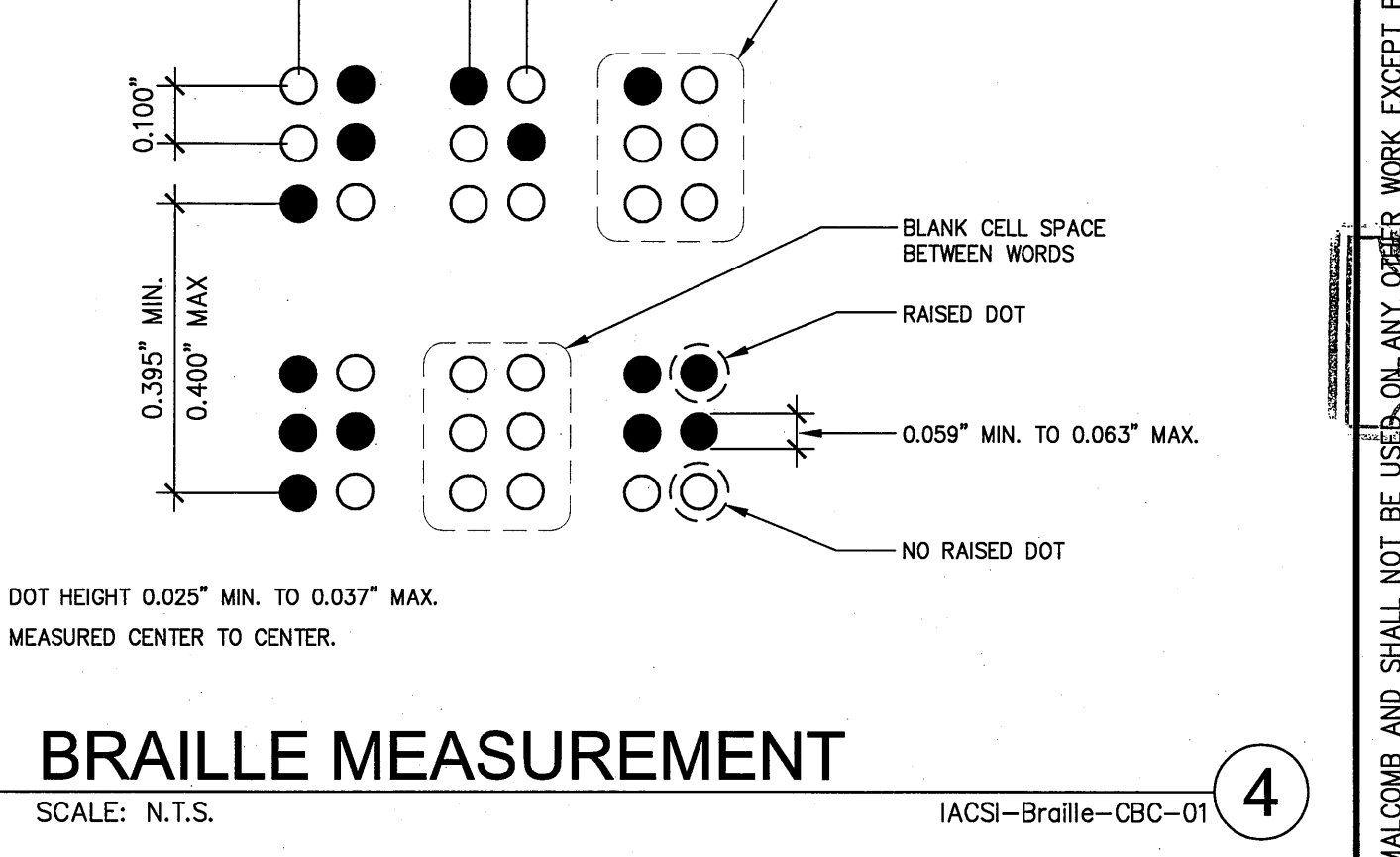
SHOWER COMPARTMENTS
 SCALE: N.T.S. IACMI-AC_Shower_compartments_608_CBC (10)



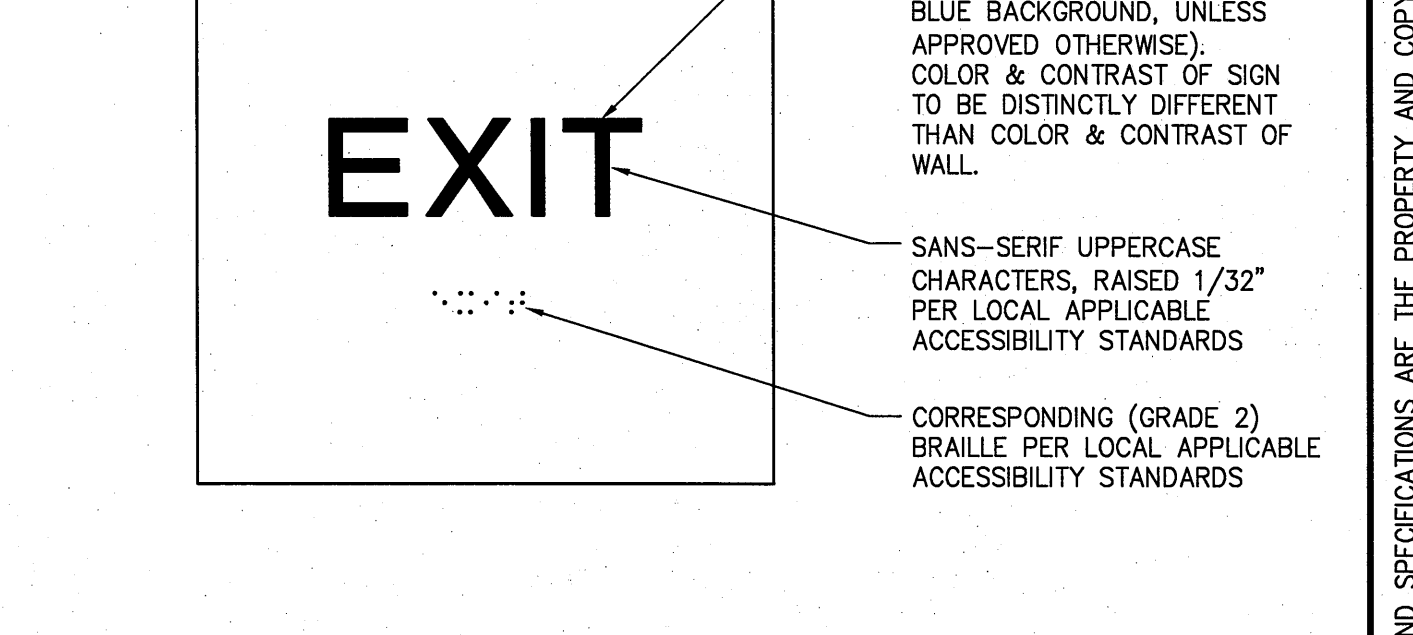
SIGNS
 SCALE: N.T.S. IACSI-Signs_CBC-01 (2)



GEOMETRIC SYMBOLS (DOOR MOUNTED)
 SCALE: N.T.S. IACSI-Geometric_symbols_CBC-01 (3)



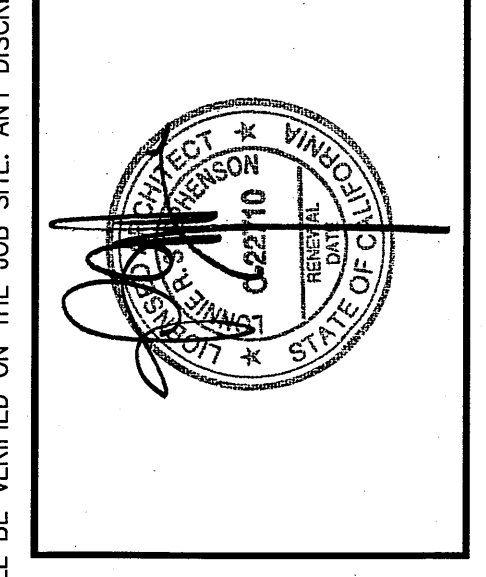
BRAILLE MEASUREMENT
 SCALE: N.T.S. IACSI-Braille_CBC-01 (4)



TACTILE "EXIT" SIGN
 SCALE: 3" = 1'-0" IACSI-Exit-ALL (5)

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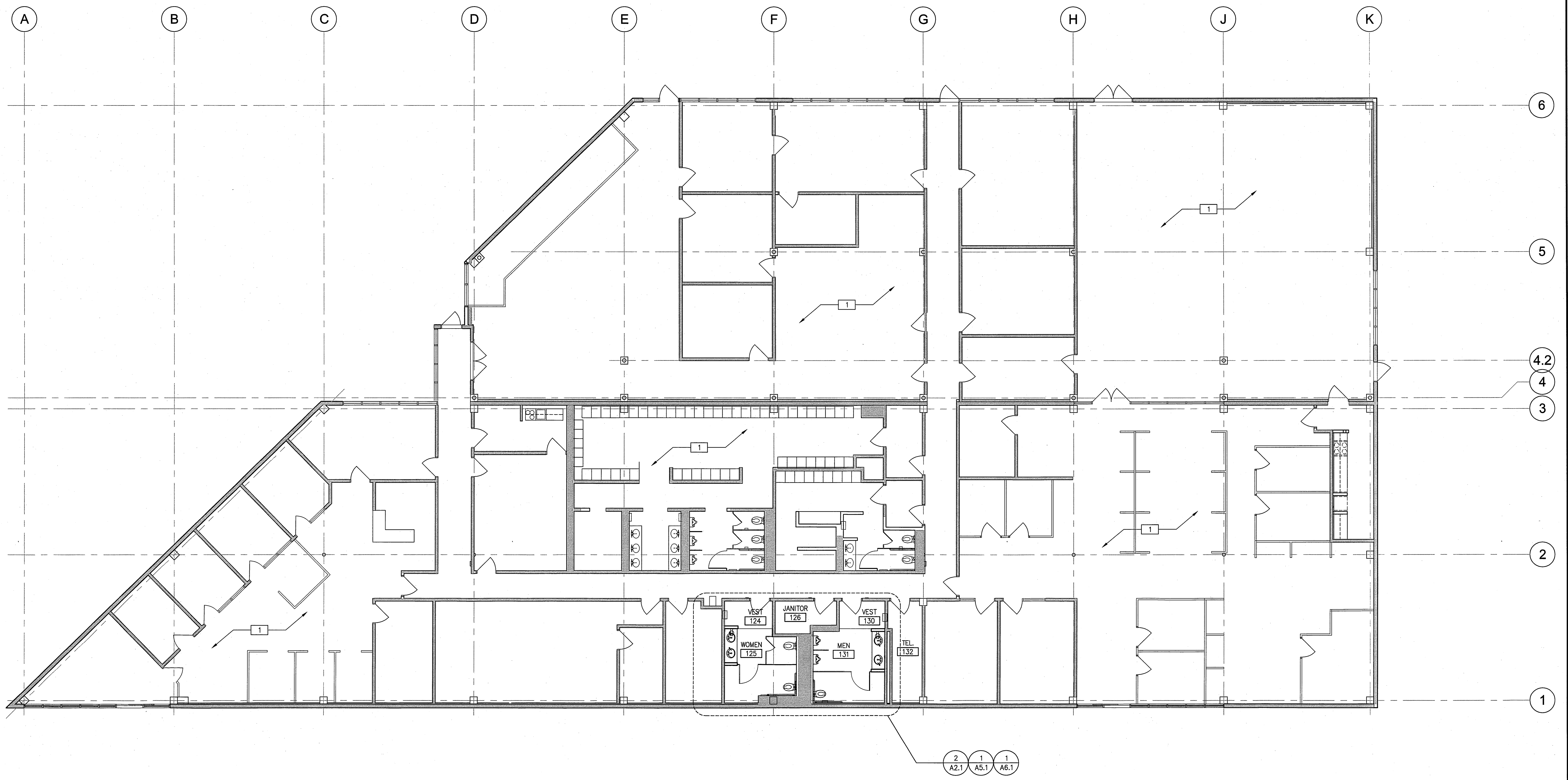


**ADA FACILITY IMPROVEMENTS
 OPERATIONS SUPPORT FACILITY
 OSF BUILDING 1
 6427 OAK CANYON
 IRVINE, CALIFORNIA**

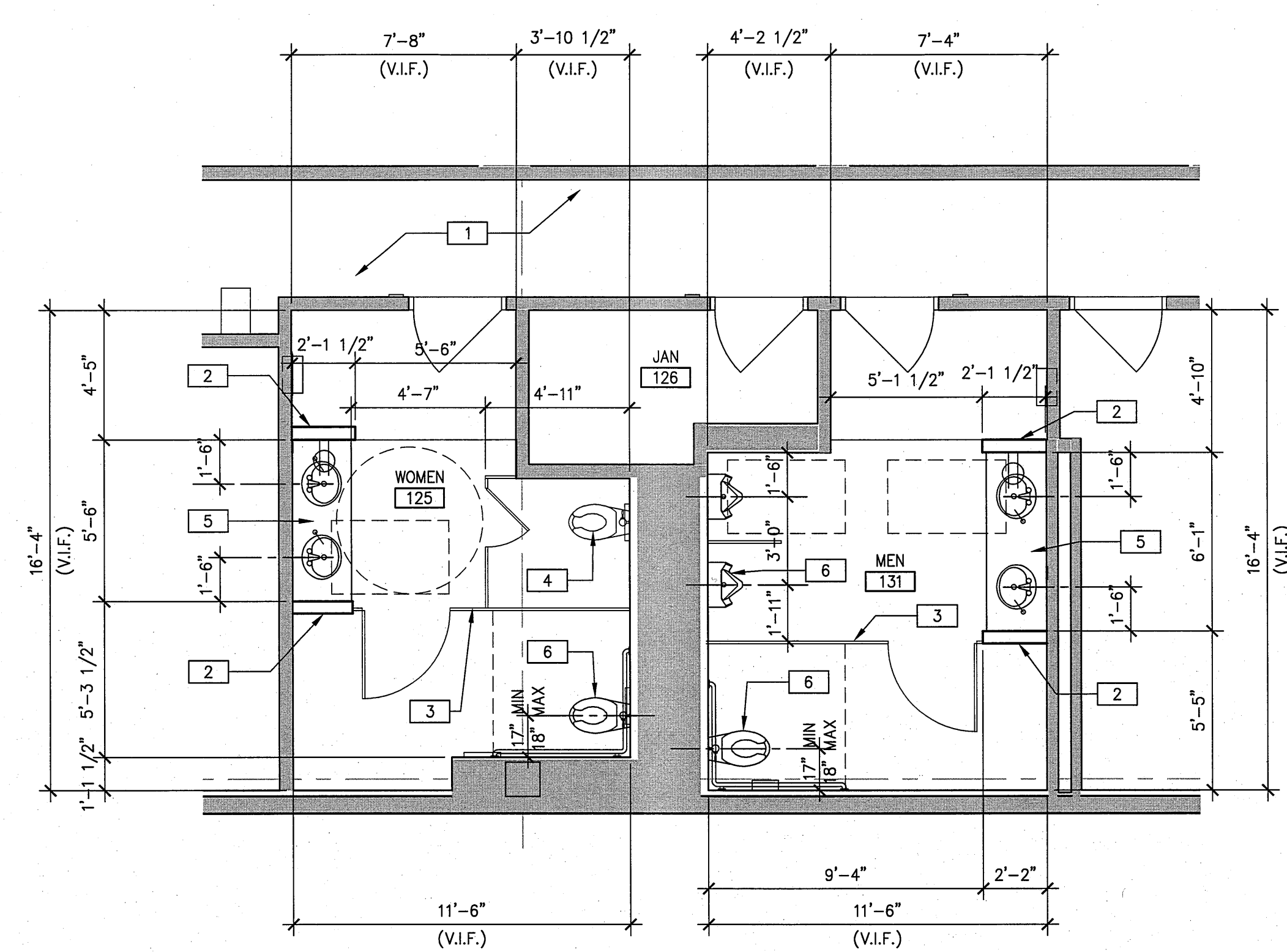
| ACCESSIBILITY DETAILS | |
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| DATE | REMARKS |
| 3/25/2016 | PLAN CHECK SUBMITTAL |
| | CITY OF IRVINE |
| | BUILDING & SAFETY DIVISION |

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| PA / PM: | JCARROLL |
| DRAWN BY: | EG |
| JOB NO.: | IRV15-0195-00 |
| SHEET | |

A0.3a



BUILDING 1 - OVERALL FLOOR PLAN
SCALE: 1/8"=1'-0" (1)



BUILDING 1 - PROPOSED NEW PUBLIC RESTROOM LAYOUT
SCALE: 1/4"=1'-0" (2)

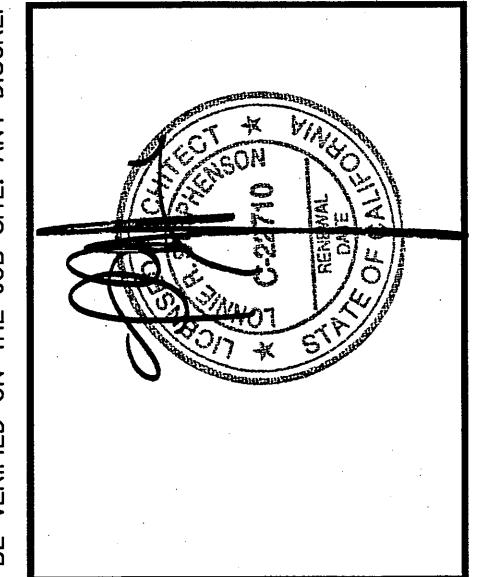
- FLOOR PLAN NOTES**
SEE SHEET A0.1 FOR GENERAL NOTES
- 1 EXISTING CONDITION TO REMAIN AS IS
 - 2 NEW NON-RATED PARTITION TO UNDERSIDE OF EXISTING CEILING - REFER TO DETAIL 20-A6.1
 - 3 NEW FLOOR MOUNTED/OVERHEAD BRACED TOILET COMPARTMENTS
 - 4 EXISTING WALL MOUNTED WATER CLOSET. CONTRACTOR TO VERIFY CONDITIONS AND REPLACE IF NECESSARY.
 - 5 NEW COUNTERTOP WITH INTEGRAL SINK BOWL. CONNECT TO EXISTING PLUMBING LINES WITH PROPER CONNECTION PER UPC 2013. REFER TO AS-BUILT PLUMBING PLANS
 - 6 NEW PLUMBING FIXTURES. CONNECT TO EXISTING PLUMBING LINES WITH PROPER CONNECTION PER UPC 2013. REFER TO AS-BUILT PLUMBING PLANS

- LEGEND**
- EXISTING CONSTRUCTION TO REMAIN
 - NEW WALL PARTITION

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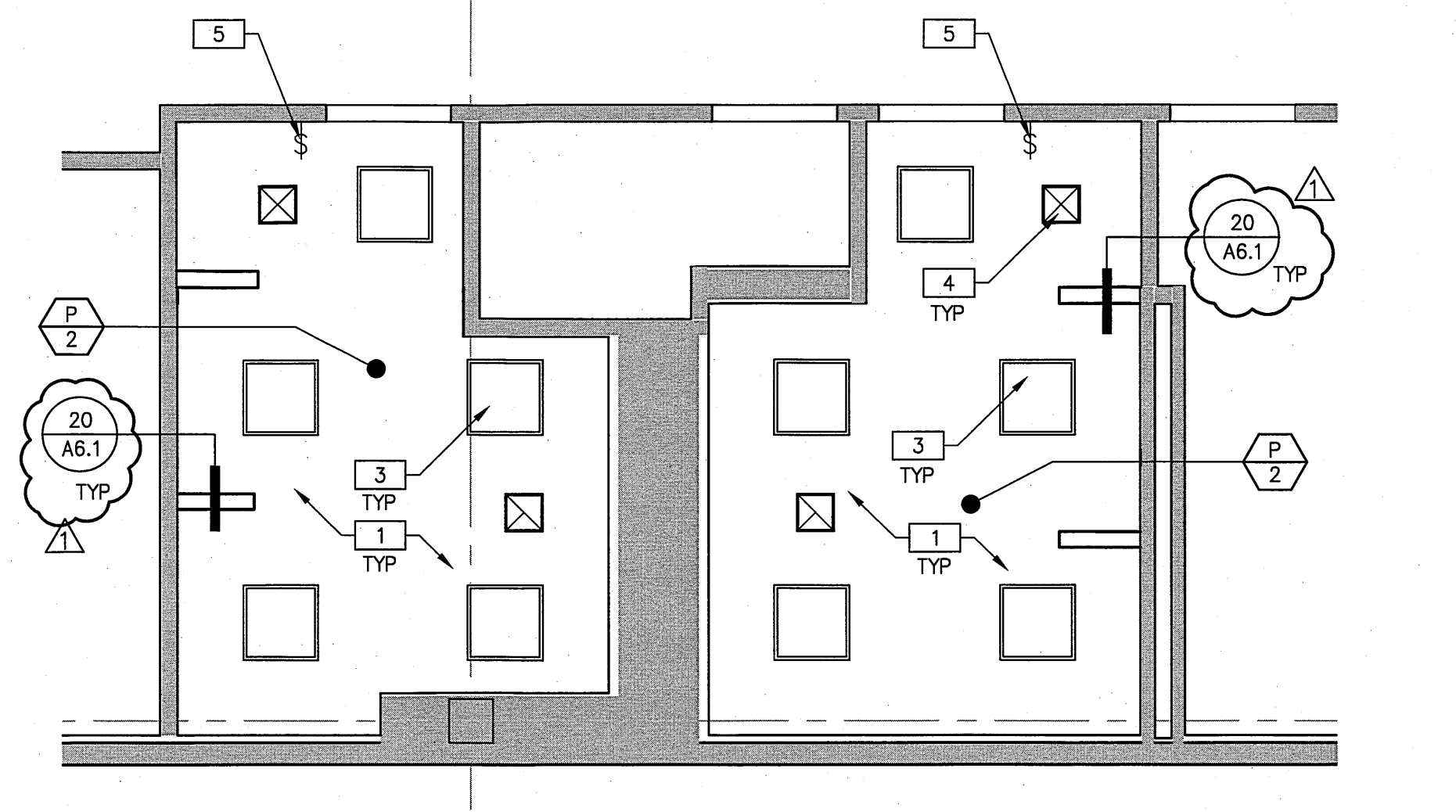
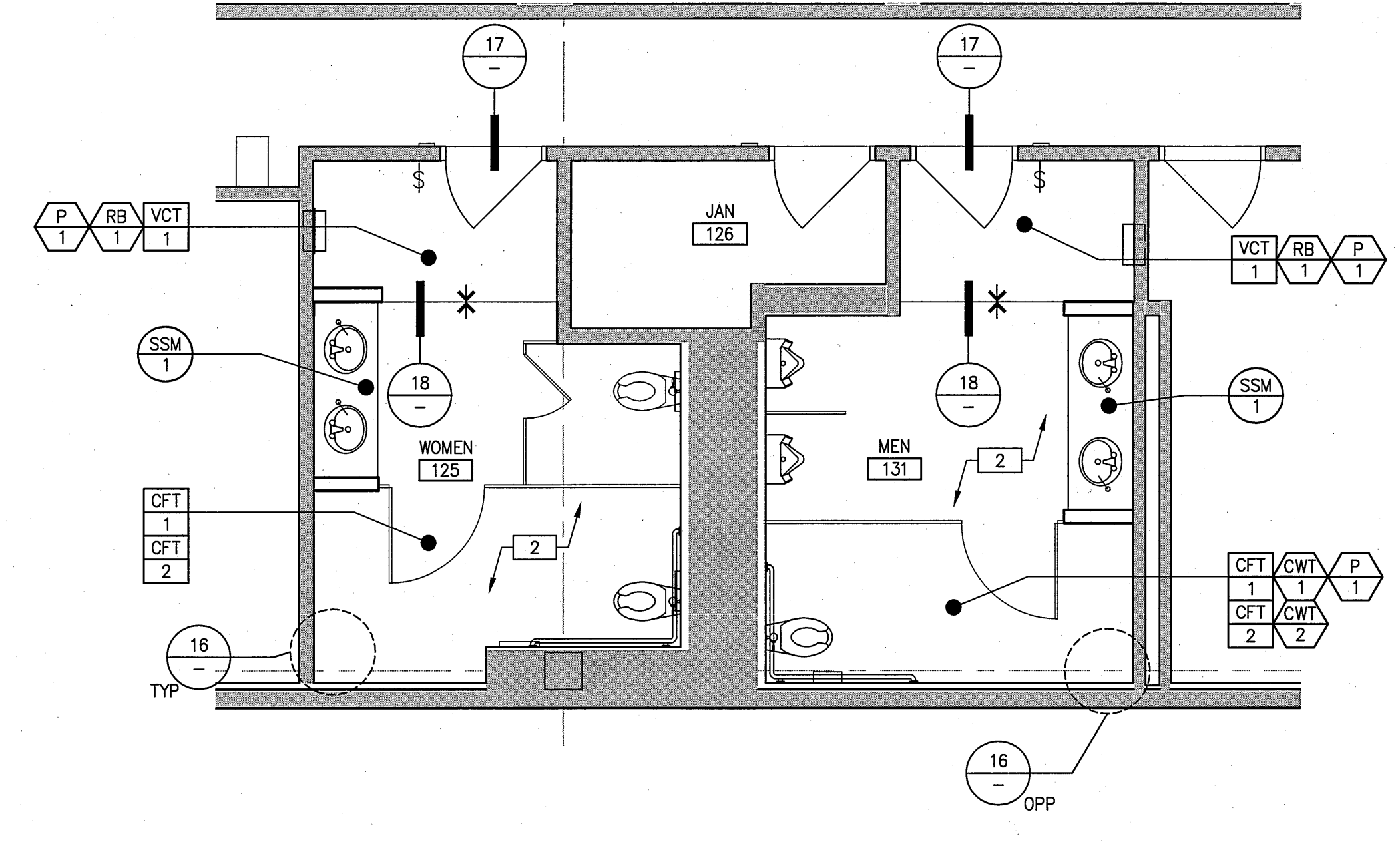
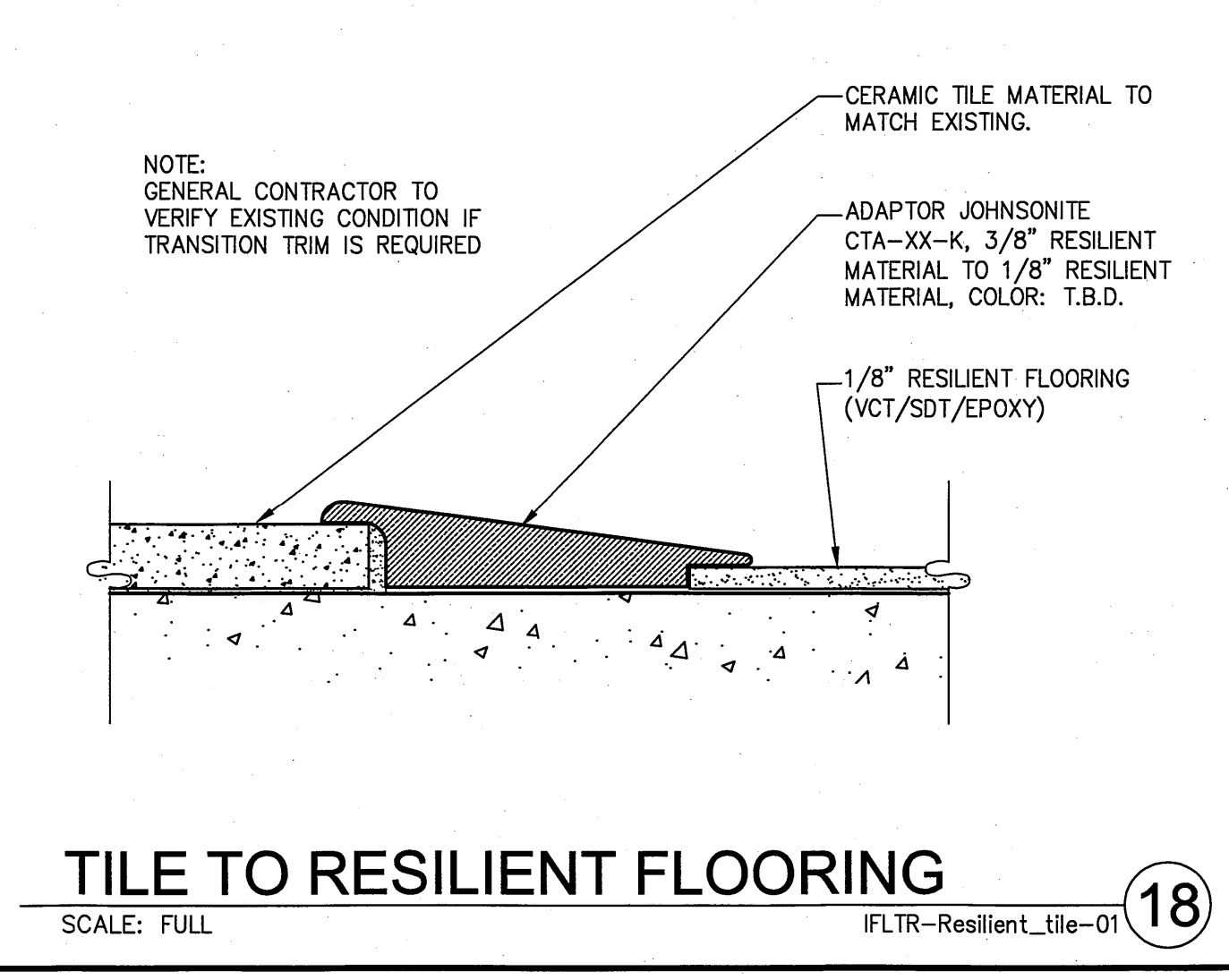
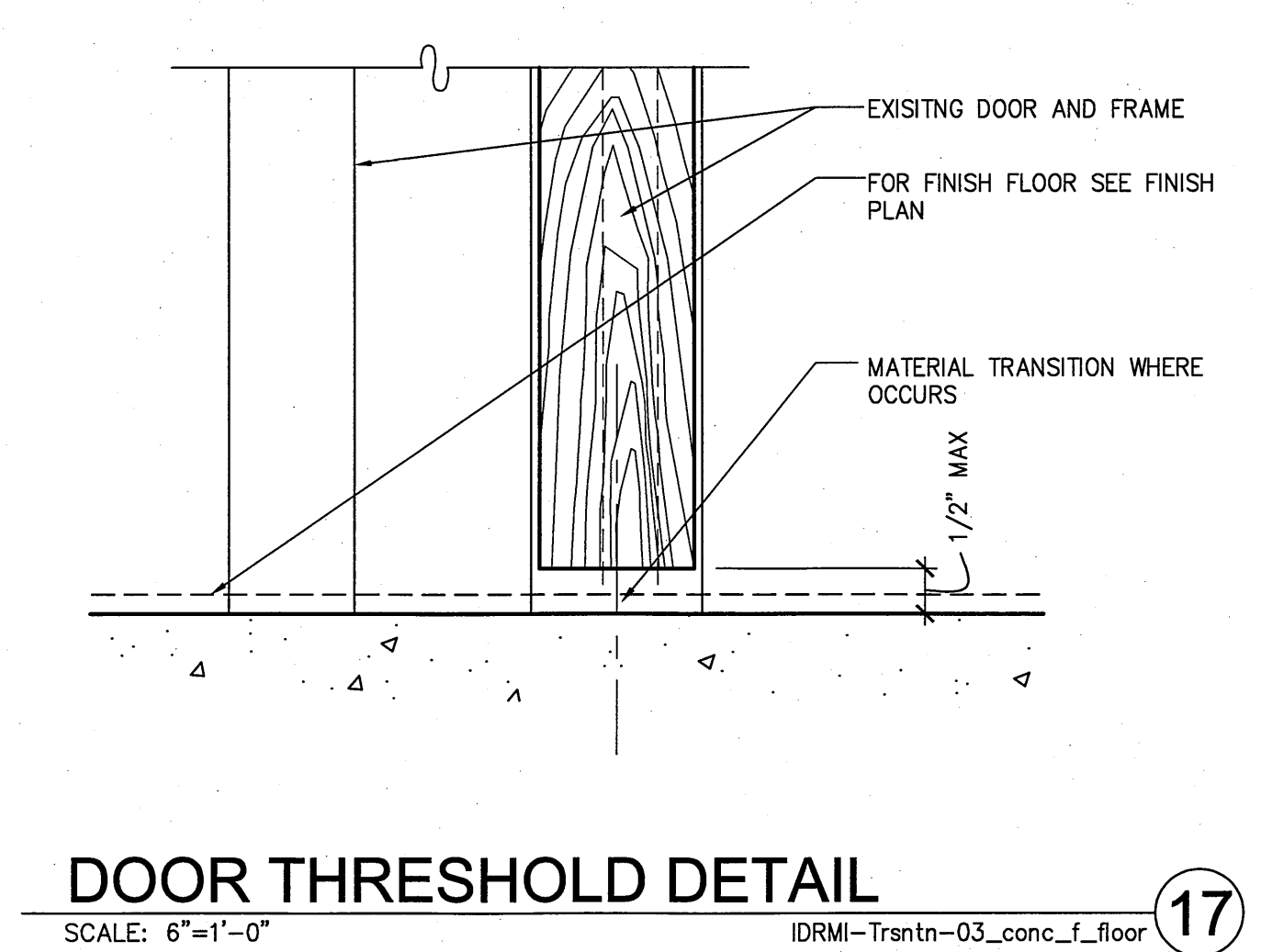
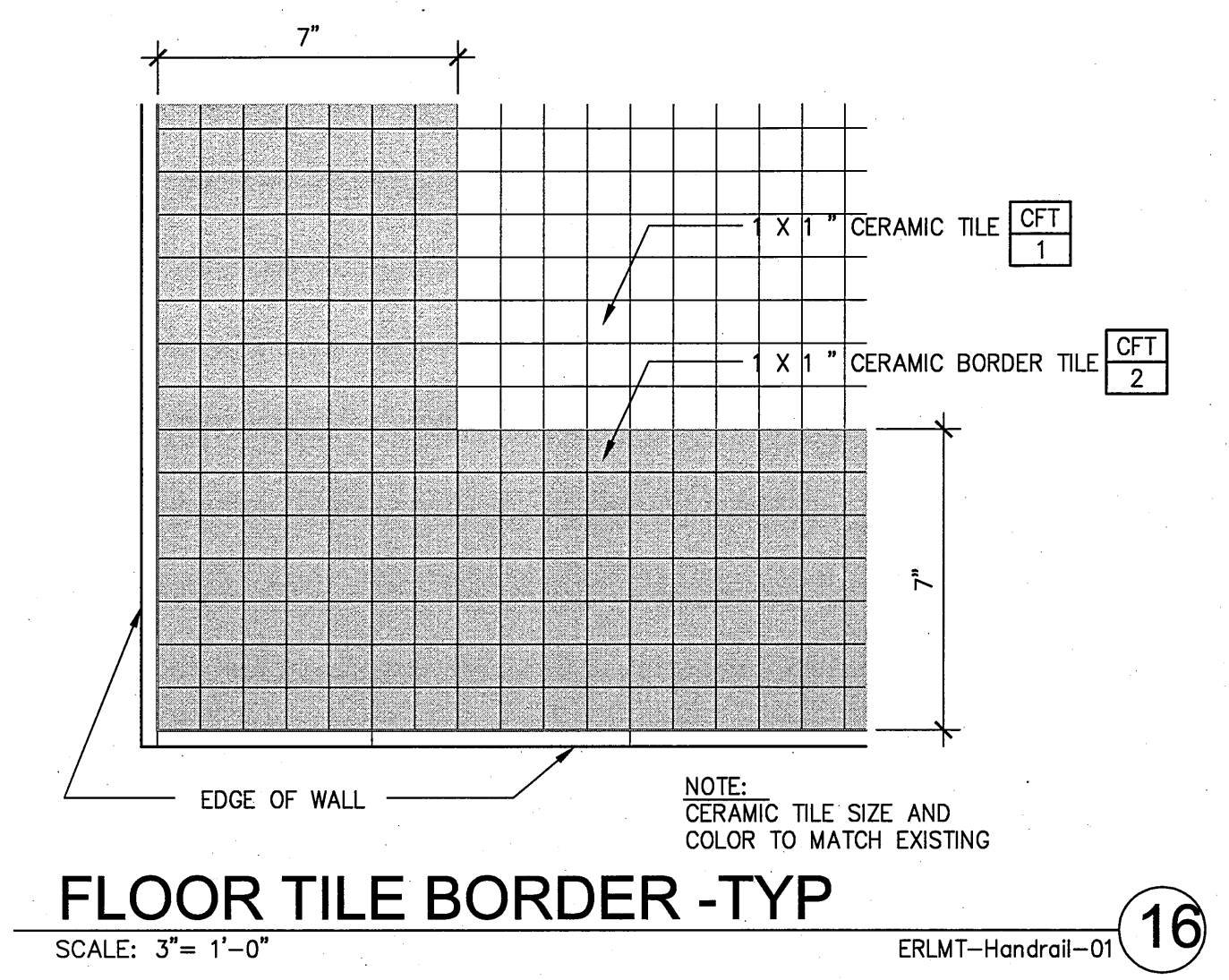
**ADA FACILITY IMPROVEMENTS
OPERATIONS SUPPORT FACILITY
OSF BUILDING 1
6427 OAK CANYON
IRVINE, CALIFORNIA**

| DATE | REMARKS | CITY |
|-----------|----------------------|--------|
| 3/20/2016 | PLAN CHECK SUBMITTAL | IRVINE |

| DATE | REMARKS | DATE | REMARKS |
|-----------|----------------------|------|---------|
| 3/20/2016 | PLAN CHECK SUBMITTAL | | |

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|-----------|---------------|
| PA / PM: | JCARROLL |
| DRAWN BY: | 000 |
| JOB NO.: | IRV15-0195-00 |

SHEET
A2.1



- SEE SHEET A0.1 FOR GENERAL NOTES
- PLAN NOTES**
- EXISTING GYPSUM BOARD CEILING. PAINT TO MATCH EXISTING
 - SEE ENLARGED RESTROOM ELEVATIONS ON SHEET A6.1 FOR WALL FINISHES
 - EXISTING LIGHT FIXTURE
 - EXISTING AIR SUPPLY/DIFFUSER
 - CONNECT ALL EXISTING CEILING LIGHT FIXTURE TO EXISTING WALL LIGHT SWITCH. REFER TO AS-BUILT ELECTRICAL DRAWINGS

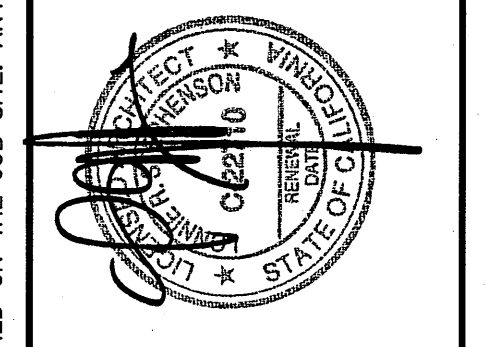
- SYMBOLS LEGEND**
- INDICATES LINE OF FLOOR TRANSITION
 - INDICATES LOCATION OF NON-TYPICAL WALL FINISH

- FINISH LEGEND**
- WALL FINISHES**
- P 1**: ITEM: WALL PAINT; MFR: DUNN-EDWARDS; COLOR/NO: T.B.D.; FINISH: GLOSSY
 - P 2**: ITEM: CEILING PAINT; MFR: DUNN-EDWARDS; COLOR/NO: T.B.D.; FINISH: GLOSSY
 - RB 1**: ITEM: RUBBER BASE; MFR: T.B.D.; COLOR/NO: T.B.D.; SIZE: T.B.D.; STYLE: COVED @ RESILIENT FLOORING
 - CWL 1**: ITEM: CERAMIC WALL TILE; MFR: T.B.D.; COLOR/NO: T.B.D.; SIZE: 6" X 6"; GROUT: T.B.D.
 - CWL 2**: ITEM: CERAMIC WALL TILE ACCENT; MFR: T.B.D.; COLOR/NO: T.B.D.; SIZE: 6" X 6"; GROUT: T.B.D.
 - CTB 1**: ITEM: CERAMIC TILE BASE; MFR: T.B.D.; COLOR/NO: T.B.D.; SIZE: 6" X 6"; GROUT: T.B.D.
- FOR ADDITIONAL INFORMATION AND REQUIREMENTS REGARDING CERAMIC TILE SEE www.waremalcomb.com/ws/09310-001.pdf
- FLOOR FINISHES**
- CFT 2**: ITEM: CERAMIC FLOOR BORDER TILE; MFR: T.B.D.; COLOR/NO: (TO MATCH EXISTING); SIZE: 1" X 1"; GROUT: T.B.D.
 - CFT 1**: ITEM: CERAMIC FLOOR TILE; MFR: T.B.D.; COLOR/NO: (TO MATCH EXISTING); SIZE: 1" X 1"; GROUT: T.B.D.
 - VCT 1**: ITEM: VINYL COMPOSITION TILE - FIELD TILE; MFR: T.B.D.; COLOR/NO: T.B.D.; SIZE: T.B.D.
- FOR ADDITIONAL INFORMATION AND REQUIREMENTS REGARDING RESILIENT FLOOR COVERING SEE www.waremalcomb.com/ws/09650-001.pdf
- MISCELLANEOUS FINISHES**
- SSM 1**: ITEM: SOLID SURFACE MATERIAL; MFR: T.B.D.; COLOR/NO: T.B.D.

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BUILDING 1 - FINISH PLAN

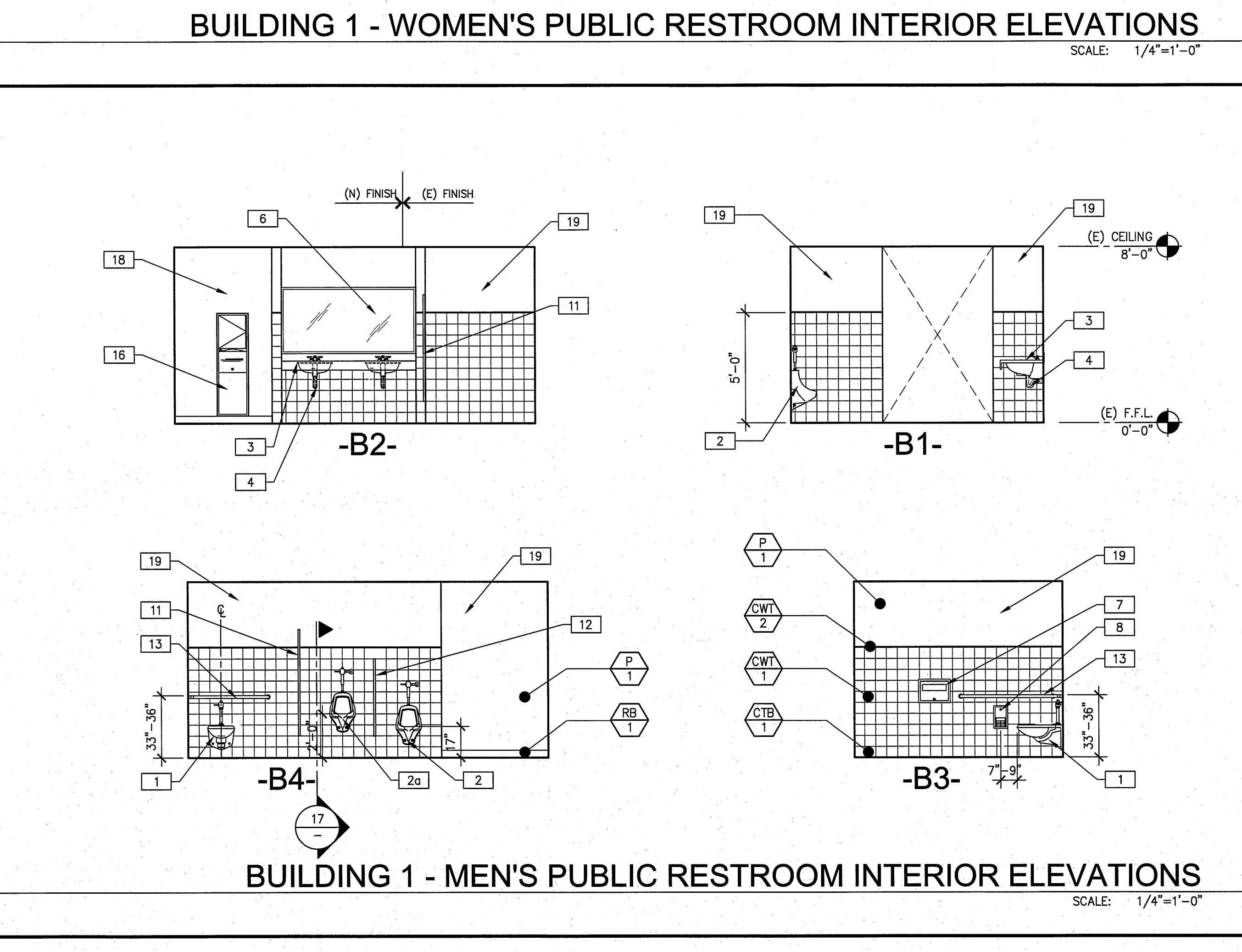
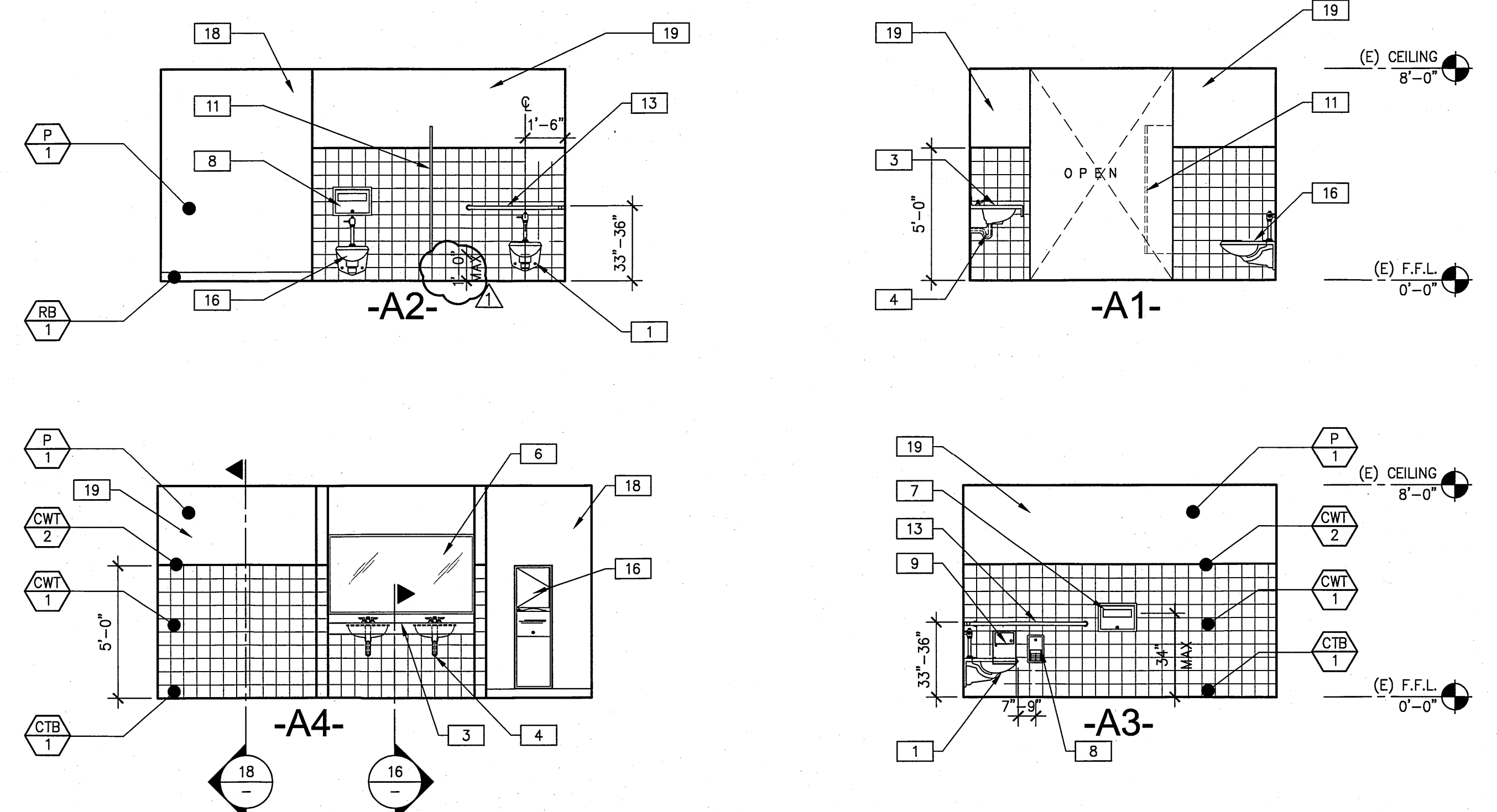
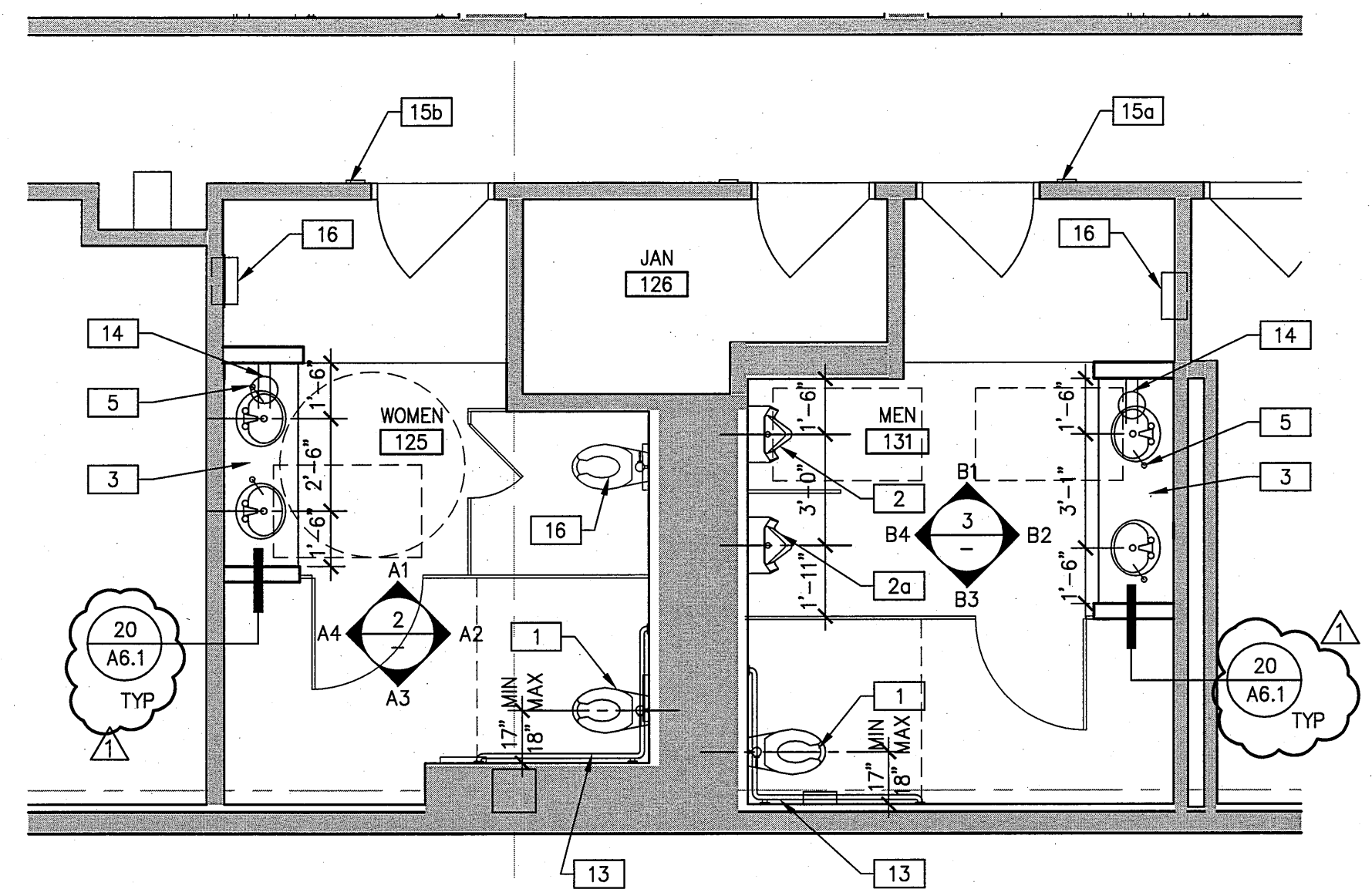
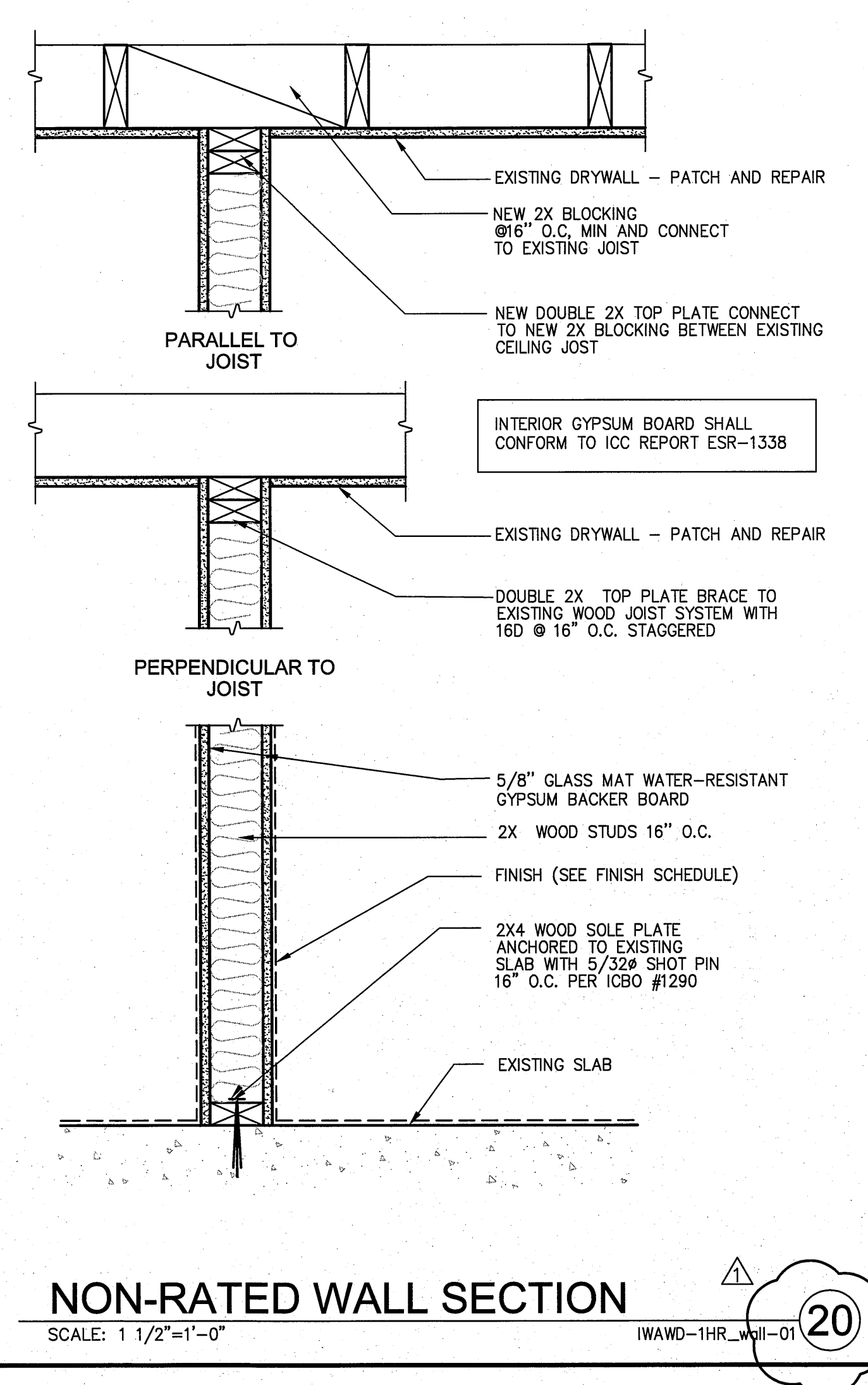
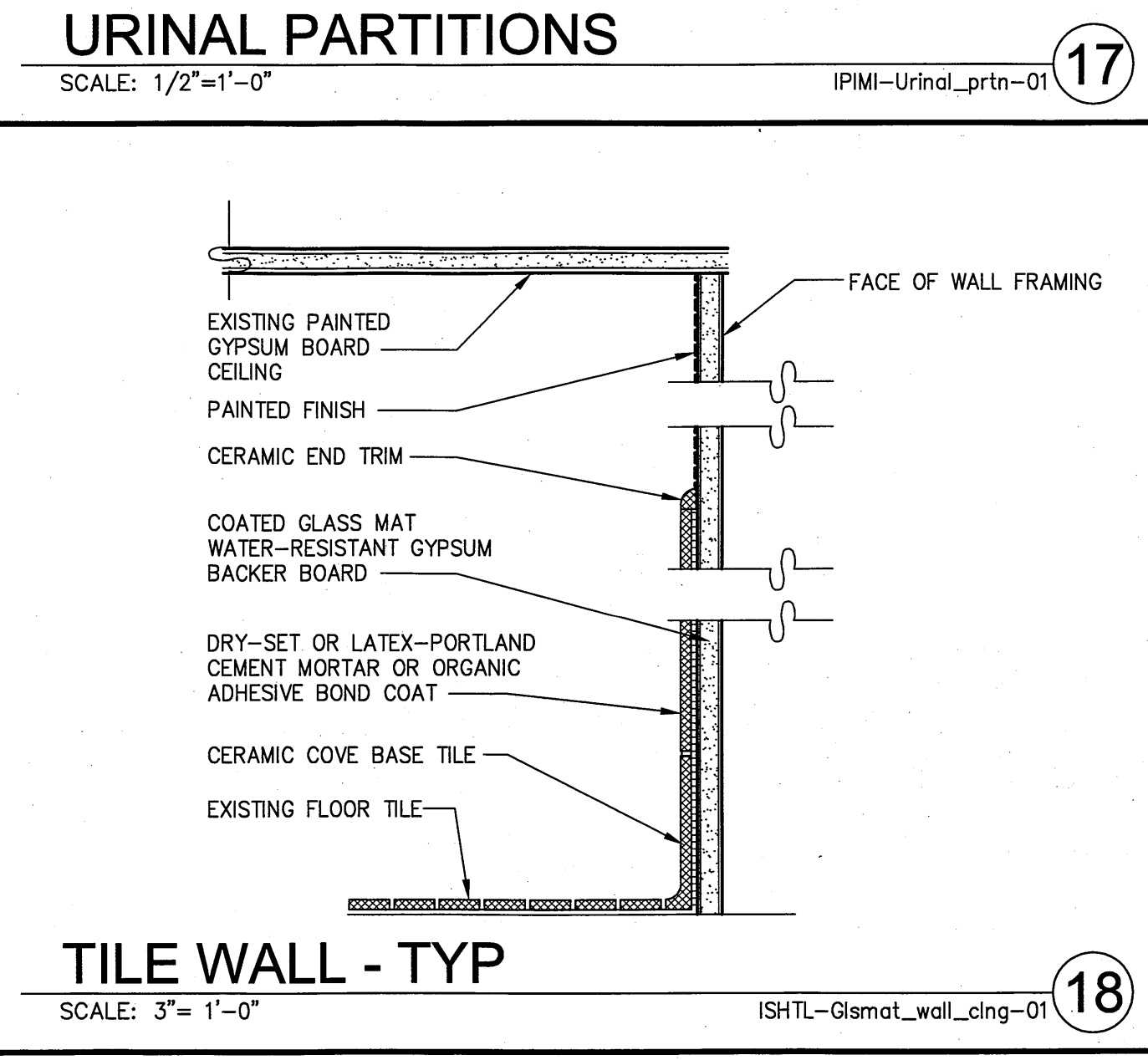
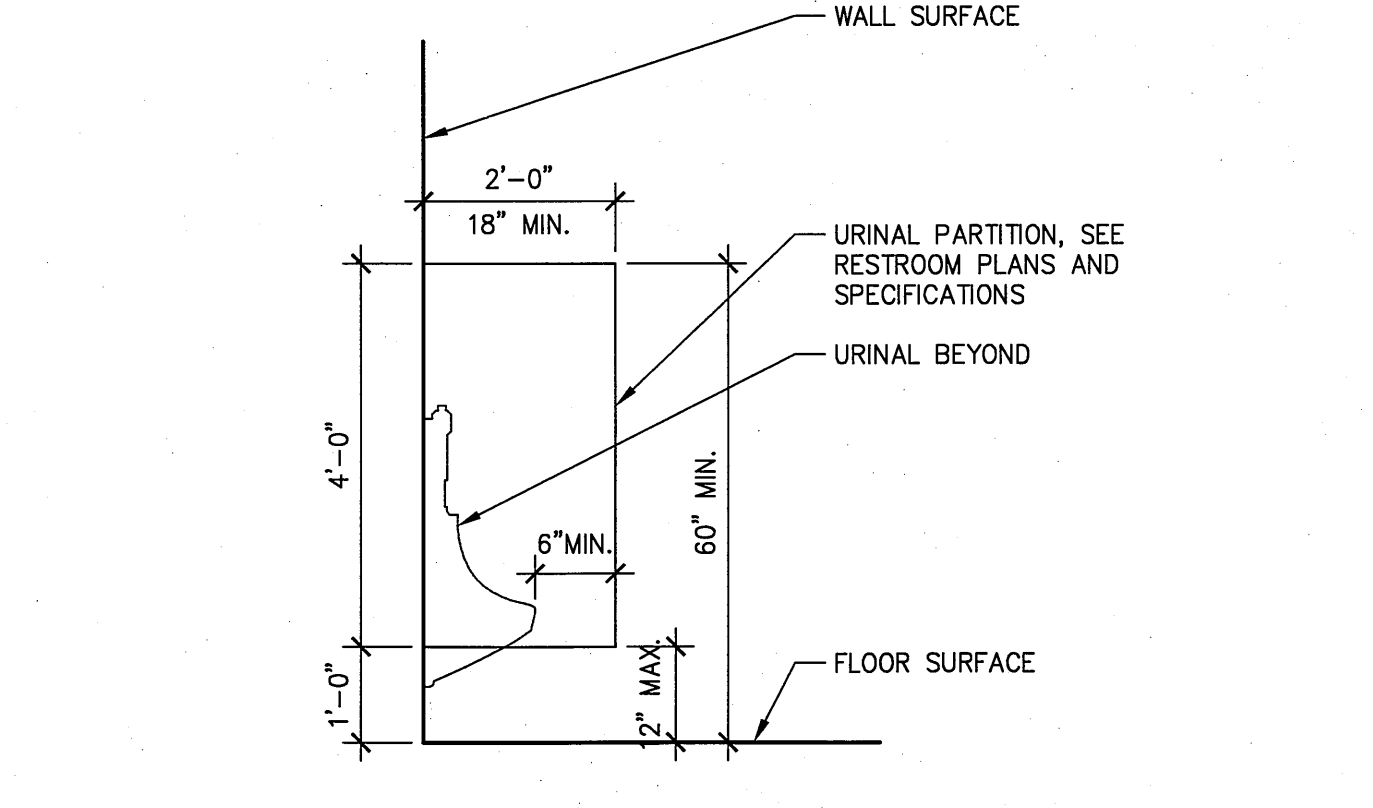
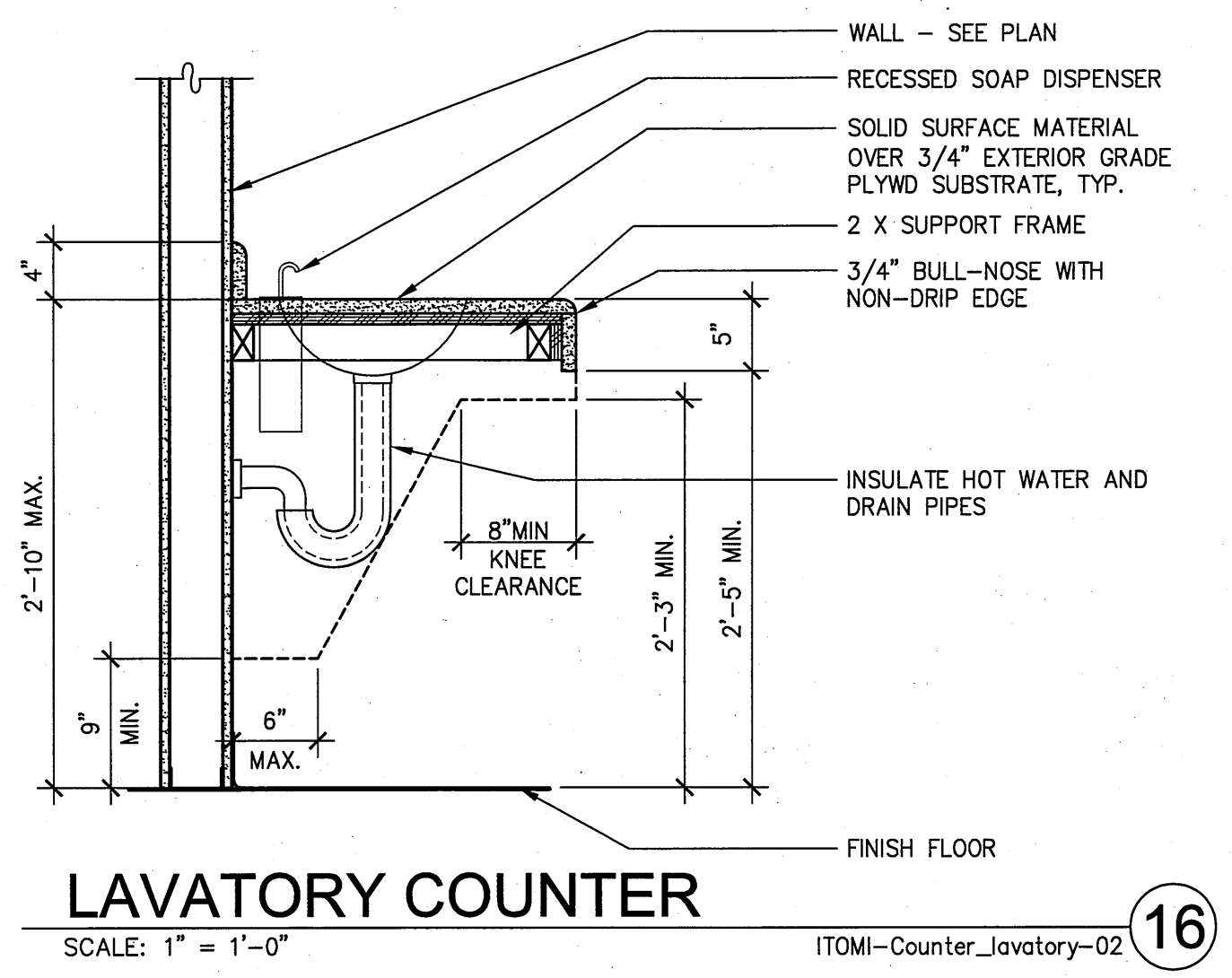
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| 3/29/2016 | PLAK CHECK SUBMITTAL |

PA / PM: JCARROLL
DRAWN BY: EG
JOB NO.: IRV15-0195-00

SHEET
A5.1

RESTROOM NOTES

1. PROVIDE SINGLE LEVER HANDLE FAUCET SET AT 17" MAX. FROM THE FRONT EDGE OF THE SINK COUNTER.
2. VERIFY BUILDING STANDARD FOR WALL-HUNG/DROP-IN COUNTER SINK WHERE APPLICABLE.
3. TOILET PAPER DISPENSERS SHALL NOT BE OF TYPE THAT CONTROLS DELIVERY, OR THAT DO NOT ALLOW CONTINUOUS PAPER FLOW. OPERABLE PARTS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE OPERABLE PARTS SHALL BE 5 POUNDS MAX.
4. OPERABLE PARTS OF ALL ACCESSORIES SHALL COMPLY WITH ALL APPLICABLE ACCESSIBILITY CODES AND STANDARDS.
5. WATER SUPPLY AND DRAIN PIPES UNDER LAVATORIES AND SINKS SHALL BE INSULATED OR OTHERWISE CONFIGURED TO PROTECT AGAINST CONTACT. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES AND SINKS.



SEE SHEET A0.1 FOR GENERAL NOTES
SEE SHEET A0.3 & A0.3a FOR RESTROOM ACCESSIBILITY NOTES & DETAILS
SEE SHEET A5.1 FOR FINISH SCHEDULE

RESTROOM NOTES

1. NEW WATER CLOSET - FULLY ACCESSIBLE, WALL-MOUNTED WITH FLUSH VALVE.
2. NEW URINAL - FULLY ACCESSIBLE, WALL-MOUNTED - AMERICAN STANDARD "LYNBROOK" #6605.027 (OR APPROVED EQUAL).
3. NEW URINAL - REGULAR HEIGHT, WALL-MOUNTED - AMERICAN STANDARD "LYNBROOK" #6605.027 (OR APPROVED EQUAL).
4. NEW SOLID SURFACE MATERIAL COUNTER TOP WITH 4" HIGH BACKSPASH & EASED FRONT EDGE.
5. PROVIDE INSULATION OF PIPES UNDER THE SINK
6. NEW SOAP DISPENSER - LAVATORY MOUNTED - BOBRICK B-8221 MOUNTED IN COUNTER TOP ADJACENT TO LAVATORY.
7. NEW MIRROR AT SINK - 36" HIGH x FULL WIDTH FIRST QUALITY MIRROR WITH BEVELED EDGES.
8. NEW TOILET SEAT COVER DISPENSER, RECESSED - BOBRICK B-301.
9. NEW TOILET TISSUE DISPENSER, RECESSED - BOBRICK B-3888.
10. NEW SANITARY NAPKIN DISPOSAL, RECESSED - BOBRICK B-353.
11. NEW TOILET PARTITIONS - FLOOR-ANCHORED/OVERHEAD SOLID PLASTIC PARTITIONS BY SCRANTON PRODUCTS OR APPROVED EQUAL. WITH STAINLESS STEEL FASTENING HARDWARE FINISH. ACCESSIBLE COAT HOOKS & STOPS AT ACCESSIBLE STALLS WITH AN AUTO-CLOSING DEVICE AND "U"-SHAPED HANDLES ON BOTH SIDES OF ALL STALLS.
12. NEW SOLID PLASTIC URINAL PARTITIONS WITH STAINLESS STEEL FASTENING HARDWARE BY SCRANTON PRODUCTS. MATCH EXISTING PARTITION COLOR AND TEXTURE.
13. NEW 42"W X 54"D TWO WALL TOILET COMPARTMENT SS GRAB BAR - BOBRICK B-6897
14. NEW GFCI DUPLEX ELECTRICAL OUTLET MOUNTED 6" ABOVE COUNTERTOP OR SPLASH - REFER TO ELECTRICAL PLANS UNDER SEPARATE SUBMITTAL
15. NEW SIGNAGE FOR WALLS AND DOORS. SEE DETAIL 2 ON SHEET A0.3a.
 - a) MEN'S WALL-MOUNTED SIGN
 - b) WOMEN'S WALL-MOUNTED SIGN
16. EXISTING RESTROOM FIXTURE OR RECYCLED RESTROOM ACCESSORIES. VERIFY WITH OWNER AND THEIR CONDITIONS PRIOR TO RE-INSTALLATION. REPLACE IF NECESSARY.
17. NEW WALL/FLOOR CERAMIC TILES TO MATCH EXISTING.
18. EXISTING WALL FINISH TO REMAIN. PATCH AND REPAIR
19. NEW PAINTED GYPSUM BOARD WALL - COLOR TO MATCH EXISTING

LEGEND

- EXISTING CONSTRUCTION TO REMAIN
- NEW WALL PARTITION

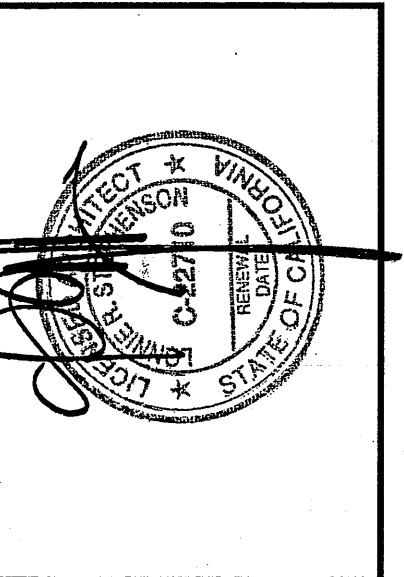
FINISH LEGEND

- WALL FINISHES**
- ITEM: P 1 MFR: T.B.D. WALL PAINT DUNN-EDWARDS
 - COLOR/NO: T.B.D.
 - FINISH: GLOSSY
 - ITEM: P 2 MFR: T.B.D. CEILING PAINT DUNN-EDWARDS
 - COLOR/NO: T.B.D.
 - FINISH: GLOSSY
 - ITEM: RB 1 MFR: T.B.D. RUBBER BASE
 - COLOR/NO: T.B.D.
 - SIZE: T.B.D.
 - STYLE: COVED @ RESILIENT FLOORING
 - ITEM: CWT 1 MFR: T.B.D. CERAMIC WALL TILE
 - COLOR/NO: T.B.D.
 - SIZE: 6" x 6"
 - GROUT: T.B.D.
 - ITEM: CWT 2 MFR: T.B.D. CERAMIC WALL TILE ACCENT
 - COLOR/NO: T.B.D.
 - SIZE: 6" x 6"
 - GROUT: T.B.D.
 - ITEM: CTB 1 MFR: T.B.D. CERAMIC TILE BASE
 - COLOR/NO: T.B.D.
 - SIZE: 6" x 6"
 - GROUT: T.B.D.
- FLOOR FINISHES**
- ITEM: CFT 2 MFR: T.B.D. CERAMIC FLOOR BORDER TILE
 - COLOR/NO: (TO MATCH EXISTING).
 - SIZE: 1' x 1'
 - GROUT: T.B.D.
 - ITEM: CFT 1 MFR: T.B.D. CERAMIC FLOOR TILE
 - COLOR/NO: (TO MATCH EXISTING).
 - SIZE: 1' x 1'
 - GROUT: T.B.D.
 - ITEM: VCT 1 MFR: T.B.D. VINYL COMPOSITION TILE - FIELD TILE
 - COLOR/NO: T.B.D.
 - SIZE: T.B.D.
- MISCELLANEOUS FINISHES**
- ITEM: SSM 1 MFR: T.B.D. SOLID SURFACE MATERIAL
 - COLOR/NO: T.B.D.

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civil engineering

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irvine, california 92618
p 949.660.9128
f 949.963.1581

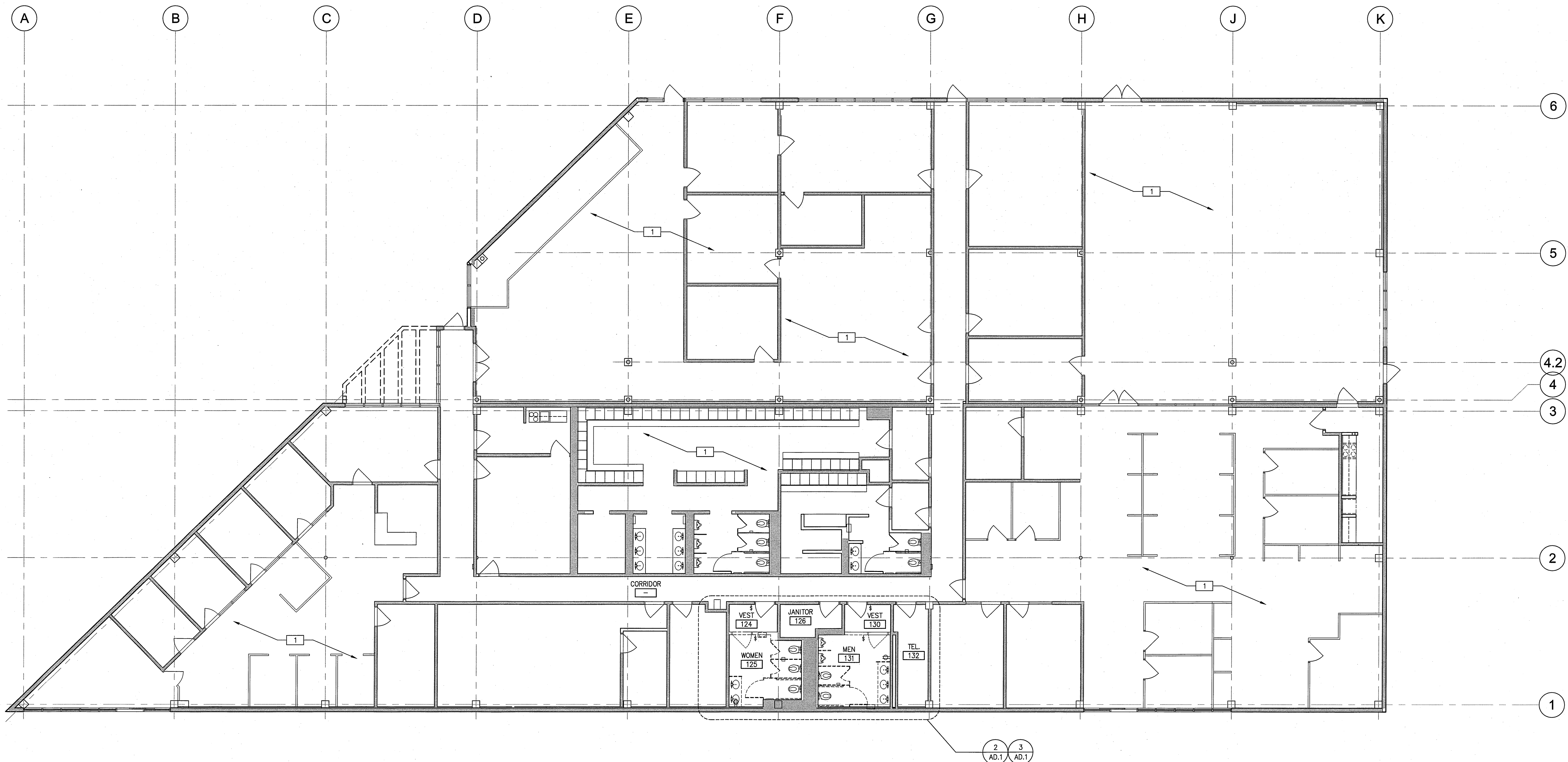


**ADA FACILITY IMPROVEMENTS
OPERATIONS SUPPORT FACILITY
OSF BUILDING 1
6427 OAK CANYON
IRVINE, CALIFORNIA**

| DATE | REMARKS |
|-----------|----------------------|
| 3/20/2016 | PLAN CHECK SUBMITTAL |
| 4/14/2016 | PLAN CHECK COMMENTS |

PA / PM: JCARROLL
DRAWN BY: 000
JOB NO.: IRV15-0195-00

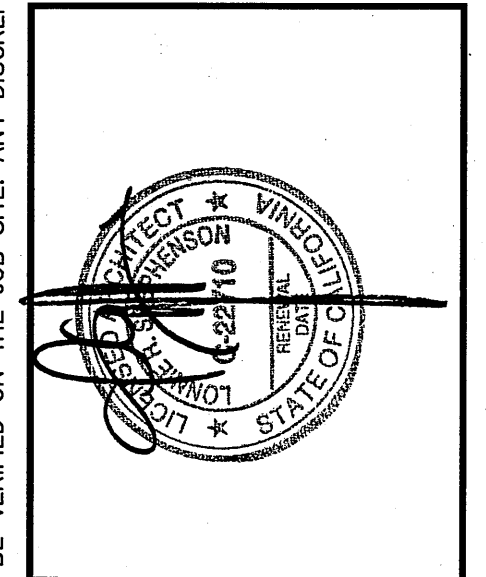
SHEET
A6.1



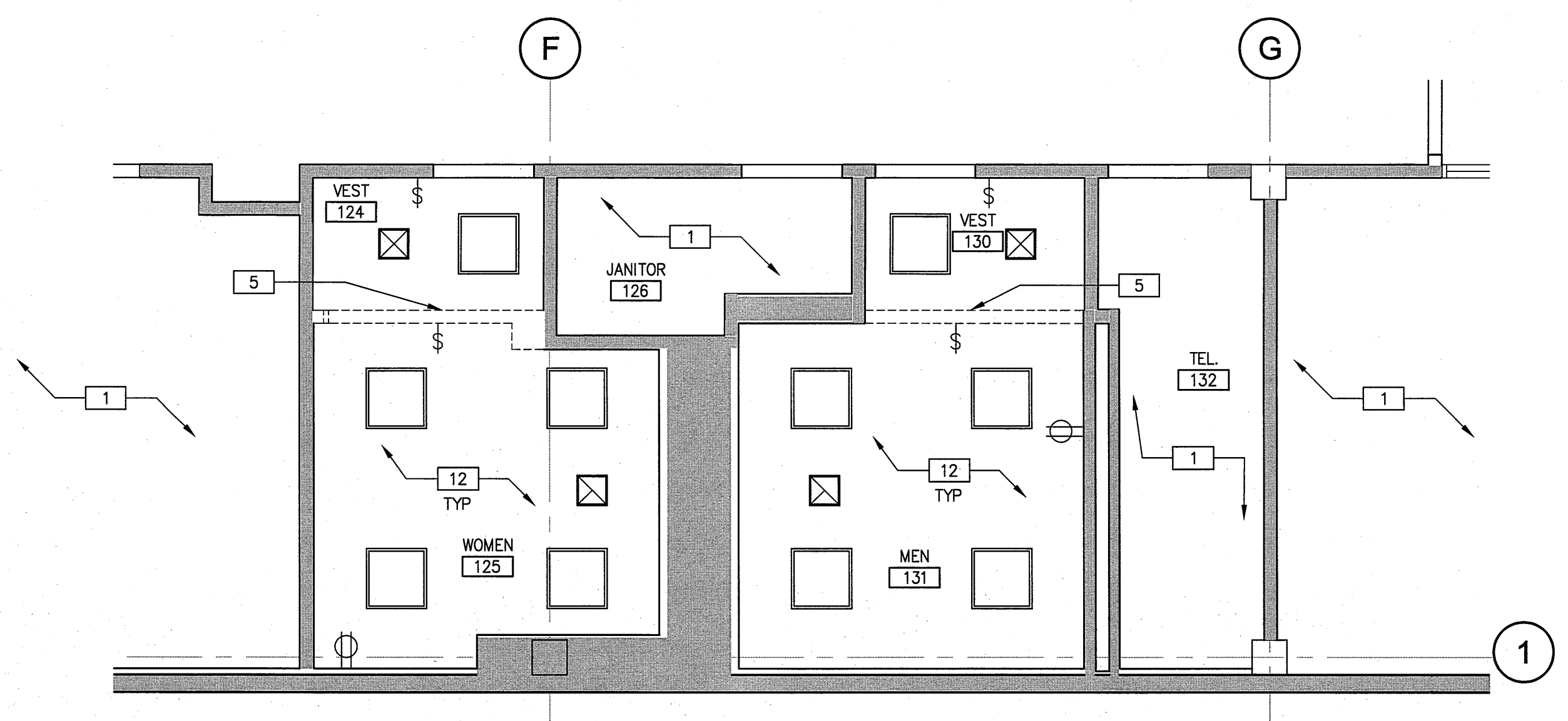
BUILDING 1 - OVERALL DEMOLITION FLOOR PLAN
SCALE: 1/8"=1'-0" 1

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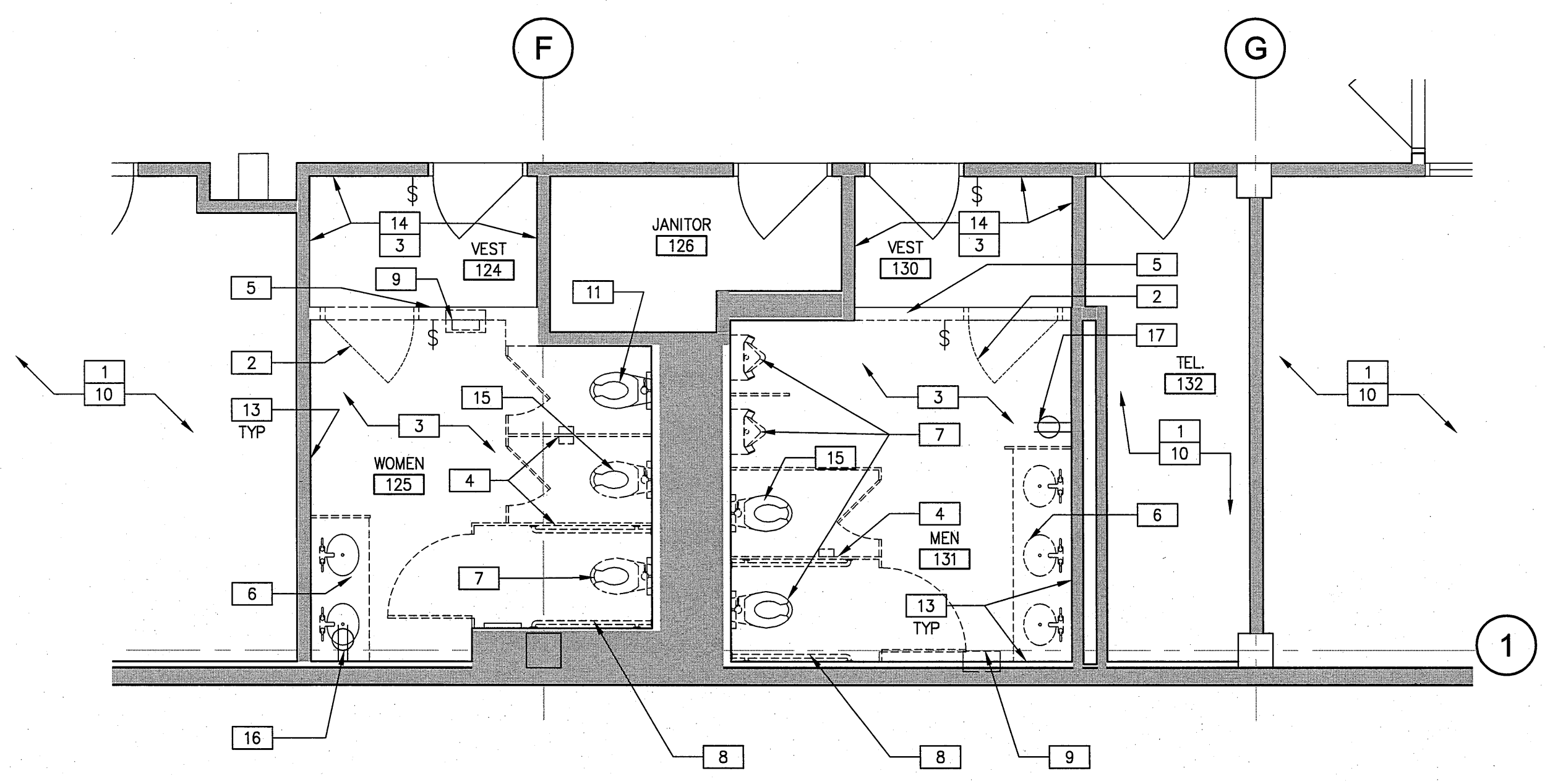
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planning
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graphics
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irvine, california 92618
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**ADA FACILITY IMPROVEMENTS
OPERATIONS SUPPORT FACILITY
OSF BUILDING 1
6427 OAK CANYON
IRVINE, CALIFORNIA**



BUILDING 1 - PUBLIC RESTROOM REFLECTED CEILING DEMOLITION PLAN
SCALE: 1/4"=1'-0" 3



BUILDING 1 - ENLARGED PUBLIC RESTROOM DEMOLITION PLAN
SCALE: 1/4"=1'-0" 2

DEMOLITION PLAN NOTES
SEE SHEET A0.1 FOR GENERAL NOTES

- 1 EXISTING CONDITIONS TO BE PROTECTED AND REMAIN IN PLACE UNLESS NOTED OTHERWISE - TYPICAL
- 2 REMOVE DOOR ASSEMBLY. SAVE FOR POSSIBLE RELOCATION OR RETURN TO BUILDING STOCK.
- 3 EXISTING FLOOR FINISH TO REMAIN. PATCH AND REPAIR TO MATCH EXISTING ACCESSORIES FOR POSSIBLE RELOCATION OR RETURN TO BUILDING STOCK
- 4 REMOVE EXISTING PARTITIONS AND SAVE ANY ATTACHED TOILET ACCESSORIES FOR POSSIBLE RELOCATION OR RETURN TO BUILDING STOCK
- 5 REMOVE WALL ENTIRELY. EXISTING ELECTRICAL OUTLETS/SWITCHES LOCATED ON DEMOLISHED WALLS ARE TO BE REMOVED INCLUDING CONDUIT AND WIRING BACK TO JUNCTION BOX. PATCH AND REPAIR ADJOINING WALL AND CEILING. NEW SWITCH CONNECTION PER SHEET A5.1 NOTE 5.
- 6 REMOVE EXISTING COUNTERTOP, MIRROR AND SINK. SAVE FOR POSSIBLE RELOCATION OR RETURN TO BUILDING STOCK. CAP PLUMBING LINES BEHIND FINISHED SURFACE OR DEMO WATER AND SEWER LINES FOR RE-CONNECTION TO NEW FIXTURE LOCATION PER SHEET A2.1. REFER TO AS-BUILT DRAWINGS FOR EXISTING PLUMBING PLAN.
- 7 EXISTING PLUMBING FIXTURES TO BE REMOVED AND REPLACE. DEMO WATER AND SEWER LINES AS REQUIRED FOR RE-CONNECTION TO NEW PLUMBING FIXTURE LOCATION PER SHEET A2.1. REFER TO AS-BUILT DRAWINGS FOR EXISTING PLUMBING.
- 8 EXISTING GRAB BAR TO BE REMOVED AND REPLACED.
- 9 REMOVE EXISTING TOILET ACCESSORIES. SAVE IT FOR POSSIBLE RELOCATION OR RETURN TO BUILDING STOCK.
- 10 EXISTING FLOOR TO BE PROTECTED AND REMAIN IN PLACE.
- 11 EXISTING PLUMBING FIXTURE TO REMAIN IN PLACE. CONTRACTOR TO VERIFY CONDITIONS AND REPLACE IF NECESSARY
- 12 EXISTING CEILING LIGHT FIXTURE AND MECH AIR GRILLES TO BE PROTECTED IN PLACE.
- 13 REMOVE EXISTING WALL TILES ENTIRELY
- 14 EXISTING WALL FINISH TO REMAIN. PATCH AND REPAIR
- 15 REMOVE PLUMBING FIXTURE ENTIRELY. CAP EXPOSED PLUMBING PIPES BEHIND FINISH SURFACE.
- 16 EXISTING OUTLET TO BE REMOVED INCLUDING CONDUIT AND WIRING BACK TO JUNCTION BOX.
- 17 EXISTING OUTLET TO BE RELOCATED. SEE DETAIL 1-A6.1

LEGEND

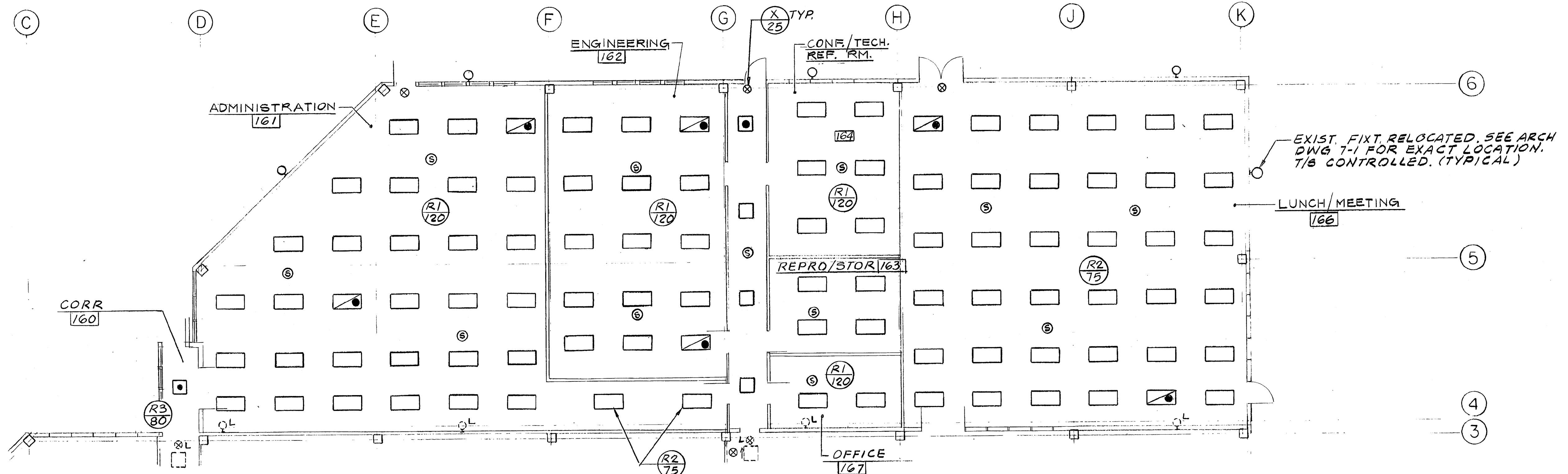
- EXISTING CONSTRUCTION TO REMAIN
- EXISTING CONSTRUCTION TO BE REMOVED

| BUILDING 1 - DEMOLITION PLAN | |
|------------------------------|----------------------|
| DATE | REMARKS |
| 3/29/2016 | PLAN CHECK SUBMITTAL |
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PA / PM: JCARROLL
DRAWN BY: OOO
JOB NO.: IRV15-0195-00

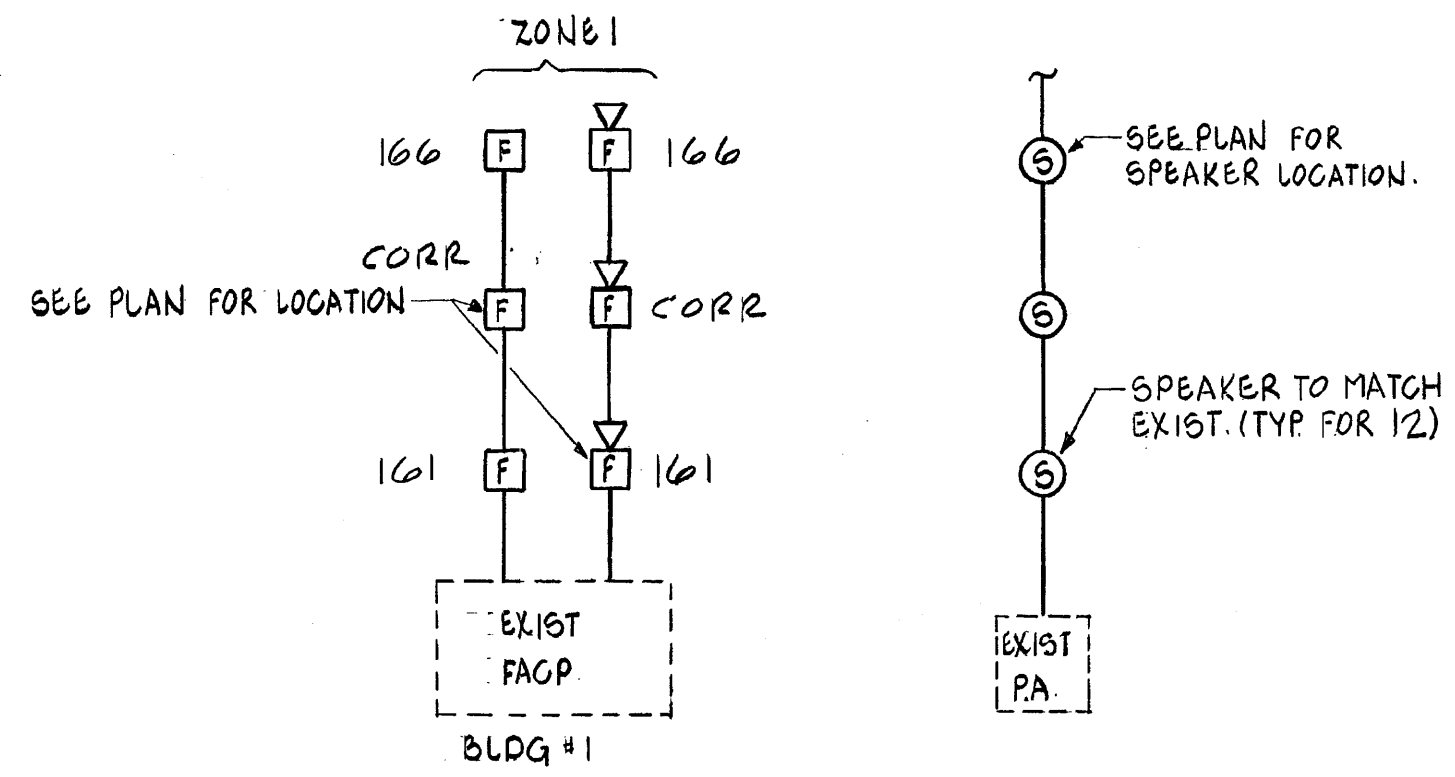
SHEET
AD.1

PARTIAL SYMBOLS
 [Symbol] EXIST TO REMAIN
 [Symbol] EXIST TO BE RELOCATED

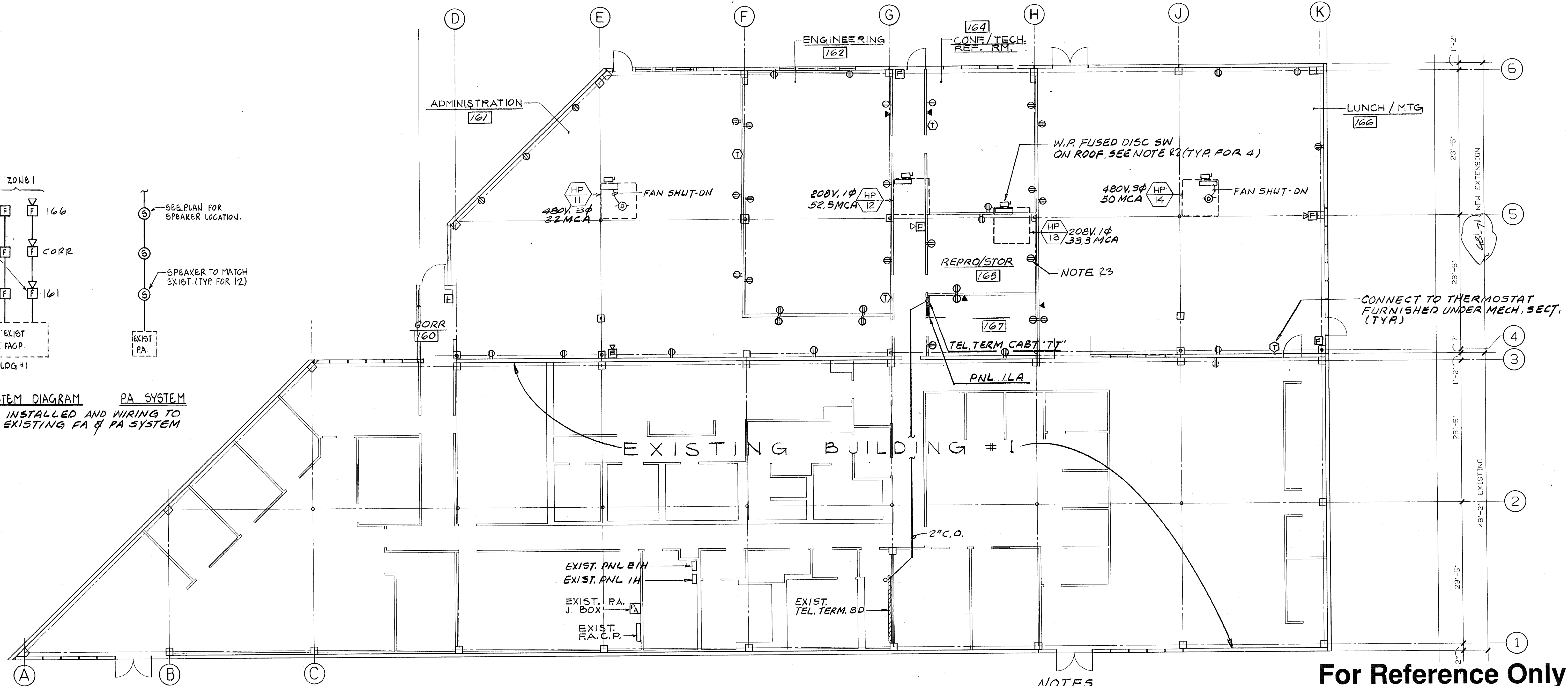


LIGHTING PLAN.
 SCALE: 1/8" = 1'-0"

NOTES
 L1. RUN GENERAL LIGHTING CIRCUITS TO EXIST PANEL HA, EMERGENCY LIGHTING CIRCUITS TO PANEL EIM
 L2. COMPLY WITH STATE OF CALIF. TITLE 24 ENERGY CONSERVATION STANDARDS, 1987 FOR LOW-RISE OFFICES FOR WIRING AND SWITCHING OF LIGHT FIXTURES.
 L3. DO NOT EXCEED 30 BALLASTS ON ONE CIRCUIT.



FA SYSTEM DIAGRAM
 DEVICE INSTALLED AND WIRING TO MATCH EXISTING FA & PA SYSTEM



NOTES (CONT'D)
 R4. PROVIDE TIME SW WITH BY-PASS SW FOR HP-11, HP-12, HP-13. LOCATE TIME SW IN REPRO/STOR RM. PROVIDE SEPARATE TIME SW WITH BY-PASS FOR HP-4

POWER PLAN
 SCALE: 1/8" = 1'-0"



NOTES
 R1. RUN RECEPTACLE CIRCUITS TO PANEL 1LA. DO NOT EXCEED 6 RECEPTS ON ONE CIRCUIT OR AS NOTED ON PLAN.
 R2. VERIFY ELECTRICAL REQMT OF EACH MECH EQUIP AND PROVIDE PROPERLY SIZED WIRES AND PROTECTIVE DEVICES.
 R3. VERIFY REPRO MACH ELECT REQMT & PROVIDE RECEPTACLE MATCHING THE PLUG.

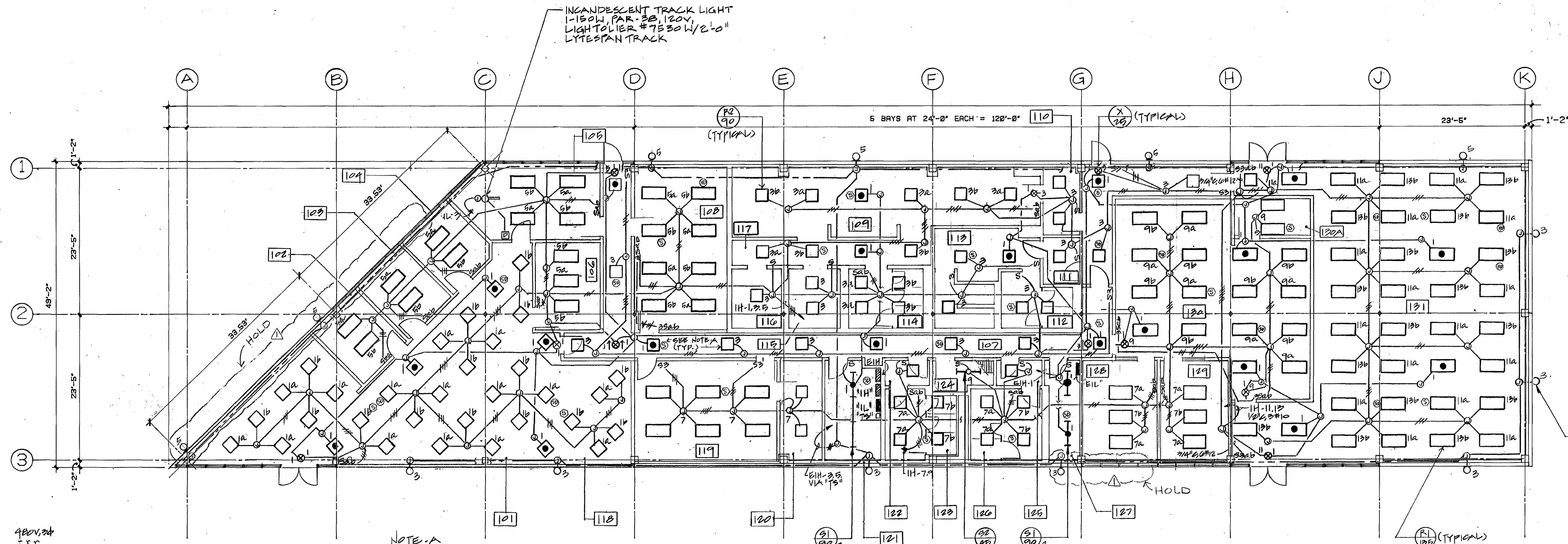
For Reference Only

Albert C. Martin and Associates Planning | Architecture | Engineering
 2809 Main Street, Irvine, California 92714
 811 West Seventh Street, Los Angeles, California 90017
 213 683-1900
 Job Number: 87053.10.500
 Project Director: J. Johnson
 Project Designer: A. SCATTARON
 Project Architect: E. Wong
 Date: 7-01-87
 Drawn by: K.K.
 Checked by:
 Const. Issue Date:

BUILDING NO.1
 LIGHTING & POWER PLAN

Operations Support Facility
 1987-88 Expansion
 15029 Sand Canyon Avenue Irvine, CA
 (714) 857-0144

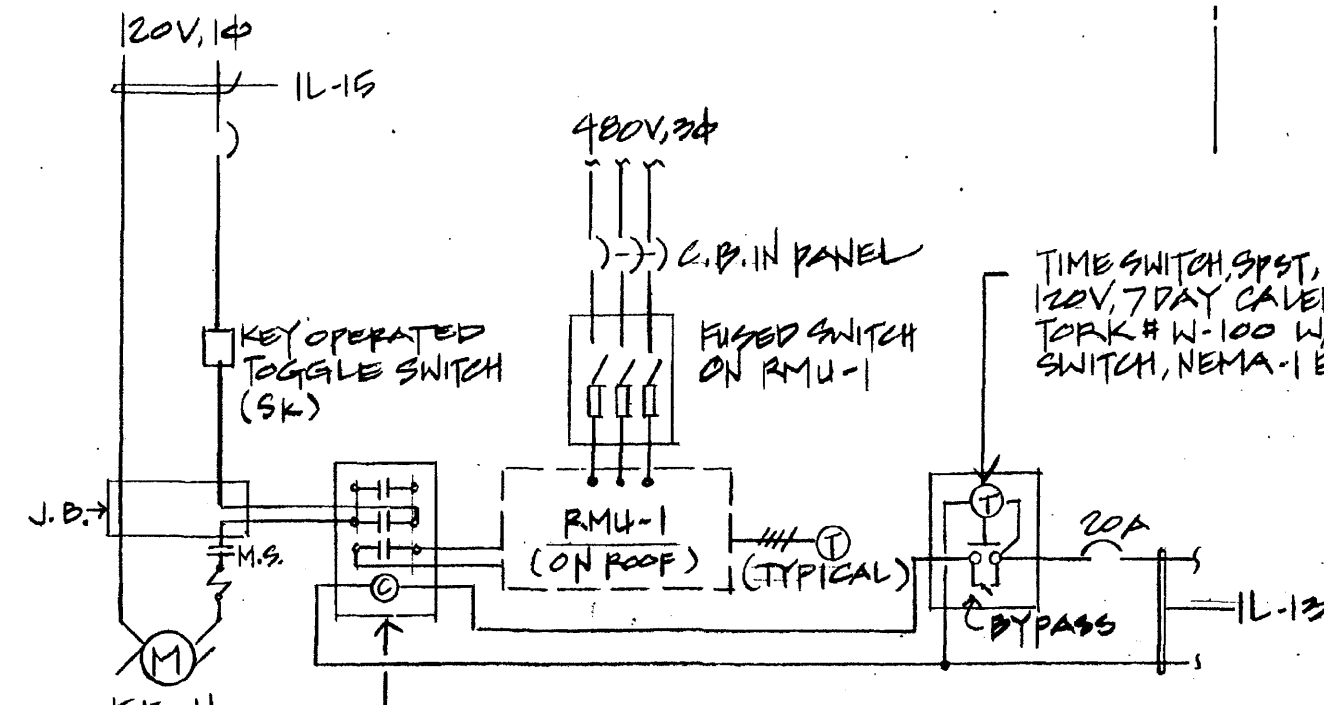
CITY OF IRVINE
 Sheet No. E-2
 RECORD DRAWING
 20 of 34 Sheets
 M 1410



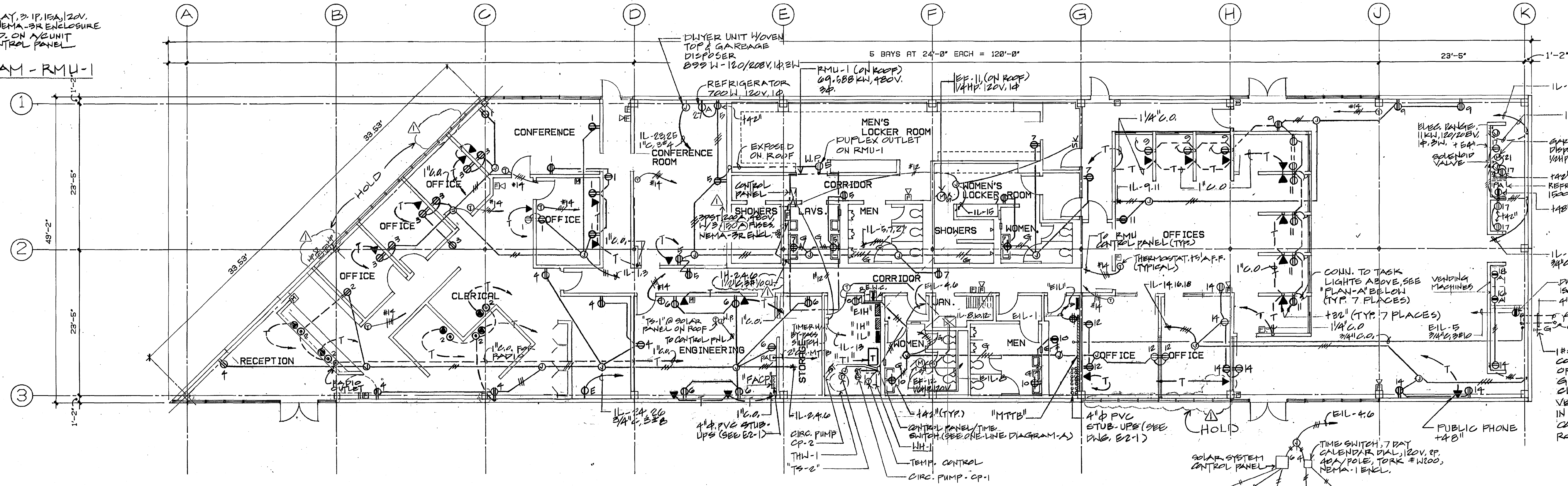
NOTE-A
ALL LIGHTING FIXTURES AND P.A. SPEAKER BOXES IN CORRIDORS SHALL BE MOUNTED IN 1HR RATED ENCLOSURES.

BUILDING 1 - ADMINISTRATION - LIGHTING PLAN (C.H.=10'-0")

SCALE: 1/8" = 1'-0"



CONTROL DIAGRAM - RMU-1
NOT TO SCALE



ADMINISTRATION - POWER AND TELEPHONE PLAN

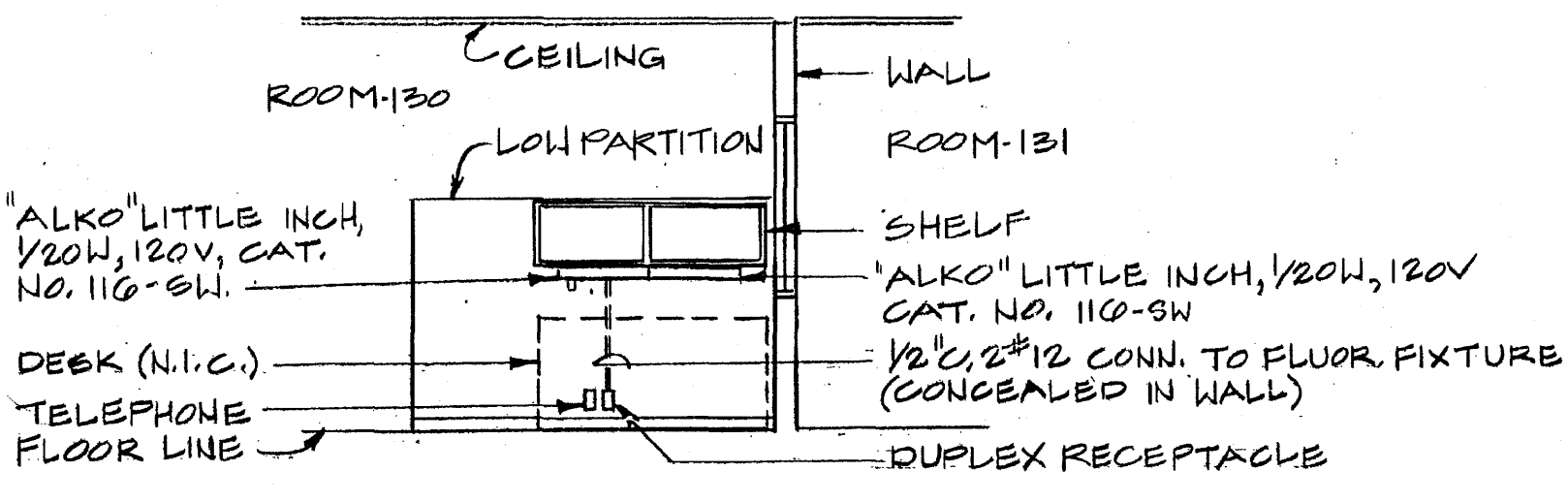
SCALE: 1/8" = 1'-0"

GENERAL NOTES

- REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL LIGHTING FIXTURES, OUTLETS, AND SWITCHES, INCLUDING MOUNTING HEIGHTS.
- REFER TO TYPICAL DRAWING NO. EG-1 FOR TIME SWITCH "TS" TYPICAL WIRING DIAGRAM.

SOLAR HOT WATER SYSTEM ONE-LINE DIAGRAM - A

NOT TO SCALE
For Reference Only



"PLAN-A" (TYP. FOR 7 PLACES)
SCALE 1/4" = 1'-0"

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| 7 | | |
| 6 | | |
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| 3 | | |
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| DATE | 3 |
| DATE | 2 |
| DATE | 1 |

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|---------------------------------|------|
| DRAWN BY: G. STATION | DATE |
| DESIGNED BY: J. YAO | DATE |
| CHECKED BY: S.K. GIVEN | DATE |
| OWNER REVISIONS (90100-01-0704) | DATE |

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| DATE | 7 |
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| NO. | 7 |
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| NO. | 2 |
| NO. | 1 |

Albert C. Martin and Associates
Architects/Planners/Engineers
1445 S. Figueroa Street, Los Angeles, California 90071 (213) 633-9000
UNION BANK SQUARE

REFERENCE ONLY

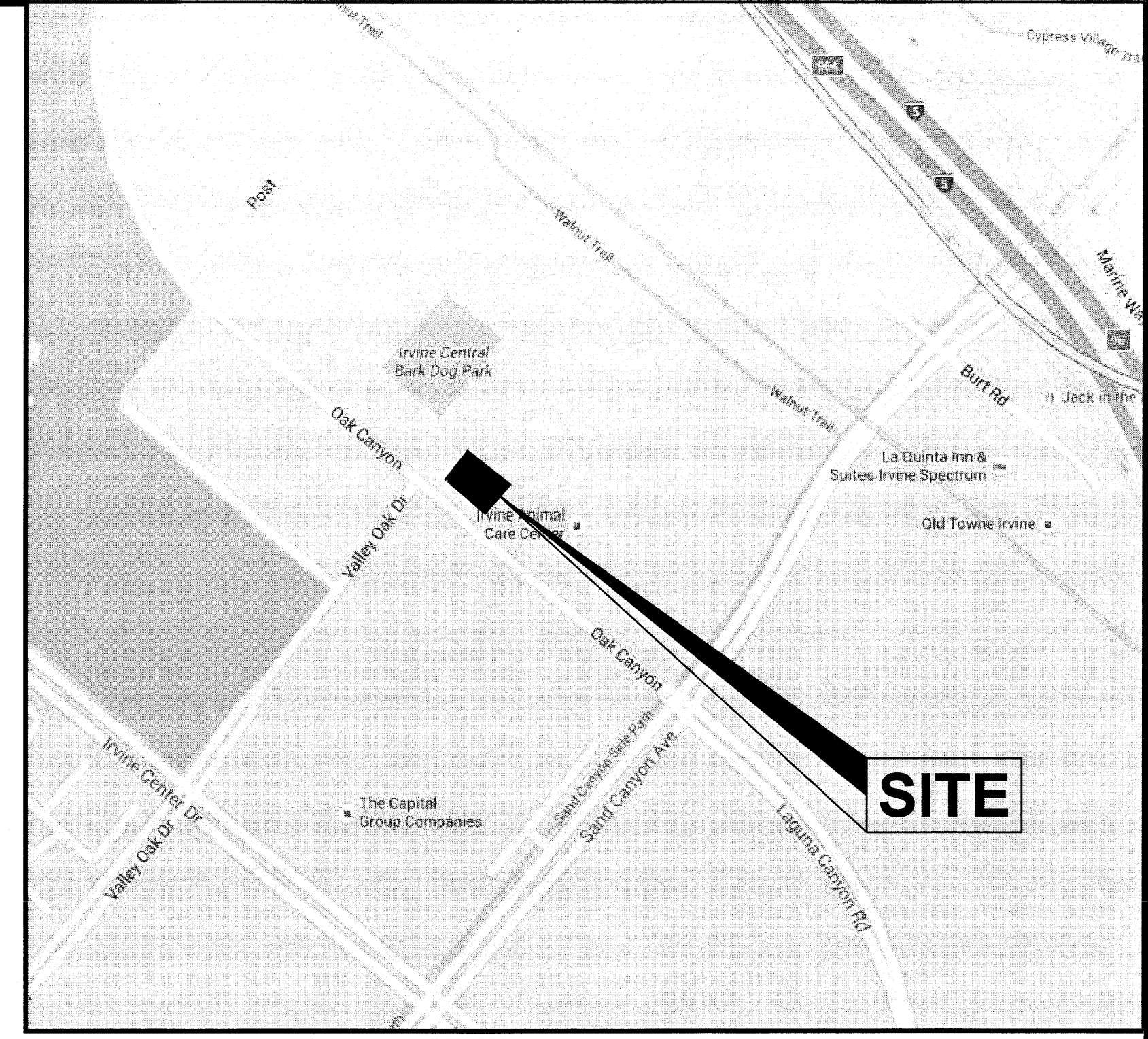
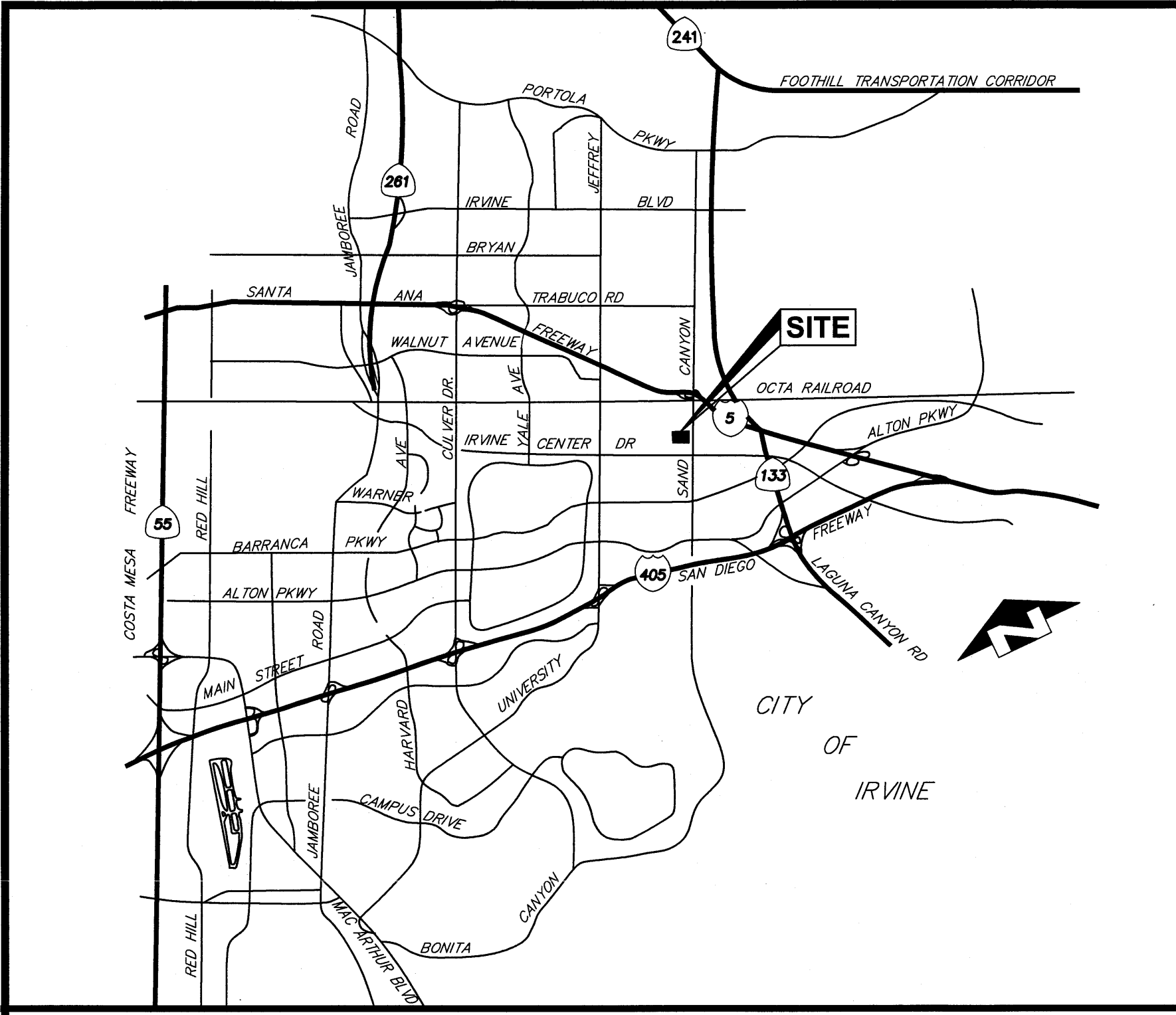
Operations Support Facility
10025 David Canyon Ave.
Van Nuys, California 91411
JOB NUMBER: 0185-01

CITY OF IRVINE
COMMUNITY DEVELOPMENT DEPARTMENT

THE CITY OF IRVINE



GRADING PLAN



VICINITY MAP

LOCATION MAP

GRADING NOTES

- All work shall be in accordance with the latest adopted edition of
 - The Irvine Grading and Excavation Regulations and Grading Manual
 - The City of Irvine Standard Plans
 - Special requirements of the Grading Permit
 - The California Building Code
 - Standard Specifications for Public Works Construction (Green Book)
 - Manual of Uniform Traffic Control Devices (MUTCD) 2005 California supplement
 Whenever special requirements conflict on any subject matter, the Chief Building Official will determine which special requirement and/or code will govern.
- The California Building Code
 - Standard Specifications for Public Works Construction (Green Book)
 - Manual of Uniform Traffic Control Devices (MUTCD) 2005 California supplement
 Whenever special requirements conflict on any subject matter, the Chief Building Official will determine which special requirement and/or code will govern.
- No grading shall be started without first notifying Grading Inspection. A pre-grading meeting at the site is required before start of clearing and grading with the following people present: Owner, Grading Contractor, Design Civil Engineer, Geotechnical Engineer, Engineering Geologist, City Grading Inspectors, City Maintenance Representative, Archaeologist, Paleontologist or their representatives.
- The Permittee or his agent shall notify Grading Inspection when the grading operation is ready for each of the following inspections: Phone (949) 724-6329
 - Initial Inspection. When the permittee is ready to begin work, but not less than two days before any clearing or grading is started.
 - Toe Inspection. After the natural ground or bedrock is exposed and prepared to receive fill, but before fill is placed.
 - Excavation Inspection. After the excavation is started, but before the vertical depth of the excavation exceeds ten feet.
 - Fill Inspection. After the fill placement is started, but before the vertical height of the fill exceeds ten feet.
 - Drainage Device Inspection. After forming of terrace drains, down-drains or after placement of pipe in subdrains, but before any concrete or filter material is placed.
 - Rough Grading Inspection. When all rough grading has been completed. This inspection may be called for at the completion of rough grading without the inspector necessarily having previously reviewed and approved the required reports.
 - Final Grading and Improvement Inspection. When all work (including installation of all drainage structures, other protective devices and all other improvements which include landscaping and irrigation systems) has been completed and the as-graded plan, professional certifications and the required reports have been submitted.
- Cut and fill slopes shall be no steeper than two horizontal to one vertical.
- Fills shall be compacted throughout to a minimum of 90% of the maximum density as determined by ASTM D1557-02e1 Modified. Compacted fills shall be certified by the Geotechnical Engineer.
- Areas to receive fill shall be properly prepared and approved by the Chief Building Official and Geotechnical Engineer prior to placing of fill.
- Fills shall be benched into approved material as deemed suitable by the Geotechnical Engineer.
- All existing fills shall be approved by the Geotechnical Engineer and Chief Building Official before any additional fills are added.
- Any existing irrigation lines and cisterns shall be removed or crushed in place and back filled and approved by the Grading Inspector and Geotechnical Engineer.
- Slopes exceeding five feet in height must be planted with an approved irrigation system. All slopes more than three feet in height shall be permanently protected against damage from erosion by planting with grass or groundcover plants.
- The stockpiling of excess material shall be approved by the Chief Building Official prior to excavation.
- The Design Civil Engineer, prior to rough grade approval, shall provide a minimum of one blue top per finished pad, set at the highest point in the finished drainage swale. For precise grade approval, the elevation of the floor shall also be provided to insure proper clearance and fall to drainage swale. These elevations shall be noted on the building plans.
- All trench back fills shall be tested and approved by the site Geotechnical Engineer per the Grading and Excavation Regulations.
- The Engineering Geologist and Geotechnical Engineer shall, after clearing and prior to the placement of fill in canyons, inspect each canyon for areas of adverse stability and to determine the presence or absence of subsurface water or spring flow. If needed, canyon subdrains will be designed and constructed prior to the placement of fill.
- Subdrain outlets shall be completed at the beginning of the subdrain construction.
- Subdrain and backdrain locations shall be surveyed in the field for line and grade, and the locations shall be shown on the as-graded plans.
- All cut slopes shall be evaluated both during and after grading by an Engineering Geologist to determine if any slope stability problem exists. Should excavation disclose any geological hazards or potential geological hazards, the Engineering Geologist shall recommend necessary treatment to the City Grading Engineer for approval.
- Where support or buttressing of cut and natural slopes is determined to be necessary by the Engineering Geologist and/or Geotechnical Engineer, the Geotechnical Engineer will submit design calculations to the Chief Building Official prior to construction. The Engineering Geologist and Geotechnical Engineer will inspect and control the construction of the buttressing and certify the stability of the slope and adjacent structures upon completion.
- When cut pads are brought to near grade, the Engineering Geologist shall determine if the bedrock is extensively fractured or faulted and will readily transmit water. If considered necessary by the Engineering Geologist and Geotechnical Engineer, a compacted fill blanket will be placed.

- The Geotechnical Engineer shall perform periodic inspections and submit a complete report and map upon completion of the rough grading.
- The final compaction report and approval from the Geotechnical Engineer shall contain the type of field-testing performed. The method of obtaining the in-place density, whether sand cone, nuclear gauge, or drive ring shall be so noted for each test. Sufficient maximum density determinations shall be performed to verify the accuracy of the maximum density curves used by the field technician.
- Notification of Noncompliance: If, in the course of fulfilling their responsibility, the Civil Engineer, the Geotechnical Engineer, the Engineering Geologist or the Testing Agency finds that the work is not being done in conformance with the approved grading plans, the discrepancies shall be reported immediately in writing to the person in charge of the grading work and to the Chief Building Official. Recommendation for corrective measures, if necessary, shall be submitted to the Chief Building Official for approval.
- The Design Civil Engineer shall provide written approval that the grading operation is in compliance with the approved plans, specifications and applicable codes at completion of the grading operation.
- Dust shall be controlled by watering using an approved method without creating any runoff from the area.
- Sanitary facilities shall be maintained on the site.
- The location and protection of all utilities is the responsibility of the permittee.
- All existing drainage courses on the project site must continue to function, while protected, especially during storm conditions. Approved protective measures and temporary drainage provisions must be used to protect adjoining properties during the grading project. In all cases, the Contractor and/or Developer shall be held liable for any damage due to obstructing natural or manmade drainage patterns.
- All water wells shall be abandoned in compliance with the City of Irvine Code of Ordinances Title VI, Division H, Chapter II, Section 6-4-216.
- All existing sewers, cesspools and septic tanks or other sewage disposal facilities shall be abandoned in compliance with the Uniform Plumbing Code and to the approval of the Geotechnical Engineer and Grading Inspector.
- Prior to final approval, the Design Civil Engineer shall certify to the Grading Inspector the number of cubic yards of cut, fill, import, or export moved during the grading operation.
- The Permittee shall comply with Section 5-10-127 of the Grading Code when an excess of 5,000 cubic yards of earth is moved on public roadways from the site of an earth grading operation.
- Whenever there is an existing catch basin along the construction site frontage, the on-site storm drain system shall be designed to convey water directly to the basin. Exceptions shall require approval by the City Engineer.
- All concrete structures that come in contact with the on-site soils shall be constructed with Type 5 six (6) sack cement, unless deemed unnecessary by the sulfate-content tests conducted by the Geotechnical Engineer and reported in the preliminary soils report.
- All planters adjacent to the foundations shall be sealed along side of the foundation footing and extended under the planter area to a minimum of 12" to prevent moisture from reaching the foundation subgrade soils. All concrete planter curbs adjacent to pavement areas shall be constructed with weep holes through the curb face.
- Export soils must go to a legal dumpsite or to a legal permitted site approved by the Chief Building Official.
- The preliminary geotechnical report and all subsequent geotechnical reports as approved by the Community Development Department are considered a part of the approved grading plan.
- Provide weakened plane joints in concrete curbs 10' on centers.
- All walkways, landings, and other finished surfaces at doorways shall be finished to within one-half inch or less of the doorway threshold with a 2:1 bevel (single family detached are exempt).
- No dirt, rock or construction material may be tracked or dropped within the public rights-of-way during the transportation of said material or equipment associated with the project. Any debris in the public right-of-way shall be removed immediately and/or as deemed necessary by the grading inspector.
- Dirt access ramps over curb and gutter to construction sites are not allowed. When necessary for entrance to such construction sites, asphalt ramps with a minimum 3" diameter pipe will be constructed per City standard 217. All base, gravel, soil or other material carried into the roadway by contractor's personnel or equipment will be cleaned immediately as necessary to prevent pollutants from getting into the storm drain system. Trucks hauling base, gravel, fill or export materials within City limits shall be topped as necessary to prevent material from spilling into the roadway.
- Prior to any construction that involves hazardous conditions, the Contractor shall first obtain a permit from the State Division of Occupational Safety and Health (DOSH).
- Proposed revisions to the grading plan shall be drawn in red pencil on blueprints of the approved plan. These blueprints are then to be submitted to the Community Development Department for review and approval. Only after the blueprint approval is given should the originals be changed by the Engineer/Architect.
- Prior to Final Approval from Inspection Services, the Engineer or Architect shall submit two sets of 35mm microfilm of the "AS-GRADED" plan mounted in 4" x 6" jackets; one set shall be the original, and the other set shall be a duplicate copy. The grading permit number shall be shown in the heading (color backing) of all microfilm sheets and the words "AS-GRADED" shall appear on all of the original drawings prior to microfilming.
- A minimum of 6" aggregate base will be required under concrete valley gutters. All valley gutters shall be a minimum 3'-0" wide.
- Open cuts of arterial highways will not be permitted without prior approval. Rock wheels are not allowed.
- All new asphalt construction shall be shaded on grading plan.
- Rule 403, Air Quality Control Management District, must be implemented during construction.
 - A person shall not cause or allow the emissions of fugitive dust from any transport, handling, construction or storage activity so that the presence of such dust remains visible in the atmosphere beyond the property line of the emission source. (Does not apply to emission emanating from unpaved roadways open to public travel or farm roads. This exclusion shall not apply to industrial or commercial facilities).
 - A person shall take every reasonable precaution to minimize fugitive dust emissions from wrecking, excavation, grading, clearing of land and solid waste disposal operations.

- A person shall not cause or allow particulate matter to exceed 100 micrograms per cubic meter when determined as the difference between upwind and downwind samples collected on high volume samplers at the property line for a minimum of five hours.
- A person shall take every reasonable precaution to prevent visible particulate matter from being deposited upon public roadways, including, but not limited to, the removal of particulate matter from equipment prior to movement on paved street.
- Subsections a. and b. shall not be applicable when the wind speed instantaneously exceeds 40 kilometers (25 miles) per hour, or when the average wind speed is greater than 24 kilometers (15 miles) per hour. The average wind speed determinations shall be on a 15-minute average at the nearest official air-monitoring station or by wind instrument located at the site being checked.
- The provisions of this rule shall not apply to agricultural operations.
- Grading operations shall occur only between the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday, and between the hours of 9:00 a.m. and 6:00 p.m. Saturdays. No construction activities shall be permitted outside of these permitted hours or on Sundays and federal holidays, unless a temporary waiver has been granted by the Chief Building Official. Any waivers shall take into account the impact upon the community. Irvine Municipal Code Section 6-8-205.
- Where an excess of five thousand (5,000) cubic yards of earth per project site is moved on public roads from or to the site of an earth grading operation, City of Irvine Building and Safety enforces the section of the grading code, which contains requirements to curtail impacts to adjacent properties. Such requirements include, but are not limited to: application of water to truck loads, sweeping of access roads to the site and use of approved truck haul routes.
- Prior to approval of grading permit, the Design Engineer shall submit drawings on DXF or Auto/CAD .dwg file to the City. Minimum information that will be required: Tract Boundary, Lot Lines, Curb Lines, Storm Drains and the Building Footprints. Call (949) 724-6343 for details.
- Curved storm drains shall be constructed in accordance with Section 306 - 1.2.4b, Standard Specifications for Public Works Construction, latest approved edition.
- A separate Landscape Permit will be required for any landscaping associated with this project.

PAVING NOTES

- A pre-paving meeting is required 48 hours prior to paving.
- The aggregate base section shall be compacted to a minimum of 95% of maximum density. Maximum and field density are to be determined in accordance with ASTM D1557-02e1 Modified.
- A "tack coat" (paint binder) shall be applied between pavement layers, and an existing pavement to be resurfaced at a rate of 0.10 gal./sq.yd. The tack coat shall be a type SSI asphalt emulsion.
- The asphalt concrete for parking lots shall be type III, Class C-3 as specified in Section 400-4.3, Standard Specifications for Public Works Construction, latest approved edition. The paving asphalt to be mixed with aggregate shall conform to the provisions of Section 203.1 and shall be steamed refined asphalt with a viscosity grade of AR-4000 minimum and AR-8000 maximum to the satisfaction of the City Engineer.
- Pavement section recommendations shall be submitted to the City for approval prior to issuance of rough grade release of parking and drive areas. The recommendations submitted by the Geotechnical Engineer shall be based on "R" value analysis of the site subgrade soils and traffic indices approved by the City of Irvine. Pavement design shall be based on a minimum T.I. of 4.0 (for parking stall areas) and a minimum T.I. of 5.5 (for all traveled ways and drive aisles) and shall be designed in accordance with the County of Orange E.M.A. Materials Lab method.
- A City Certified Deputy Paving Inspector is required during operations at the job site and at the asphalt plant.

PRIVATE ENGINEER'S NOTICE TO CONTRACTOR(S)

- The existence and location of any underground utilities and/or structures shown on these plans were obtained by a search of the available records. Approval of these plans by the City of Irvine does not constitute a representation as to the accuracy or completeness of the location or non-existence of any utility and/or structure within the limits of this project. The Contractor is required to take all due precautionary means to protect the utilities of record or not of record or not shown on these plans.
- Relocation or removal of any existing utilities shall be performed by the respective Utility Owners, at the expense of the Developer.
- The Grading Contractor shall satisfy himself as to the grading quantity as shown on this plan as part of his bid.
- It is requested that the Grading Contractor notify this private Engineer by calling at least 48 hours before completion of the grading operation in order that this office may perform a final inspection with our grade certification commitment to the City of Irvine.
- Contractor shall be responsible for obtaining all required permits prior to commencement of grading operations.
- Unauthorized changes and uses: The Engineer preparing these plans will not be responsible for, or liable for, unauthorized changes to or uses of these plans. All changes to the plans must be in writing and must be approved by the preparer of these plans and the City of Irvine.

JOB ADDRESS:

Site Location (nearest cross streets): 6427 Oak Canyon Irvine, CA 92616
Tract/Parcel Map No.: X

GRADING PLAN INDEX

| SHEET | NO. |
|--|-----|
| TITLE SHEET | 1 |
| GENERAL NOTES & OVERALL SITE AND KEY MAP | 2 |
| SITE PLAN & GRADING PLAN - BUILDINGS 1 & 4 | 3 |
| SITE PLAN & GRADING PLAN - BUILDING 3 | 4 |
| SITE DETAILS | 5 |
| DEMOLITION PLAN - BUILDINGS 1 & 4 | 6 |
| DEMOLITION PLAN - BUILDING 3 | 7 |

BENCHMARK

BENCHMARK: 3B-117-13

Described by OCS 2013 - Found 4" OCS Aluminum Benchmark Disk Stamped "3B-117-13", Set in the top of the southeasterly rail road bridge wall corner northeast of the railroad tracks. Monument is located +/- 420' SWly of the intersection of Sand Canyon Road and Burnt Road

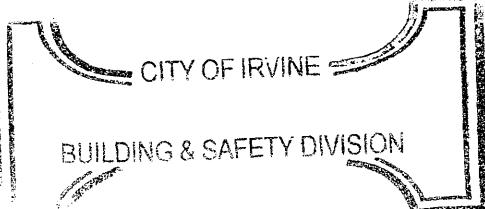
BASIS OF BEARINGS

Being the centerline of Oak Canyon, having a bearing of N 49°20'37" W as per Parcel Map No. 2002-213 recorded in P.M. Book 334, pages 17-20.

CLIENT

PUBLIC WORKS DEPARTMENT
6427 OAK CANYON
IRVINE, CA

ERIC GRUBER
PH: (949) 724-6689
FAX: (949) 724-7565

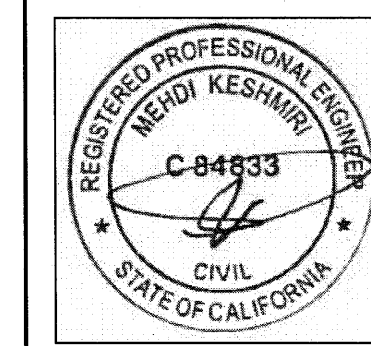


CITY OF IRVINE COMMUNITY DEVELOPMENT DEPARTMENT

This set of plans & specifications must be kept on the job at all times and it is unlawful to make any changes or alterations on same without written permission from the City of Irvine Community Development Department. The stamping of this plan & specifications SHALL NOT be held to permit or be an approval of the violation of any provisions of any City Ordinance or State Law.

IMPORTANT NOTICE

Section 4216/4217 of the Government Code requires a Dig Alert Identification Number be issued before a "Permit to Excavate" will be valid.
TOLL FREE 1-800-422-4133
Two working days before you dig.



architecture
planning
interiors
graphics
civil engineering

10 edelman
irvine, california 92618
p 949.660.9128
f 949.863.1581

ALL WORK PROPOSED IN PUBLIC RIGHT-OF-WAY WILL BE SHOWN ON THE GRADING PLANS. THOSE ITEMS THAT ARE NOT SHOWN WILL REQUIRE A SEPARATE ENCROACHMENT PERMIT. THIS DOES NOT EXEMPT ONSITE UTILITIES FROM OBTAINING THEIR REQUIRED PERMITS.

BENCHMARK: 3B-117-13
DESCRIBED BY OCS 2013 - FOUND 4" OCS ALUMINUM BENCHMARK DISK STAMPED "3B-117-13", SET IN THE TOP OF THE SOUTHWESTERLY RAIL ROAD BRIDGE WALL CORNER NORTHEAST OF THE RAILROAD TRACKS. MONUMENT IS LOCATED +/- 420' SWLY OF THE INTERSECTION OF SAND CANYON ROAD AND BURNT ROAD
ELEV=38.984 FEET NAVD88 YEAR 2013
SITE ACREAGE: 0.125 AC. GR.

LEGAL DESCRIPTION:
ADA IMPROVEMENTS OPERATIONS SUPPORT FACILITY PRECISE GRADING TITLE SHEET

CITY OF IRVINE
COMMUNITY DEVELOPMENT DEPARTMENT

WARE MALCOMB
Leading Design for Commercial Real Estate

CALL BEFORE YOU DIG!
CALIFORNIA LAW REQUIRES EXCAVATORS TO NOTIFY THE REGIONAL NOTIFICATION CENTER NOT LESS THAN TWO (2) WORKING DAYS NOR MORE THAN FOURTEEN (14) CALENDAR DAYS PRIOR TO EXCAVATION
Dig Alert
www.digalert.org
1-800-227-2600

| NO. | DATE | REVISIONS | CITY OF IRVINE | | PREPARED BY | | GEOTECHNICAL & GEOLOGICAL FIRM: | |
|-----|------------|---------------------|----------------|------|-------------|------|---------------------------------|------|
| | | | APP. | DATE | NAME | DATE | NAME | DATE |
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| 5 | | | | | | | | |
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| 2 | | | | | | | | |
| 1 | 04/14/2016 | PLAN CHECK COMMENTS | | | | | | |
| | | | | | | | | |

GENERAL NOTES

- A. ALL CONSTRUCTION SHALL COMPLY WITH APPLICABLE CODES AND LOCAL REQUIREMENTS. CONTRACTORS MUST COMPLY WITH CONTRACTOR REGISTRATION REQUIREMENTS OF ALL GOVERNING AUTHORITIES. ALL REQUIRED CITY / COUNTY / STATE PERMITS SHALL BE OBTAINED AND PAID FOR BY THE CONTRACTOR. ALL OTHER PERMITS SHALL BE SECURED AND PAID FOR BY THE GENERAL CONTRACTOR.
- B. DISCREPANCIES BETWEEN PORTIONS OF THE CONTRACT DOCUMENTS, DRAWINGS, AND SPECIFICATIONS ARE NOT INTENDED. STATED DIMENSIONS TAKE PRECEDENCE OVER GRAPHICS. DO NOT SCALE DRAWINGS TO DETERMINE LOCATIONS. THE CONTRACTOR IS TO CLARIFY ANY SUCH DISCREPANCIES WITH THE ENGINEER PRIOR TO COMMENCING WORK.
- C. IF REQUESTED BY THE PROJECT OWNER, WARE MALCOM MAY PROVIDE THE CONTRACTOR WITH ELECTRONIC DOCUMENTS FOR INFORMATIONAL PURPOSES. THE ENGINEER OF RECORD ASSUMES NO RESPONSIBILITY FOR THE USE OF SUCH FILES FOR CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE INFORMATION CONTAINED IN SUCH FILES AS THEY MAY COMPARE TO THE INFORMATION ON THE SIGNED AND SEALED HARD COPY DOCUMENTS.
- D. APPROVED PLANS SHALL BE KEPT IN A PLAN BOX AND SHALL NOT BE USED BY WORKMEN. ALL CONSTRUCTION SETS SHALL REFLECT SAME INFORMATION. CONTRACTOR SHALL MAINTAIN ONE COMPLETE SET OF PLANS ON THE PREMISES IN GOOD CONDITION AT ALL TIMES. THIS SHALL INCLUDE ALL ADDENDA AND CHANGE ORDERS.
- E. GENERAL CONTRACTOR TO REFER TO THESE DOCUMENTS AS WELL AS ANY APPLICABLE SPECIFICATIONS FOR IDENTIFICATION OF ALL OWNER SUPPLIED ITEMS. ALL ITEMS NOT MARKED AS OWNER SUPPLIED ARE TO BE SUPPLIED BY THE GENERAL CONTRACTOR. UNLESS NOTED OTHERWISE, ALL ITEMS ARE TO BE INSTALLED BY GENERAL CONTRACTOR.
- F. CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL WHILE WORKING IN THE PUBLIC RIGHT OF WAY OR ADJOINING PROPERTIES. ALL SIGNAGE AND TRAFFIC CONTROL DEVICES SHALL BE PROVIDED IN ACCORDANCE WITH CITY OF IRVINE, COUNTY OF ORANGE, CALIFORNIA. IF A MAINTENANCE OF TRAFFIC PLAN IS NECESSARY, THE PLAN SHALL BE PREPARED BY A PROFESSIONAL ENGINEER LICENSED WITH THE LOCALITY OF THE PROJECT. MAINTENANCE OF TRAFFIC PLANS WHICH ARE NOT INCLUDED IN THIS SET OF DRAWINGS ARE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
- G. UTILITIES SHOWN ARE TAKEN FROM THE SURVEY AND RECORDS OF RESPECTIVE UTILITY COMPANIES AND DO NOT NECESSARILY REPRESENT ALL UNDERGROUND UTILITIES ADJACENT TO OR ON THE SITE SHOWN ON PLAN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES. WHETHER SHOWN HEREIN OR NOT, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR THE EXPENSE OF REPAIR OR REPLACEMENT OF UTILITIES OR OTHER PROPERTY DAMAGED BY OPERATIONS IN CONJUNCTION WITH THE EXECUTION OF THE WORK.
- H. ALL SITE WORK AND PAVING SHALL BE IN ACCORDANCE WITH OR SURPASS RECOMMENDATIONS OF THE GEOTECHNICAL REPORT. IF THE GEOTECHNICAL REPORT CONFLICTS WITH DRAWINGS AND SPECIFICATIONS, THE MORE PROHIBITIVE OF THE TWO SHALL TAKE PRECEDENCE AND BE CONSIDERED THE INTENT OF THE BID DOCUMENTS. THE OWNER AND/OR GEOTECHNICAL ENGINEER ACCEPT NO RESPONSIBILITY FOR THE ACCURACY OF THE SOILS REPORT RECOMMENDATIONS REGARDING GRADING, TRENCHING, ETC. CONTACT THE GEOTECHNICAL ENGINEER FOR INSTRUCTIONS PRIOR TO THE CONTINUATION OF WORK SHOULD ANY UNUSUAL CONDITIONS BECOME APPARENT DURING GRADING OR FOUNDATION CONSTRUCTION.
- I. A MINIMUM WIDTH ACCESSIBLE ROUTE FROM BUILDING TO PUBLIC RIGHT-OF-WAY. THE ACCESSIBLE ROUTE IDENTIFIED ON THE PLAN SHALL BE IN COMPLIANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO ENSURE THAT THE FINAL ACCESSIBLE ROUTE IS CONSISTENT WITH THE DESIGN SHOWN AND CONSTRUCTED IN SUCH A WAY AS TO MEET ALL APPLICABLE REQUIREMENTS. CODE REFERENCES LISTED IN THE PLANS IDENTIFY THE APPLICABLE SECTION OF THE ADA STANDARDS FOR ACCESSIBLE DESIGN IN THE CALIFORNIA BUILDING CODE. THE CONTRACTOR SHALL BE RESPONSIBLE TO BE KNOWLEDGEABLE OF ANY ADDENDA OR UPDATE TO THE FEDERAL, STATE AND LOCAL ACCESSIBILITY LAWS AND CODES.
- J. FOR CONSTRUCTION DETAILS NOT SHOWN, USE THE MANUFACTURER'S APPROVED SHOP DRAWINGS / DATA SHEETS IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND LOCAL REGULATIONS.
- K. ALL TRAFFIC CONTROL DEVICES SHALL BE INSTALLED AND MAINTAINED IN CONFORMANCE WITH THE CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

GRADING NOTES

- A. THE INFORMATION DEPICTED ON THESE CONSTRUCTION DOCUMENTS IS AS ACCURATE AS POSSIBLE WITH REGARD TO THE INFORMATION PROVIDED BY THE SURVEYOR. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING GRADES PRIOR TO CONSTRUCTION. NOTIFY THE OWNER'S REPRESENTATIVE AND THE ENGINEER OF RECORD IMMEDIATELY OF ANY DISCREPANCY FOUND BETWEEN THE FIELD CONDITIONS AND THESE PLANS.
- B. ALL PROPOSED SPOT ELEVATIONS AND CONTOURS SHOWN ON THE PLAN ARE PROPOSED FINISHED GRADES. FINISHED GRADE ADJACENT TO THE BUILDING SHALL BE 4" MINIMUM BELOW THE FINISH SWEEP SCREED OF THE BUILDING INCLUDING ANY TOPSOIL, MULCH, AND/OR SOD. THE GENERAL CONTRACTOR SHALL ADJUST SUBGRADE ELEVATIONS ACCORDINGLY TO ENSURE POSITIVE DRAINAGE AWAY FROM THE BUILDING. SEE THE BUILDING PLANS FOR FURTHER DETAILS. GENERAL CONTRACTOR SHALL ALSO ADJUST SUBGRADE ELEVATION IN ALL LANDSCAPED ISLANDS TO ACCOUNT FOR TOPSOIL AND MULCH. SEE LANDSCAPE PLANS FOR FURTHER DETAIL.
- C. WALKS AND SIDEWALKS SHALL HAVE A CONTINUOUS COMMON SURFACE NOT INTERRUPTED BY STEPS OR BY ABRUPT CHANGES IN LEVEL EXCEEDING 1/8", AND SHALL BE A MINIMUM OF 48" IN WIDTH.
- D. WALKING SURFACE CROSS SLOPES SHALL NOT EXCEED 1/8" PER FOOT.
- E. WALKS, SIDEWALKS AND PEDESTRIAN WAYS SHALL BE FREE OF GRATING WHENEVER POSSIBLE. FOR GRATINGS LOCATED IN THE SURFACE OF ANY OF THESE AREAS, GRID OPENINGS IN THE GRATINGS SHALL BE LIMITED TO 1/2" IN THE DIRECTION OF TRAFFIC FLOW.
- F. ON ACCESSIBLE ROUTES, WHEN THE SLOPE IN THE DIRECTION OF TRAVEL OF ANY WALK EXCEEDS 1V:20H, IT SHALL COMPLY WITH THE PROVISIONS OF A PEDESTRIAN RAMP.
- G. PER CALIFORNIA BUILDING CODE: ON ACCESSIBLE ROUTES, CHANGES IN ELEVATION UP TO 1/8" ARE ALLOWED, CHANGES GREATER THAN 1/8" MUST BE BEVELED NO GREATER THAN 1V:2H AND CHANGES GREATER THAN 1/8" SHALL COMPLY WITH REQUIREMENTS FOR CURB RAMP.
- H. NO SLOPE SHALL BE GREATER THAN 1V:2H. SLOPES GREATER THAN 1V:2H MUST BE AN ENGINEERED SLOPE OR CONTOURED UTILIZING A RETAINING WALL OR OTHER APPROVED STRUCTURAL MEANS. THE GENERAL CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD IF A DISCREPANCY IS FOUND IN THE FIELD WHICH CREATES A SCOPE CONDITION THAT EXCEEDS 1V:2H. FAILURE TO CONTACT THE ENGINEER PRIOR TO COMMENCING WORK WILL RESULT IN CORRECTIVE MEASURES AT THE CONTRACTOR'S EXPENSE.
- I. ALL WALKS WITH CONTINUOUS SLOPE SHALL HAVE LEVEL AREAS AT LEAST 6 FEET IN LENGTH AT INTERVALS OF AT LEAST EVERY 400 FEET.
- J. ASPHALT ELEVATION ADJACENT TO CATCH BASINS TO BE 1/2" ABOVE RIM ELEVATION SHOWN FOR CATCH BASIN (TYPICAL).
- K. INSTALL ALL NECESSARY EROSION CONTROL MEASURES PRIOR TO THE START OF ANY GRADING ACTIVITIES. REFER TO THE EROSION CONTROL PLAN FOR DETAILS AND PROCEDURES.
- L. NO GRADING ACTIVITIES SHALL BE PERFORMED OFF-SITE WITHOUT THE EXPRESSED WRITTEN CONSENT OF THE ADJACENT PROPERTY OWNER AND LOCAL JURISDICTION.
- M. EXISTING GRADES SHALL BE MATCHED WITHIN THE LEGAL BOUNDARY UNLESS OTHER PROVISIONS HAVE BEEN MADE.
- N. SOILS IMPORTED INTO THE SITE FOR STRUCTURAL FILL SHALL BE CLEAN AND FREE OF ORGANIC MATERIALS.
- O. CONTRACTOR TO ADJUST AND/OR RECONSTRUCT TO PROPOSED GRADE ALL MANHOLES, CLEANOUTS, VALVES, VAULTS, GREASE TRAPS, AND ALL OTHER UTILITY APPURTENANCES AS NEEDED. SEE THE GRADING PLAN FOR PROPOSED GRADING INFORMATION.

MITIGATION MEASURES

- 1. THE CONTRACTOR SHALL ENSURE THAT THE FOLLOWING CONSTRUCTION IMPACT MITIGATION MEASURES ARE FULLY IMPLEMENTED THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS PROJECT. FAILURE TO COMPLY WITH THESE CONDITIONS BY THE APPLICANT, PROJECT CONTRACTORS OR SUBCONTRACTORS SHALL BE CAUSE FOR SHUTDOWN OF THE PROJECT SITE UNTIL COMPLIANCE WITH THE FOLLOWING CONDITIONS CAN BE ENSURED BY THE CITY.
- 1. MITIGATION MEASURE: THESE CONSTRUCTION IMPACT MITIGATION MEASURES SHALL BE INCLUDED IN ALL CONTRACT DOCUMENTS FOR THE PROJECT TO ENSURE FULL DISCLOSURE TO CONTRACTORS AND SUBCONTRACTORS.
- 2. EQUIPMENT: MITIGATION OF CONSTRUCTION PHASE NOISE AT THE SITE SHALL INCLUDE THE USE OF QUIET OR 'NEW TECHNOLOGY' EQUIPMENT, PARTICULARLY WITH IMPROVED EXHAUST MUFFLERS. ALL INTERNAL COMBUSTION ENGINES USED AT THE PROJECT SITE SHALL BE EQUIPPED WITH THE TYPE OF MUFFLER RECOMMENDED BY THE EQUIPMENT MANUFACTURER. IN ADDITION, ALL EQUIPMENT SHALL BE MAINTAINED IN GOOD MECHANICAL CONDITION SO AS TO MINIMIZE NOISE CREATED BY FAULTY OR POORLY MAINTAINED ENGINE, DRIVE-TRAIN AND OTHER COMPONENTS.
- 3. CONSTRUCTION HOURS: CONSTRUCTION SHALL BE LIMITED TO THE HOURS OF 7:00 A.M. TO 7:00 P.M. MONDAY THROUGH FRIDAY FOR ANY ONSITE OR OFFSITE WORK WITHIN 500 FEET OF ANY RESIDENTIAL UNIT SO AS TO AVOID THE MORE SENSITIVE EVENING, NIGHTTIME AND WEEKEND HOURS.
- 4. CONSTRUCTION DELIVERIES: DELIVERIES SHALL NOT OCCUR OUTSIDE THE ABOVE CONSTRUCTION HOURS. ALL DELIVERIES SHALL BE COORDINATED TO ENSURE THAT NO DELIVERY VEHICLES ARRIVE PRIOR TO THE OPENING OF THE GATES TO PREVENT THE DISRUPTION OF NEARBY RESIDENTS.
- 5. PLANS: THE CONSTRUCTION HOURS SHALL BE PRINTED ON ALL PLANS FOR THE PROJECT USED TO CONSTRUCT THE PROJECT.
- 6. FENCING: THE SITE SHALL BE WHOLLY ENCLOSED BY SECURITY FENCING. THE GATES TO THE PROJECT SITE SHALL REMAIN LOCKED DURING ALL OTHER TIMES, EXCEPT FOR A FIFTEEN-MINUTE PERIOD IMMEDIATELY PRECEDING AND FOLLOWING THE ABOVE HOURS OF CONSTRUCTION.
- 7. CONSTRUCTION EMPLOYEES: CONSTRUCTION WORKERS SHALL NOT ARRIVE TO THE SITE UNTIL THE OPENING OF THE PROJECT GATES. THE APPLICANT SHALL DESIGNATE A LOCATION WITHOUT ADJACENT RESIDENTIAL UNITS FOR WORKERS TO WAIT PRIOR TO THE OPENING OF THE PROJECT GATES.
- 8. CONSTRUCTION ACTIVITIES: CONSTRUCTION EQUIPMENT, MATERIALS, AND WORKERS SHALL NOT BE STAGED ON ANY AREA OF THE SITE WITHIN 50 FEET OF AN ADJOINING PROPERTY USED FOR RESIDENTIAL PURPOSES UNLESS THE DIRECTOR OF PLANNING APPROVES A PERMIT ADJUSTMENT AUTHORIZING SUCH ACTIVITY. THE CONSTRUCTION STAGING AREA SHALL NOT CREATE A PUBLIC OR PRIVATE NUISANCE.
- 9. DISTURBANCE COORDINATOR: A DISTURBANCE COORDINATOR SHALL BE IDENTIFIED BY THE DEVELOPER FOR THIS PROJECT. THE DISTURBANCE COORDINATOR SHALL BE RESPONSIBLE FOR ENSURING COMPLIANCE WITH THE HOURS OF CONSTRUCTION, SITE OPENING, AND OTHER CONSTRUCTION-RELATED CONDITIONS IN THIS PERMIT.
- 10. DAILY LOG: THE DISTURBANCE COORDINATOR SHALL MAINTAIN A LOG OF DAILY ACTIVITIES ON THE PROJECT, INCLUDING BUT NOT LIMITED TO, VERIFICATION OF SITE CLOSURE ACTIVITIES, PROJECT CLEANLINESS, COMPLAINTS ON SITE ACTIVITIES AND CONDITIONS AND DATES AND TIMES OF THE COORDINATOR'S VISITS TO THE PROJECT IF THE COORDINATOR IS NOT SOLELY RESPONSIBLE FOR THIS PROJECT SITE. THIS LOG SHALL BE AVAILABLE FOR INSPECTION BY CITY STAFF UPON REQUEST.
- 11. TELEPHONE CONTACT: A PHONE WITH ANSWERING MACHINE FOR COMPLAINTS OR OTHER COMMUNICATION DURING NON-WORK HOURS SHALL BE MAINTAINED DURING THE DURATION OF PROJECT CONSTRUCTION. THE PHONE NUMBER SHOULD BE A LOCAL CALL FOR SURROUNDING RESIDENTS.
- 12. SIGNAGE: THE NAME AND PHONE NUMBER OF THE DISTURBANCE COORDINATOR, THE HOURS OF CONSTRUCTION LIMITATIONS, THE PROJECT CONTACT TELEPHONE NUMBER, CITY FILE NUMBER H07-046, CITY CONTACT AND PHONE NUMBER (DEPARTMENT AND PHONE NUMBER) SHALL BE DISPLAYED ON A WEATHER-PROOF SIGN POSTED AT EACH ENTRANCE TO THE PROJECT SITE.

SITE NOTES

- A. TAPER LAST 10' OF 6" CURB FROM TYPICAL CURB DETAIL TO MEET AND MATCH CONFIGURATION AND ELEVATION OF EXISTING ADJOINING CURB, PAVEMENT, OR SIDEWALK, OR TRAMP CATCH AT EXISTING SIDEWALK.
- B. ACCESSIBLE PARKING TO MEET ADA AND LOCAL ACCESSIBILITY CODES AND REQUIREMENTS.
- C. PROVIDE A 4" MINIMUM WIDTH ACCESSIBLE ROUTE FROM BUILDING TO PUBLIC RIGHT-OF-WAY PER PLAN. CROSS SLOPE IS NOT TO EXCEED 2.00% RUNNING SLOPE NOT TO EXCEED 5.00%.
- D. ALL RADII ARE 5' OR HALF THE ISLAND WIDTH UNLESS OTHERWISE NOTED.
- E. ALL DIMENSIONS ARE TO FACE OF CURB AND BUILDING FOUNDATION WALL UNLESS OTHERWISE NOTED.
- F. PAVEMENT STRIPING SHALL BE ALKD-READY MIX PER DOT SPECIFICATIONS.
- G. ALL SIGNAGE SHALL COMPLY WITH LOCAL REQUIREMENTS. VERIFY STYLE WITH OWNER'S REPRESENTATIVE.
- H. TRASH ENCLOSURE APRON TO BE INSTALLED PER CONCRETE TURN DOWN EDGE DETAIL.

DEMOLITION NOTES

- A. BUILDING AND APPURTENANCES DESIGNATED FOR DEMOLITION SHALL NOT BE DISTURBED BY THE CONTRACTOR UNTIL FURNISHED WITH NOTICE OF POSSESSION AND APPROVAL TO PROCEED FROM OWNER. THE CONTRACTOR SHALL COORDINATE THE SCHEDULE WITH EXISTING TENANTS AND ADJACENT PROPERTY OWNERS.
- B. FOUNDATIONS, SLABS, ALL UNDERGROUND STRUCTURES, AND UTILITIES DESIGNATED FOR REMOVAL SHALL BE REMOVED ENTIRELY. AREAS TO BE BACK FILLED IN ACCORDANCE WITH GEOTECHNICAL REPORT.
- C. ALL MATERIAL EXCEPT THAT BELONGING TO A PUBLIC UTILITY COMPANY OR AS IDENTIFIED BY THE OWNER SHALL BECOME PROPERTY OF THE CONTRACTOR. CONTRACTOR SHALL NOTIFY OWNER OF WATER, ELECTRIC OR GAS METERS WHEN METERS ARE READY FOR REMOVAL. CONTRACTOR IS RESPONSIBLE FOR DISCONNECTING ALL UTILITIES IN COMPLIANCE WITH LOCAL REQUIREMENTS.
- D. CONTRACTOR IS SOLELY RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES THAT ARE INTENDED TO PROVIDE SERVICE WHETHER SHOWN ON THE PLANS OR NOT.
- E. ALL EXISTING UTILITIES WITHIN THE BUILDING PAD AREA ARE TO BE COMPLETELY REMOVED, UNLESS NOTED OTHERWISE ON THE PLANS.
- F. CONTRACTOR TO VERIFY THAT ALL UTILITIES HAVE BEEN ABANDONED OR PROPERLY SHUTOFF PRIOR TO EXCAVATION.
- G. EXISTING UTILITIES AND TOPO LOCATIONS ARE BASED ON THE BEST AVAILABLE INFORMATION. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATION WHETHER SHOWN ON PLANS OR NOT.
- H. ALL DEBRIS FROM DEMOLITION, NOT BEING REUSED, SHALL BE HAULED OFF SITE AND DISPOSED OF BY LEGAL MEANS.
- I. CONTRACTOR SHALL ERECT AND MAINTAIN TEMPORARY FENCE, 6 FOOT MINIMUM HEIGHT, FOR THE DURATION OF ALL DEMOLITION PHASES. UPON COMPLETION OF DEMOLITION PHASES, FENCE MAINTENANCE SHALL BE RESPONSIBILITY OF THE SITE CONTRACTOR.
- J. CONTRACTOR SHALL NOT RESTRICT ACCESS TO ADJOINING PROPERTIES DURING DEMOLITION OR CONSTRUCTION. ACCESS SHALL BE MAINTAINED SO AS NOT TO INTERRUPT NORMAL OPERATIONS OF ADJACENT FACILITIES.
- K. CONTRACTOR SHALL NOT ALLOW ANY UTILITY OR SERVICES TO THE NEIGHBORING PROPERTY(S) TO BE INTERRUPTED WITHOUT THE EXPRESSED WRITTEN PERMISSION OF THE RESPECTIVE OWNERS. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN ALL UTILITY SERVICES TO THE NEIGHBORING BUILDINGS. IF IT IS NECESSARY FOR CONNECTIONS TO BE INTERRUPTED, THE CONTRACTOR IS RESPONSIBLE TO PROVIDE TEMPORARY SERVICES (I.E., GENERATORS, PORTABLE GAS TANKS, ETC.). THE CONTRACTOR IS RESPONSIBLE TO COORDINATE ALL UTILITY ABANDONMENT AND REMOVAL WITH THE RESPECTIVE UTILITY COMPANIES.
- L. ANY EXISTING UTILITIES COMPLETELY EXCAVATED AND REMOVED SHALL BE BACKFILLED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.
- M. WORK CANNOT OCCUR OUTSIDE OF THE DEMOLITION LIMITS WITHOUT PRIOR CONSENT OF OWNER, ADJACENT OWNER, AND LOCAL JURISDICTION. ANY TEMPORARY EASEMENTS REQUIRED WHICH ARE NOT DEPICTED IN THE DRAWINGS SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- N. EROSION CONTROL PRACTICES MUST BE IN PLACE AND MAINTAINED DURING DEMOLITION.
- O. GENERAL CONTRACTOR IS TO PRESENT LICENSING INFORMATION TO THE STATE ENVIRONMENTAL PROTECTION AGENCY THIRTY (30) DAYS PRIOR TO COMMENCEMENT OF ANY DEMOLITION.

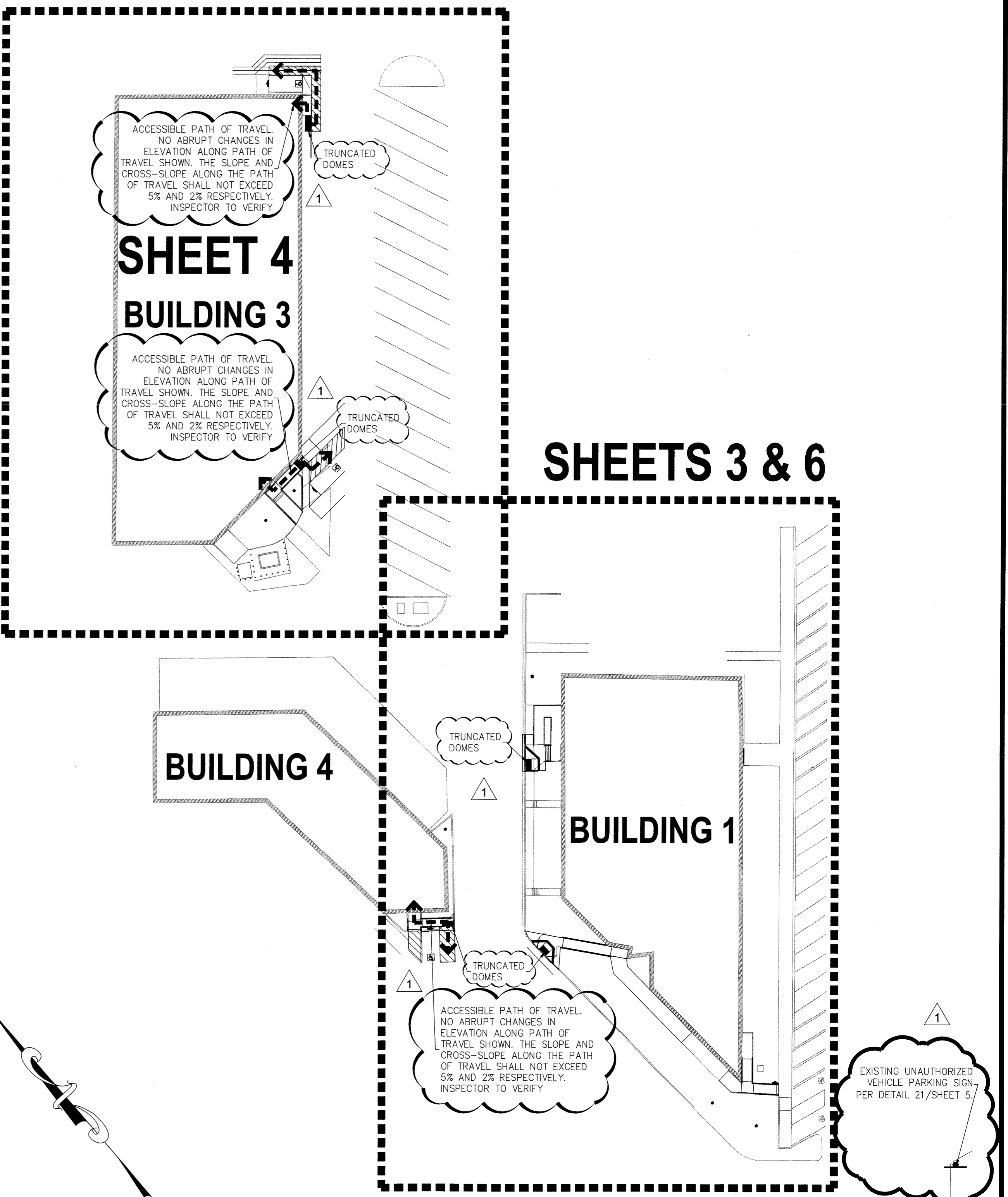
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- B. ALL PROPOSED SPOT ELEVATIONS AND CONTOURS SHOWN ON THE PLAN ARE PROPOSED FINISHED GRADES. FINISHED GRADE ADJACENT TO THE BUILDING SHALL BE 4" MINIMUM BELOW THE FINISH SWEEP SCREED OF THE BUILDING INCLUDING ANY TOPSOIL, MULCH, AND/OR SOD. THE GENERAL CONTRACTOR SHALL ADJUST SUBGRADE ELEVATIONS ACCORDINGLY TO ENSURE POSITIVE DRAINAGE AWAY FROM THE BUILDING. SEE THE BUILDING PLANS FOR FURTHER DETAILS. GENERAL CONTRACTOR SHALL ALSO ADJUST SUBGRADE ELEVATION IN ALL LANDSCAPED ISLANDS TO ACCOUNT FOR TOPSOIL AND MULCH. SEE LANDSCAPE PLANS FOR FURTHER DETAIL.
- C. WALKS AND SIDEWALKS SHALL HAVE A CONTINUOUS COMMON SURFACE NOT INTERRUPTED BY STEPS OR BY ABRUPT CHANGES IN LEVEL EXCEEDING 1/8", AND SHALL BE A MINIMUM OF 48" IN WIDTH.
- D. WALKING SURFACE CROSS SLOPES SHALL NOT EXCEED 1/8" PER FOOT.
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- F. ON ACCESSIBLE ROUTES, WHEN THE SLOPE IN THE DIRECTION OF TRAVEL OF ANY WALK EXCEEDS 1V:20H, IT SHALL COMPLY WITH THE PROVISIONS OF A PEDESTRIAN RAMP.
- G. PER CALIFORNIA BUILDING CODE: ON ACCESSIBLE ROUTES, CHANGES IN ELEVATION UP TO 1/8" ARE ALLOWED, CHANGES GREATER THAN 1/8" MUST BE BEVELED NO GREATER THAN 1V:2H AND CHANGES GREATER THAN 1/8" SHALL COMPLY WITH REQUIREMENTS FOR CURB RAMP.
- H. NO SLOPE SHALL BE GREATER THAN 1V:2H. SLOPES GREATER THAN 1V:2H MUST BE AN ENGINEERED SLOPE OR CONTOURED UTILIZING A RETAINING WALL OR OTHER APPROVED STRUCTURAL MEANS. THE GENERAL CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD IF A DISCREPANCY IS FOUND IN THE FIELD WHICH CREATES A SCOPE CONDITION THAT EXCEEDS 1V:2H. FAILURE TO CONTACT THE ENGINEER PRIOR TO COMMENCING WORK WILL RESULT IN CORRECTIVE MEASURES AT THE CONTRACTOR'S EXPENSE.
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- J. ASPHALT ELEVATION ADJACENT TO CATCH BASINS TO BE 1/2" ABOVE RIM ELEVATION SHOWN FOR CATCH BASIN (TYPICAL).
- K. INSTALL ALL NECESSARY EROSION CONTROL MEASURES PRIOR TO THE START OF ANY GRADING ACTIVITIES. REFER TO THE EROSION CONTROL PLAN FOR DETAILS AND PROCEDURES.
- L. NO GRADING ACTIVITIES SHALL BE PERFORMED OFF-SITE WITHOUT THE EXPRESSED WRITTEN CONSENT OF THE ADJACENT PROPERTY OWNER AND LOCAL JURISDICTION.
- M. EXISTING GRADES SHALL BE MATCHED WITHIN THE LEGAL BOUNDARY UNLESS OTHER PROVISIONS HAVE BEEN MADE.
- N. SOILS IMPORTED INTO THE SITE FOR STRUCTURAL FILL SHALL BE CLEAN AND FREE OF ORGANIC MATERIALS.
- O. CONTRACTOR TO ADJUST AND/OR RECONSTRUCT TO PROPOSED GRADE ALL MANHOLES, CLEANOUTS, VALVES, VAULTS, GREASE TRAPS, AND ALL OTHER UTILITY APPURTENANCES AS NEEDED. SEE THE GRADING PLAN FOR PROPOSED GRADING INFORMATION.

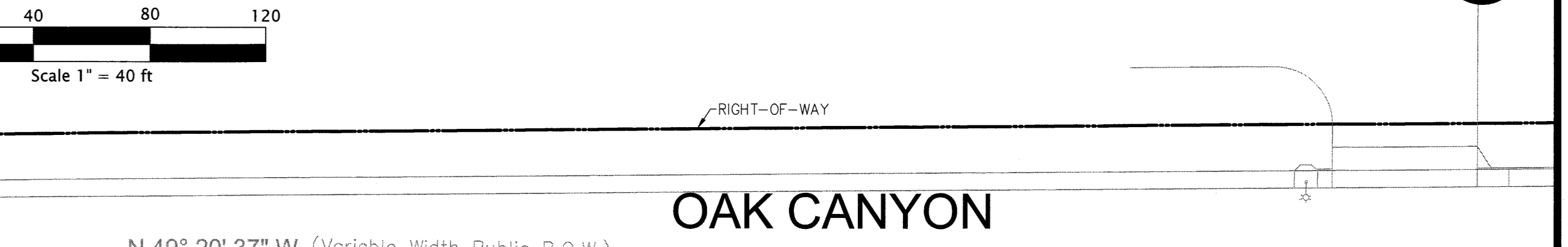
PAVING NOTES

- A. THE COMPACTED SUBGRADE BENEATH PAVEMENTS SHALL BE COMPACTED TO AT LEAST 98% OF THE MODIFIED PROCTOR (ASTM D1557-00) MAXIMUM DENSITY.
- B. ASPHALT PAVEMENT AND AGGREGATE BASE ROCK MATERIALS SHALL BE PROVIDED AND INSTALLED PER THE MOST CURRENT CALTRANS STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
- C. MATCH NEW ASPHALTIC PAVEMENT SECTIONS TO EXISTING ASPHALTIC PAVEMENT SECTIONS.
- D. PORTLAND CEMENT CONCRETE - CROSS SECTION SHALL BE AS FOLLOWS: SEE DETAILS.
- E. CONTRACTOR SHALL REFER TO GEOTECHNICAL REPORT FOR SPECIFICATIONS ON PAVEMENT CONSTRUCTION.

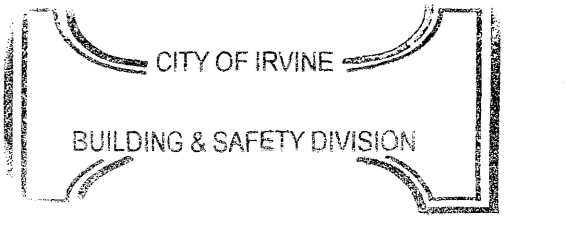
SHEETS 4 & 7



SHEETS 3 & 6



OVERALL SITE AND KEY MAP



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| <table border="1"> <tr> <th>NO.</th> <th>DATE</th> <th>REVISIONS</th> </tr> <tr> <td>6</td> <td></td> <td></td> </tr> <tr> <td>5</td> <td></td> <td></td> </tr> <tr> <td>4</td> <td></td> <td></td> </tr> <tr> <td>3</td> <td></td> <td></td> </tr> <tr> <td>2</td> <td></td> <td></td> </tr> <tr> <td>1</td> <td>04/14/2016</td> <td>PLAN CHECK COMMENTS</td> </tr> </table> | | NO. | DATE | REVISIONS | 6 | | | 5 | | | 4 | | | 3 | | | 2 | | | 1 | 04/14/2016 | PLAN CHECK COMMENTS | <table border="1"> <tr> <td>CITY OF IRVINE</td> <td>PREPARED BY</td> <td>GEOTECHNICAL & GEOLOGICAL FIRM:</td> <td>BENCHMARK:</td> <td>LEGAL DESCRIPTION:</td> <td> <input type="checkbox"/> PRELIMINARY GRADING PERMIT <input checked="" type="checkbox"/> PRECISE GRADING PERMIT GRADING PLAN CHECK # 00667070-CIT GRADING PERMIT # _____ CITY OF IRVINE COMMUNITY DEVELOPMENT DEPARTMENT </td> </tr> <tr> <td></td> <td>RCE# 84833 03-31-18</td> <td></td> <td>38-117-13 - FOUND 4" OCS ALUMINUM BENCHMARK DISK STAMPED "39-117-13" SET IN THE TOP OF TEH SOUTHWESTERLY RAIL ROAD BRIDGE WALL CORNER NORTHEAST OF THE RAILROAD TRACKS. MONUMENT IS LOCATED +/- 420' SWLY OF THE INTERSECTION OF SAND CANYON ROAD AND BURNT ROAD</td> <td>ELEV=38.984 FEET NAVD88 YEAR 2013</td> <td></td> </tr> <tr> <td></td> <td>CIVIL ENGINEER LICENSE NO. EXP. DATE</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>ERIC GRUBER PH: (949) 724-6689 FAX: (949) 724-7565</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>PUBLIC WORKS DEPARTMENT 6427 OAK CANYON IRVINE, CA</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>APP. DATE</td> <td>LICENSE NO. EXP. DATE</td> <td></td> <td>SITE ACREAGE: 0.125 AC. GR.</td> <td></td> </tr> </table> | | CITY OF IRVINE | PREPARED BY | GEOTECHNICAL & GEOLOGICAL FIRM: | BENCHMARK: | LEGAL DESCRIPTION: | <input type="checkbox"/> PRELIMINARY GRADING PERMIT <input checked="" type="checkbox"/> PRECISE GRADING PERMIT GRADING PLAN CHECK # 00667070-CIT GRADING PERMIT # _____ CITY OF IRVINE COMMUNITY DEVELOPMENT DEPARTMENT | | RCE# 84833 03-31-18 | | 38-117-13 - FOUND 4" OCS ALUMINUM BENCHMARK DISK STAMPED "39-117-13" SET IN THE TOP OF TEH SOUTHWESTERLY RAIL ROAD BRIDGE WALL CORNER NORTHEAST OF THE RAILROAD TRACKS. MONUMENT IS LOCATED +/- 420' SWLY OF THE INTERSECTION OF SAND CANYON ROAD AND BURNT ROAD | ELEV=38.984 FEET NAVD88 YEAR 2013 | | | CIVIL ENGINEER LICENSE NO. EXP. DATE | | | | | | ERIC GRUBER PH: (949) 724-6689 FAX: (949) 724-7565 | | | | | | PUBLIC WORKS DEPARTMENT 6427 OAK CANYON IRVINE, CA | | | | | | APP. DATE | LICENSE NO. EXP. DATE | | SITE ACREAGE: 0.125 AC. GR. | | <p>SHEET 2 OF 7</p> | | <p>JOB NO.</p> |
|---|--|---------------------------------|--|-----------------------------------|---|--|--|---|--|--|---|--|--|---|--|--|---|--|--|---|------------|---------------------|---|--|----------------|-------------|---------------------------------|------------|--------------------|---|--|---------------------|--|--|-----------------------------------|--|--|--------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-----------|-----------------------|--|-----------------------------|--|---------------------|--|----------------|
| NO. | DATE | REVISIONS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 1 | 04/14/2016 | PLAN CHECK COMMENTS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CITY OF IRVINE | PREPARED BY | GEOTECHNICAL & GEOLOGICAL FIRM: | BENCHMARK: | LEGAL DESCRIPTION: | <input type="checkbox"/> PRELIMINARY GRADING PERMIT <input checked="" type="checkbox"/> PRECISE GRADING PERMIT GRADING PLAN CHECK # 00667070-CIT GRADING PERMIT # _____ CITY OF IRVINE COMMUNITY DEVELOPMENT DEPARTMENT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | RCE# 84833 03-31-18 | | 38-117-13 - FOUND 4" OCS ALUMINUM BENCHMARK DISK STAMPED "39-117-13" SET IN THE TOP OF TEH SOUTHWESTERLY RAIL ROAD BRIDGE WALL CORNER NORTHEAST OF THE RAILROAD TRACKS. MONUMENT IS LOCATED +/- 420' SWLY OF THE INTERSECTION OF SAND CANYON ROAD AND BURNT ROAD | ELEV=38.984 FEET NAVD88 YEAR 2013 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | CIVIL ENGINEER LICENSE NO. EXP. DATE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | PUBLIC WORKS DEPARTMENT 6427 OAK CANYON IRVINE, CA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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CONSTRUCTION NOTES

SEE SHEET C1.0 FOR GENERAL NOTES

ALL ITEMS ARE EXISTING TO REMAIN UNLESS NOTED OTHERWISE

- 1 CONSTRUCT 6-INCH CONCRETE CURB PER DETAIL 1/SHEET 5
- 2 CONSTRUCT CONCRETE LANDING AND STAIRS AND HANDRAILS PER DETAIL 2/SHEET 5.
- 3 CONSTRUCT CONCRETE A.D.A ACCESSIBLE RAMP AND HANDRAILS PER DETAIL 2/SHEET 5. LENGTH AND WIDTH PER PLAN
- 4 REMOVE EXISTING CURB. LIMITS PER PLAN
- 5 CONSTRUCT CURB RAMP PER CITY STD DETAIL 202. LENGTH AND WIDTH PER PLAN.
- 6 INSTALL 3W X4L (U.N.O) TRUNCATED DOMES SURFACE PER CITY STD DETAIL 202 SHOWN ON SHEET 5
- 7 DEMOLISH EXISTING CONCRETE RAMP
- 8 SAW CUT/CONFORM LIMIT PER DETAIL 9/SHEET 5.
- 9 RECONSTRUCT AC PAVEMENT PER EXISTING STRUCTURAL SECTION WITHIN THE LIMITS OF SAW CUT PER DETAIL 9/SHEET 5.
- 10 PROPOSED LANDSCAPED AREA
- 11 PROTECT IN PLACE EXISTING PLANTER
- 12 PROPOSED ADA PARKING STRIPING PER DETAIL 13/SHEET 5
- 13 PROPOSED RETAINING WALL
- 14 REPLACE EXISTING HANDRAIL PER DETAIL 3/SHEET 5.
- 15 INSTALL INTERNATIONAL SYMBOL OF ACCESSIBILITY ON BUILDING ENTRANCE PER DETAIL 2/A0.3a OF ARCHITECTURAL SET
- 16 CONSTRUCT CONCRETE VALLEY GUTTER PER DETAIL 17/SHEET 5
- 17 CONSTRUCT CONCRETE WALK PER CITY STD DETAIL 201
- 18 PROVIDE ACCESSIBLE SIGNAGE PER DETAIL 19/SHEET 5
- 19 PROVIDE ACCESSIBLE DIRECTIONAL SIGN PER DETAIL 20/SHEET 5
- 20 DOWEL INTO EXISTING CONCRETE PER DETAIL 25/SHEET 5
- 21 PROTECT IN PLACE EXISTING STRUCTURE/UTILITY

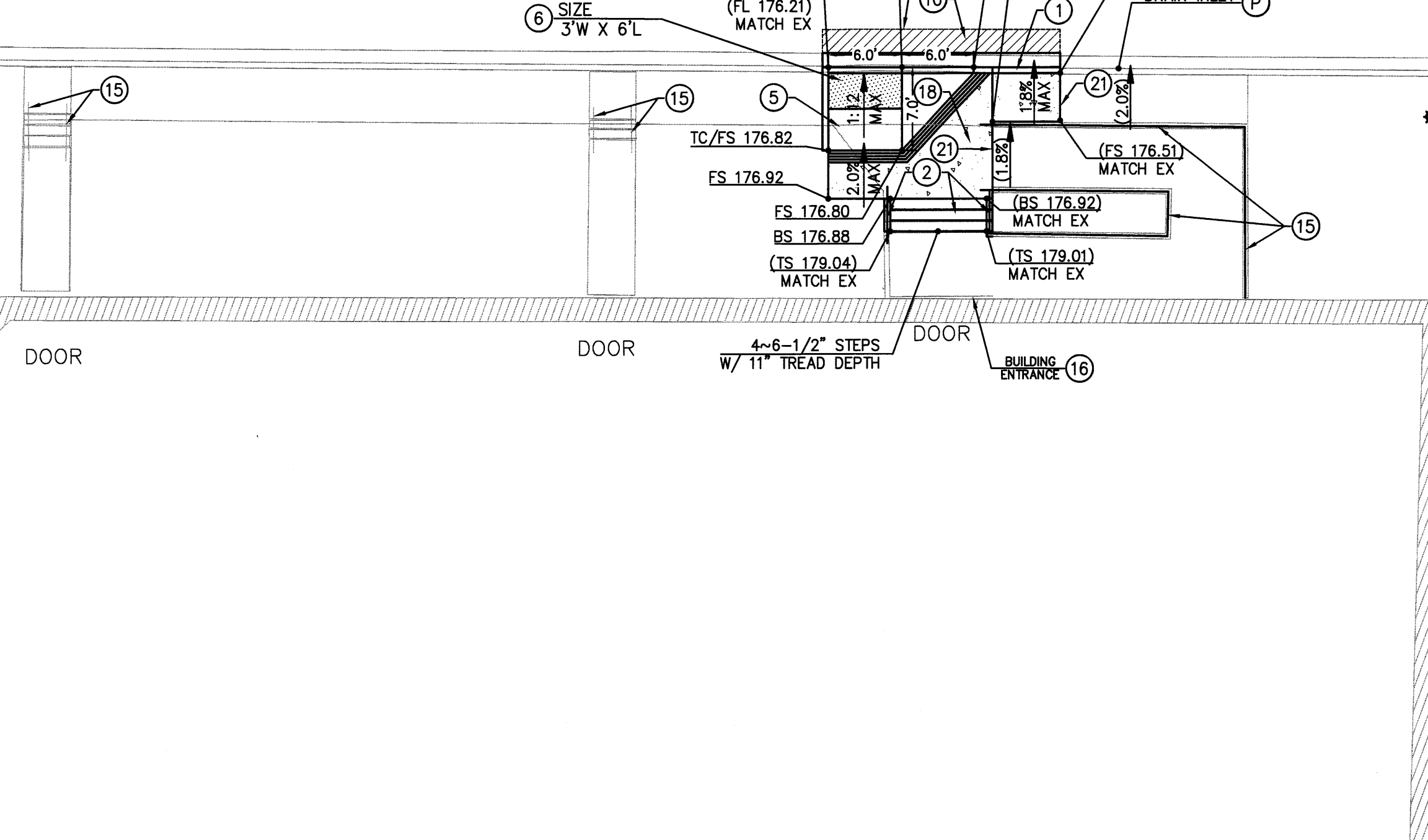
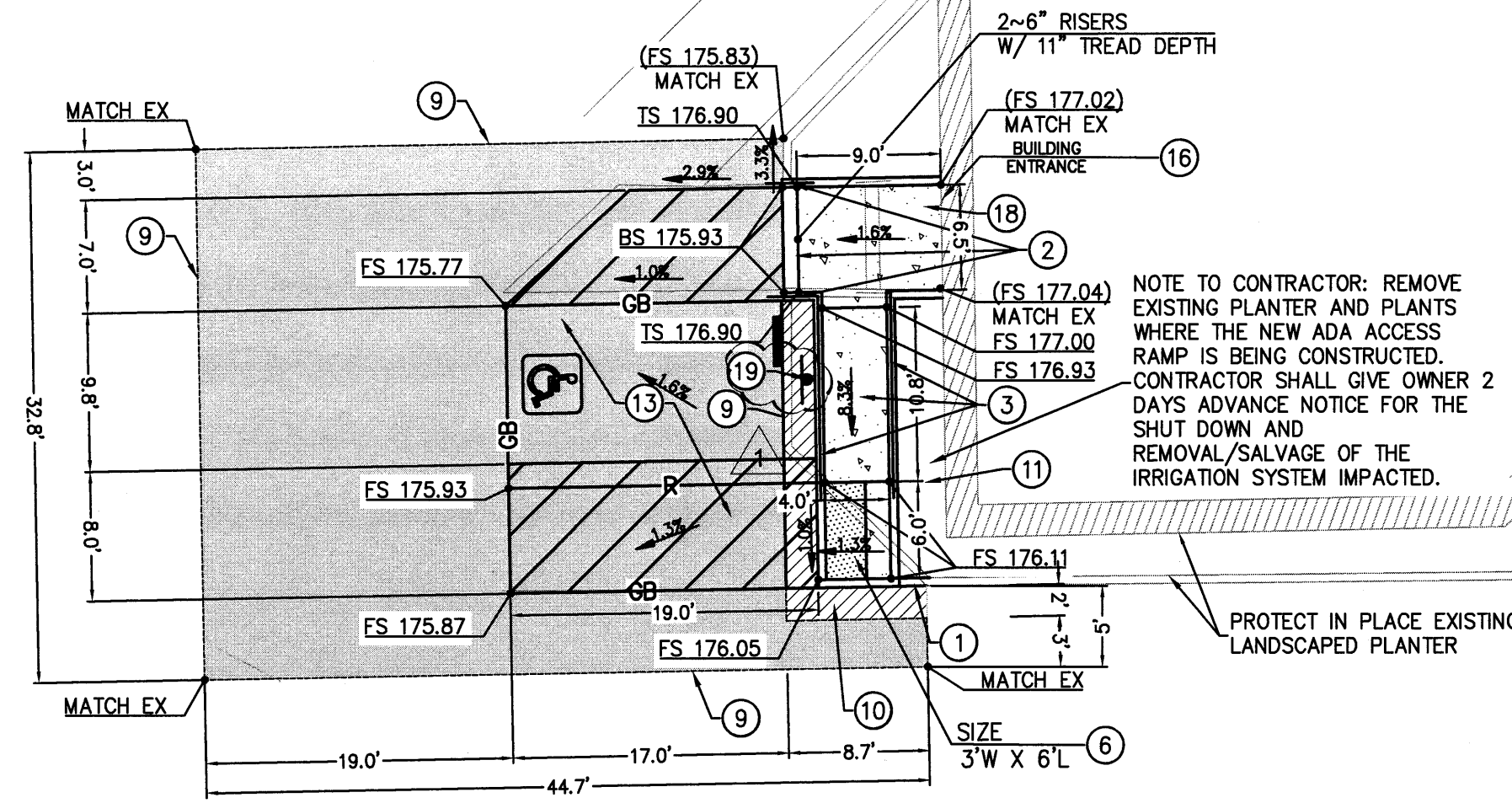
LEGEND

| EXISTING | PROPOSED | DEFINITION |
|----------|----------|--|
| | | RIGHT OF WAY LINE |
| | | SPOT ELEVATION |
| | | CONTOUR |
| | | CONCRETE WALK |
| | | NEW AC PAVEMENT, MATCH EXISTING SECTION. |
| | | NEW AC PAVEMENT OVERLAY |
| | | RIDGE LINE |
| | | GRADE BREAK |
| | | FINISHED SURFACE SLOPE |
| | | ACCESSIBLE PATH OF TRAVEL |
| | | NO PARKING ZONES |

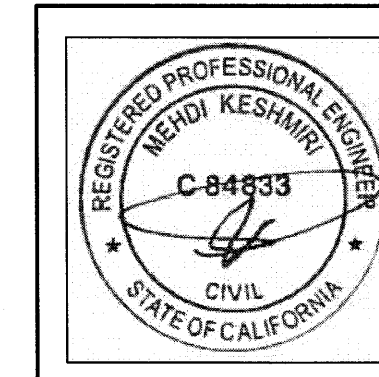
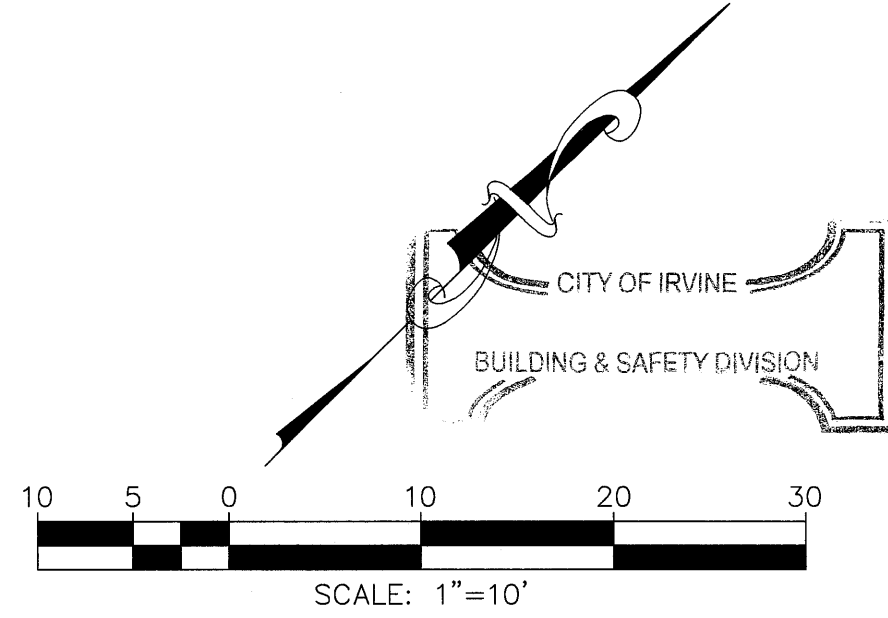
ABBREVIATIONS

BS BOTTOM OF STEP
 EX EXISTING
 FF FINISH FLOOR
 FL FLOW LINE
 FS FINISH SURFACE
 LIP LIP OF GUTTER
 TC TOP OF CURB
 TS TOP OF SLAB
 W/ WITH
 P PROTECT IN PLACE
 U.N.O. UNLESS NOTED OTHERWISE

BUILDING 4



BUILDING 1



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| NO. | DATE | REVISIONS |
|-----|------------|---------------------|
| 1 | 04/14/2016 | PLAN CHECK COMMENTS |

| | | |
|----------------|-------------------------|-----------------------|
| CITY OF IRVINE | PREPARED BY | RECEIVED |
| | | 03-31-18 |
| | CIVIL ENGINEER | LICENSE NO. EXP. DATE |
| | | |
| | PREPARED FOR: | |
| | CITY OF IRVINE | |
| | PUBLIC WORKS DEPARTMENT | ERIC GRUBER |
| | 6427 OAK CANYON | PH: (949) 724-6889 |
| | IRVINE, CA | FAX: (949) 724-7565 |

| | |
|---------------------------------|-----------------------------------|
| GEOTECHNICAL & GEOLOGICAL FIRM: | ELEV=38.984 FEET NAVD88 YEAR 2013 |
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| | |

BENCHMARK: 38-117-13
 DESCRIBED BY OCS 2013 - FOUND 4" OCS ALUMINUM BENCHMARK DISK STAMPED "38-117-13", SET IN THE TOP OF TEH SOUTHWESTERLY RAIL ROAD BRIDGE WALL CORNER NORTHEAST OF THE RAILROAD TRACKS. MONUMENT IS LOCATED +/- 420' SWLY OF THE INTERSECTION OF SAND CANYON ROAD AND BURNT ROAD

LEGAL DESCRIPTION:
 SITE ACREAGE: 0.125 AC. GR.

ADA IMPROVEMENTS
 OPERATIONS SUPPORT FACILITY
 PRECISE GRADING
 SITE PLAN & GRADING - BUILDING 1 & 4

CITY OF IRVINE
 COMMUNITY DEVELOPMENT DEPARTMENT

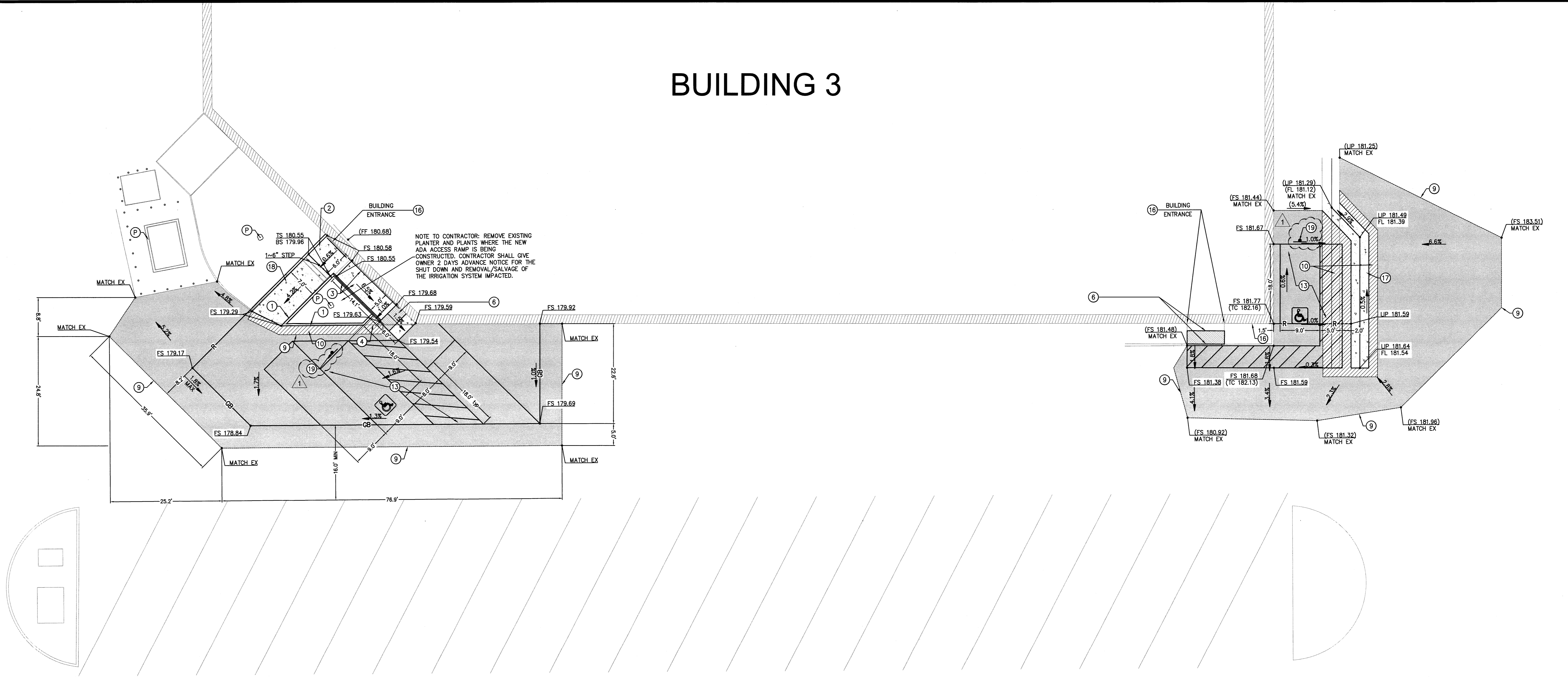
PRELIMINARY GRADING PERMIT
 PRECISE GRADING PERMIT
 GRADING PLAN CHECK # 00867070-CT1
 GRADING PERMIT # _____

SHEET 3 OF 7

JOB NO. _____

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 Date: 5/17/2016 11:12 AM (Anonymous) Plot Date: 5/17/2016 11:12 AM (Anonymous)

BUILDING 3



LEGEND

| EXISTING | PROPOSED | DEFINITION |
|----------|----------|--|
| (162±) | 162 | RIGHT OF WAY LINE |
| | | SPOT ELEVATION |
| | | CONTOUR |
| | | CONCRETE WALK |
| | | NEW AC PAVEMENT, MATCH EXISTING SECTION. |
| | | NEW AC PAVEMENT OVERLAY |
| | R | RIDGE LINE |
| | GB | GRADE BREAK |
| 0.0% | 0.0% | FINISHED SURFACE SLOPE |
| | | ACCESSIBLE PATH OF TRAVEL |
| | | NO PARKING ZONES |

ABBREVIATIONS

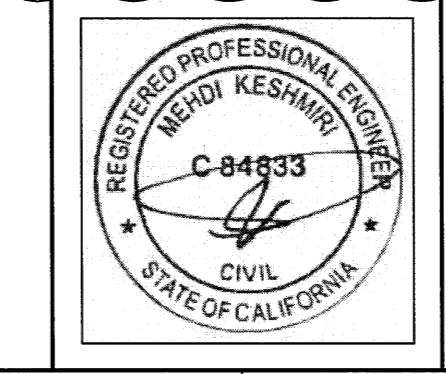
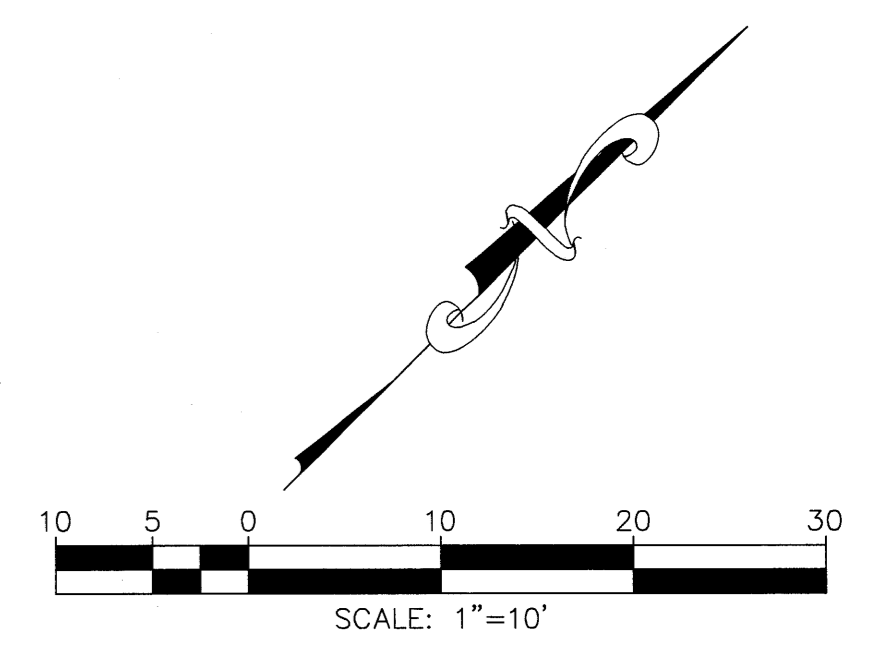
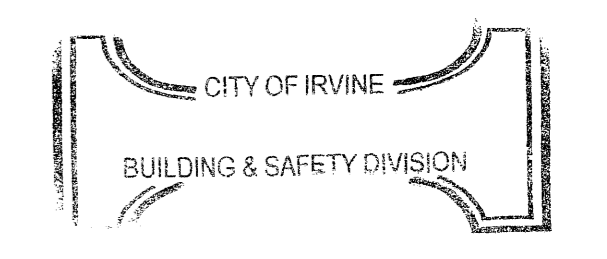
| | |
|--------|------------------------|
| BS | BOTTOM OF STEP |
| EX | EXISTING |
| FF | FINISH FLOOR |
| FL | FLOW LINE |
| FS | FINISH SURFACE |
| LIP | LIP OF GUTTER |
| TC | TOP OF CURB |
| TS | TOP OF SLAB |
| W/ | WITH |
| U.N.O. | UNLESS NOTED OTHERWISE |

CONSTRUCTION NOTES

SEE SHEET C1.0 FOR GENERAL NOTES

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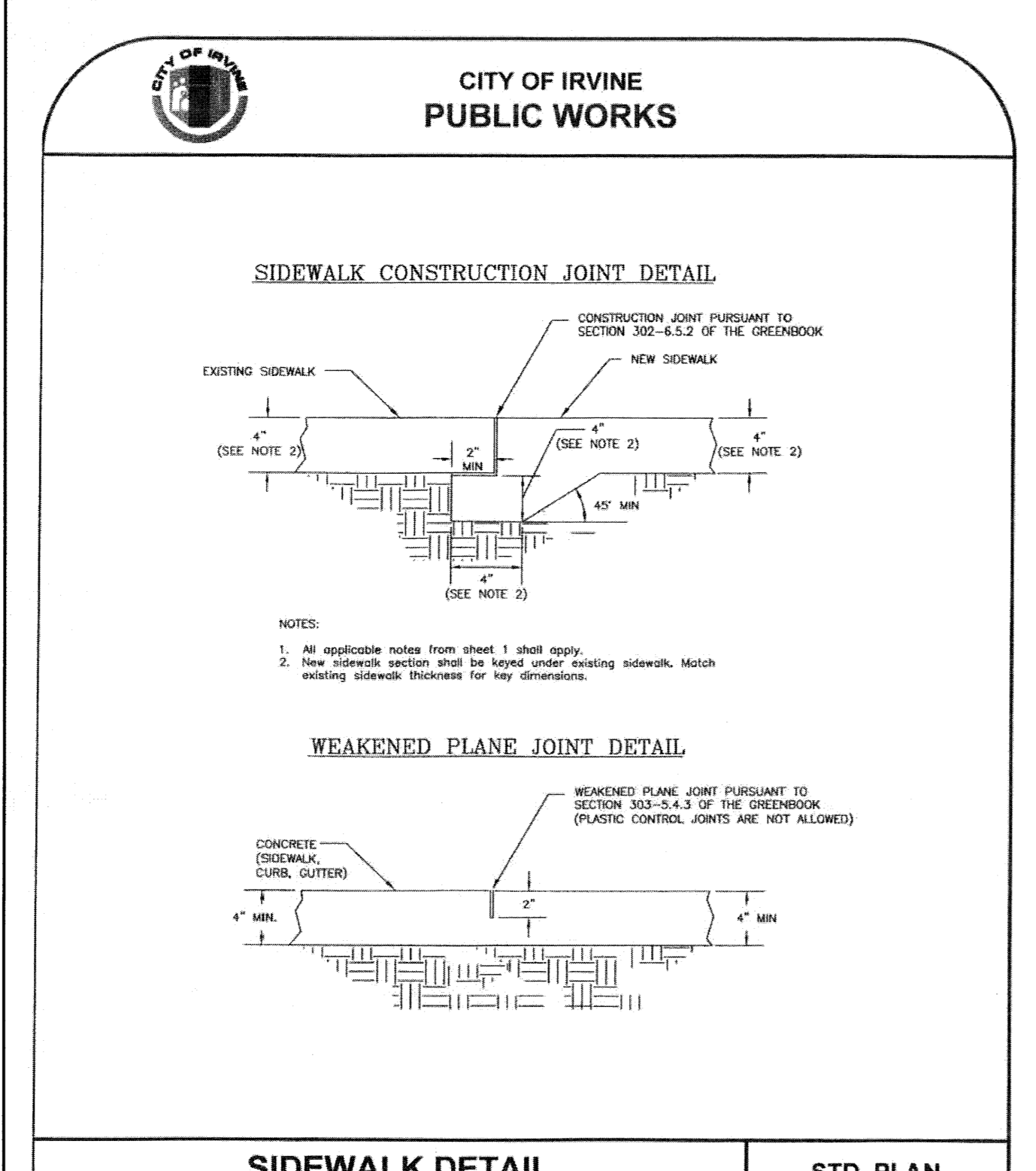
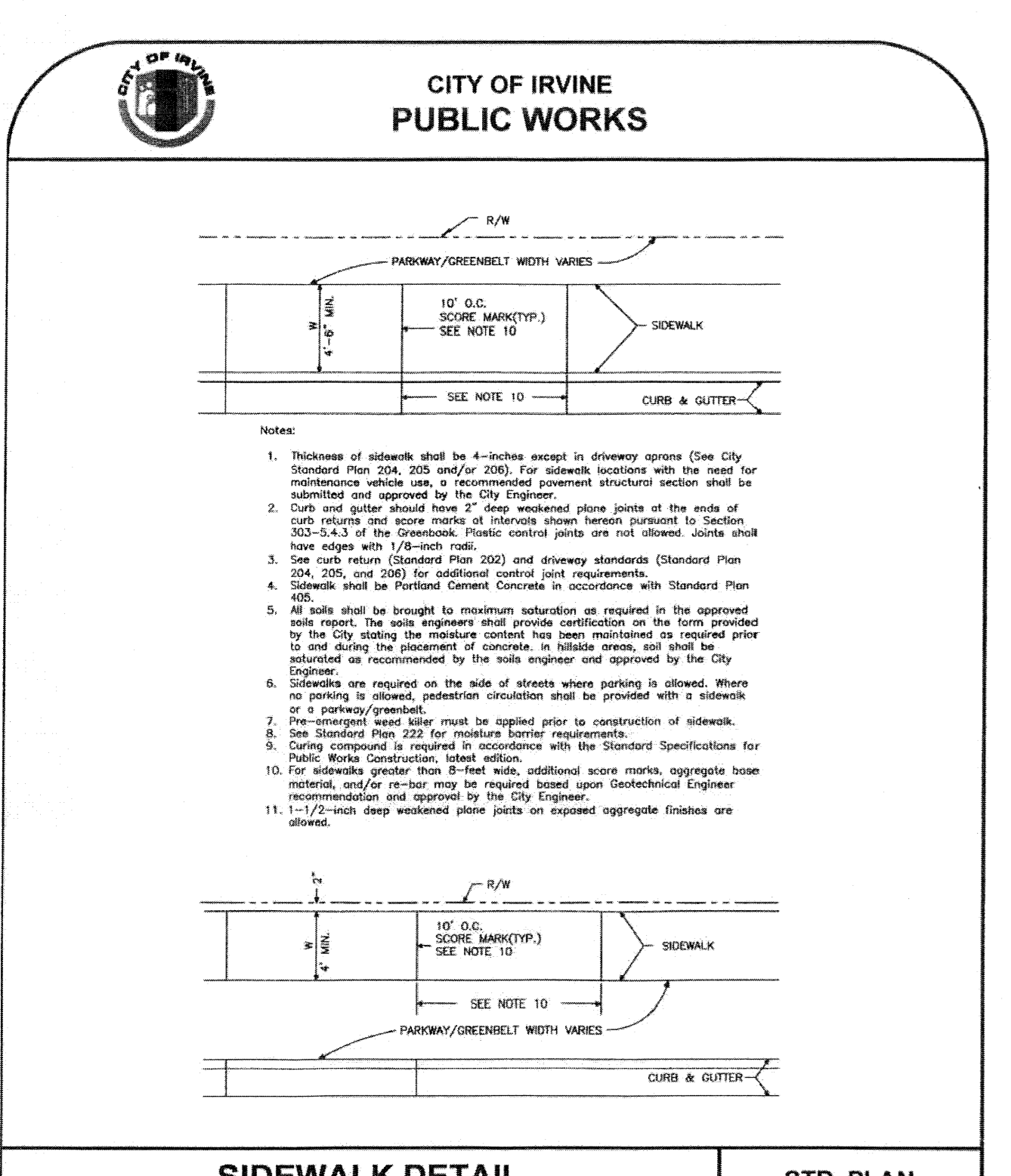
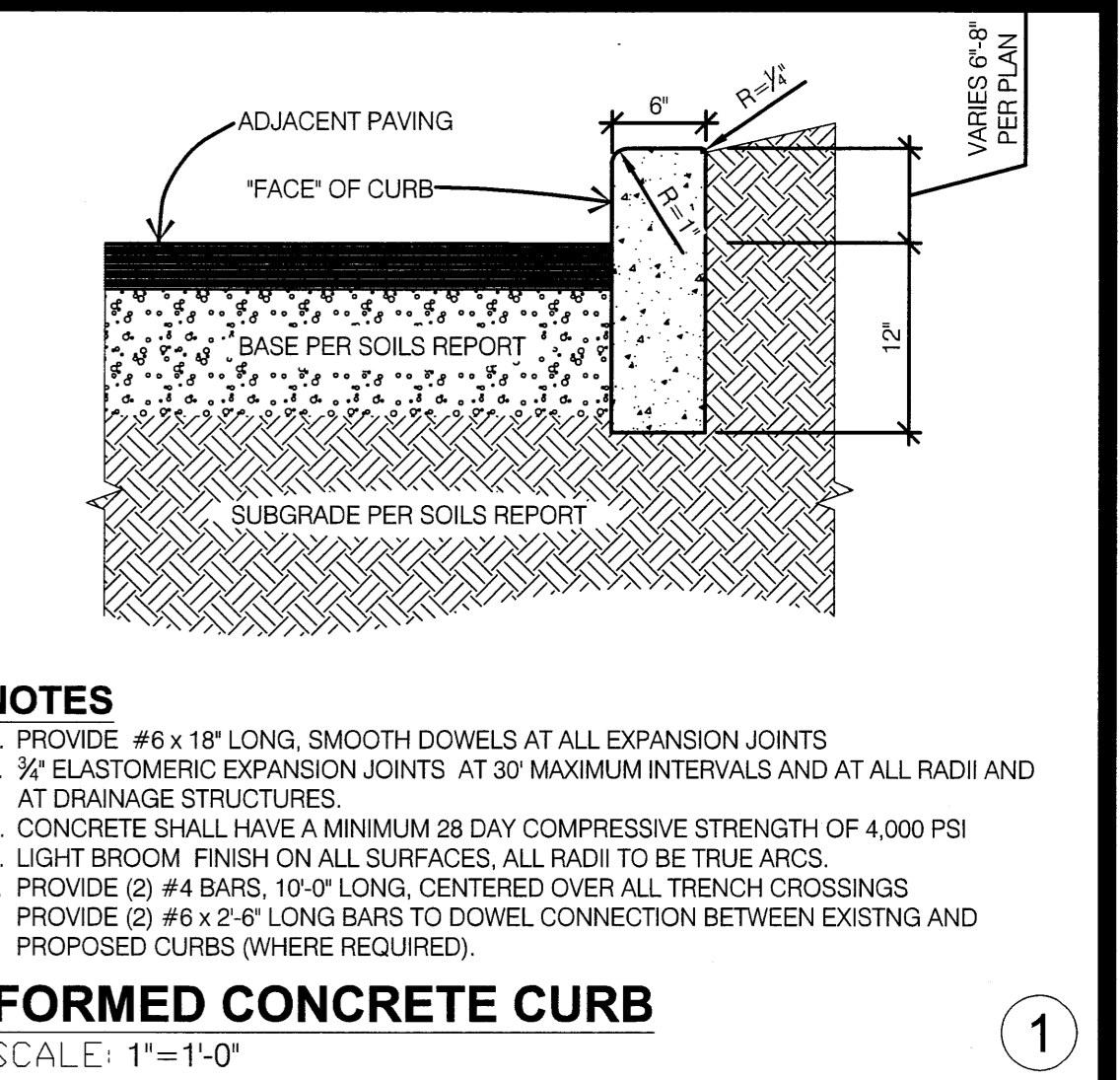
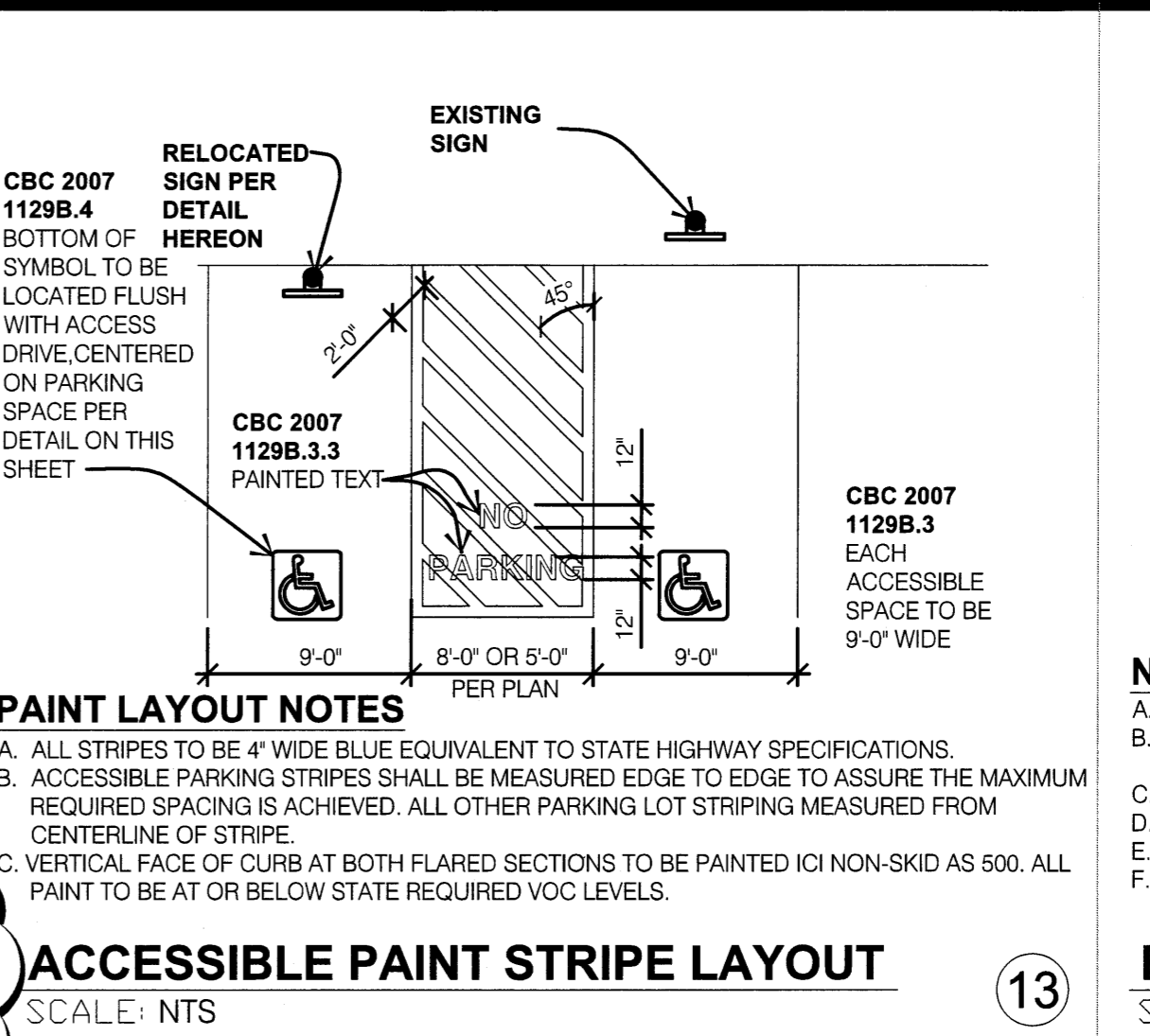
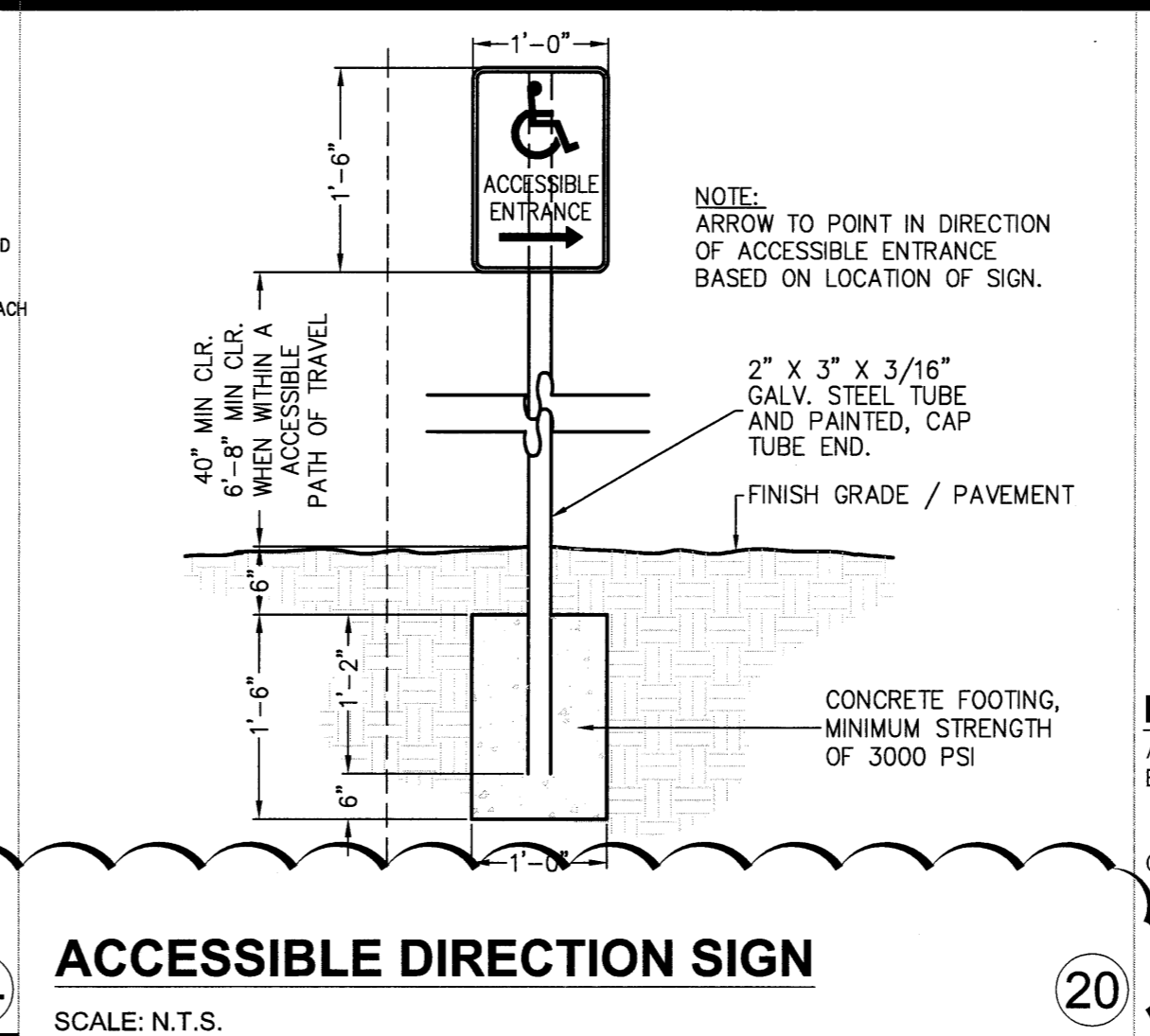
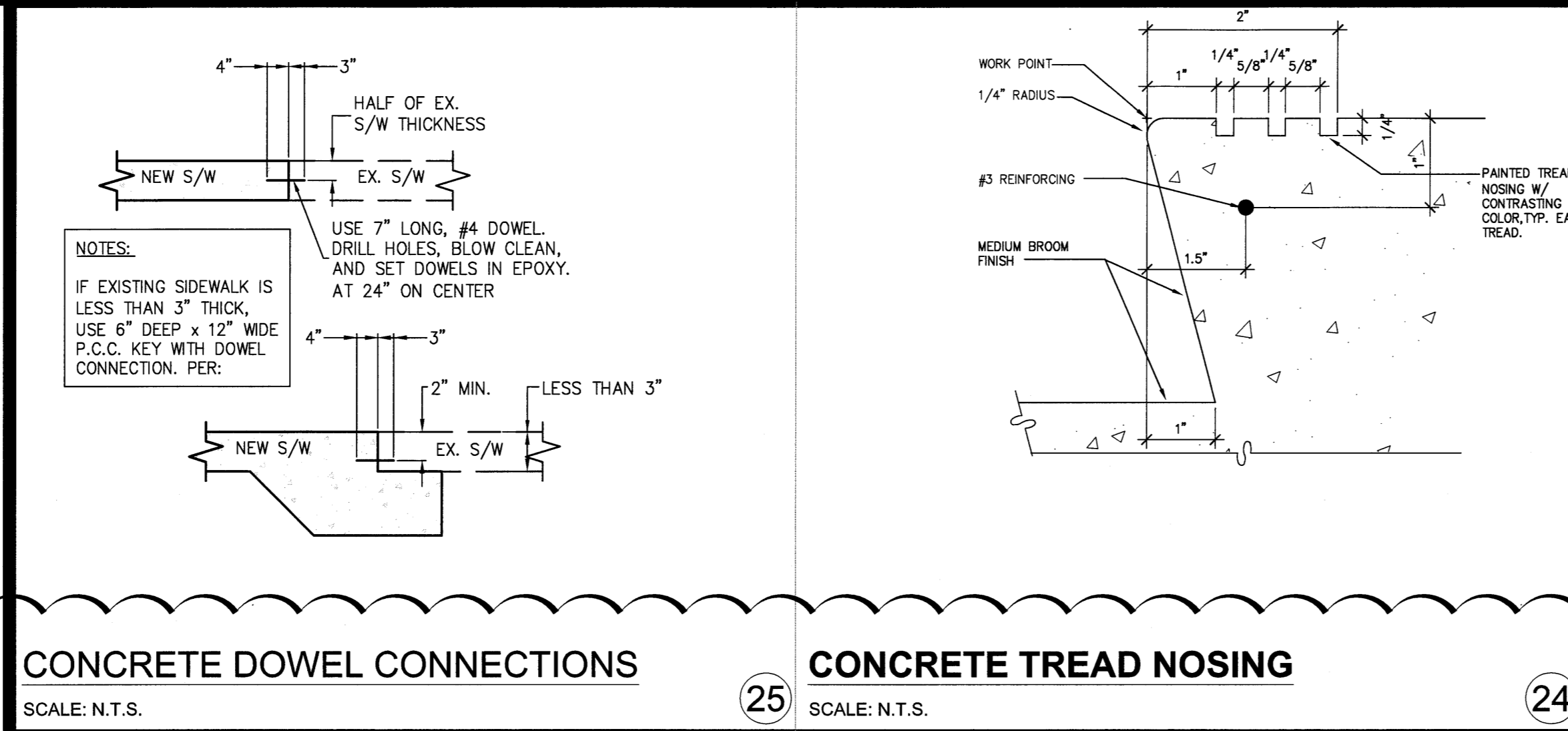
| NO. | DATE | REVISIONS | APP. | DATE |
|-----|------------|---------------------|------|------|
| 1 | 04/14/2016 | PLAN CHECK COMMENTS | | |

| CITY OF IRVINE | PREPARED BY | GEOTECHNICAL & GEOLOGICAL FIRM: | BENCHMARK: | LEGAL DESCRIPTION: |
|----------------|---|---------------------------------|--|--------------------|
| | ERIC GRUBER PUBLIC WORKS DEPARTMENT 6427 OAK CANYON IRVINE, CA | | 38-117-13 DESCRIBED BY OCS 2013 - FOUND 4" OCS ALUMINUM BENCHMARK DISK STAMPED "39-117-13", SET IN THE TOP OF TEH SOUTHWESTERLY RAIL ROAD BRIDGE WALL CORNER NORTHEAST OF THE RAILROAD TRACKS. MONUMENT IS LOCATED +/- 420' SWLY OF THE INTERSECTION OF SAND CANYON ROAD AND BURNT ROAD | |

| ADA IMPROVEMENTS OPERATIONS SUPPORT FACILITY PRECISE GRADING SITE PLAN & GRADING - BUILDING 3 | CITY OF IRVINE COMMUNITY DEVELOPMENT DEPARTMENT | PRELIMINARY GRADING PERMIT | PRECISE GRADING PERMIT |
|---|---|-----------------------------------|-------------------------------------|
| | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | GRADING PLAN CHECK # 00667070-CT1 | GRADING PERMIT # |

SHEET **4** OF **7**

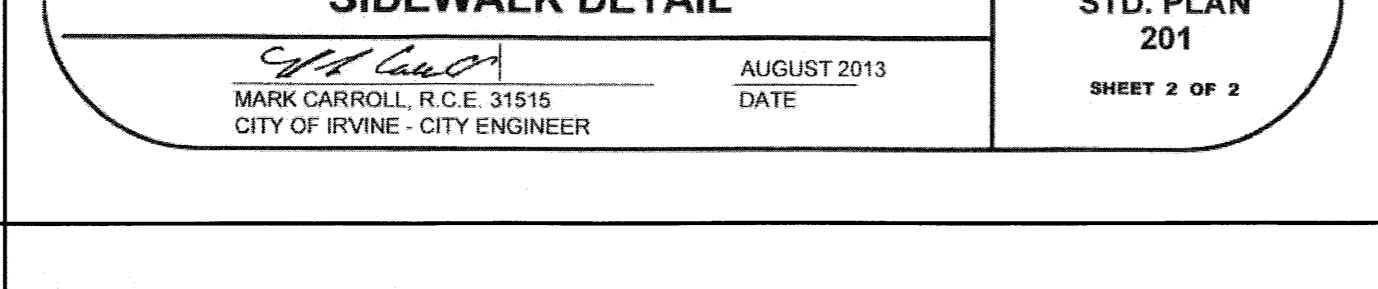
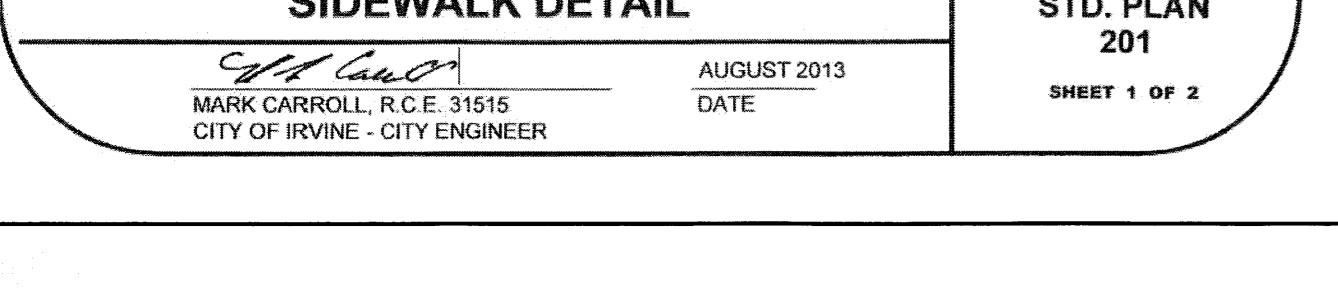
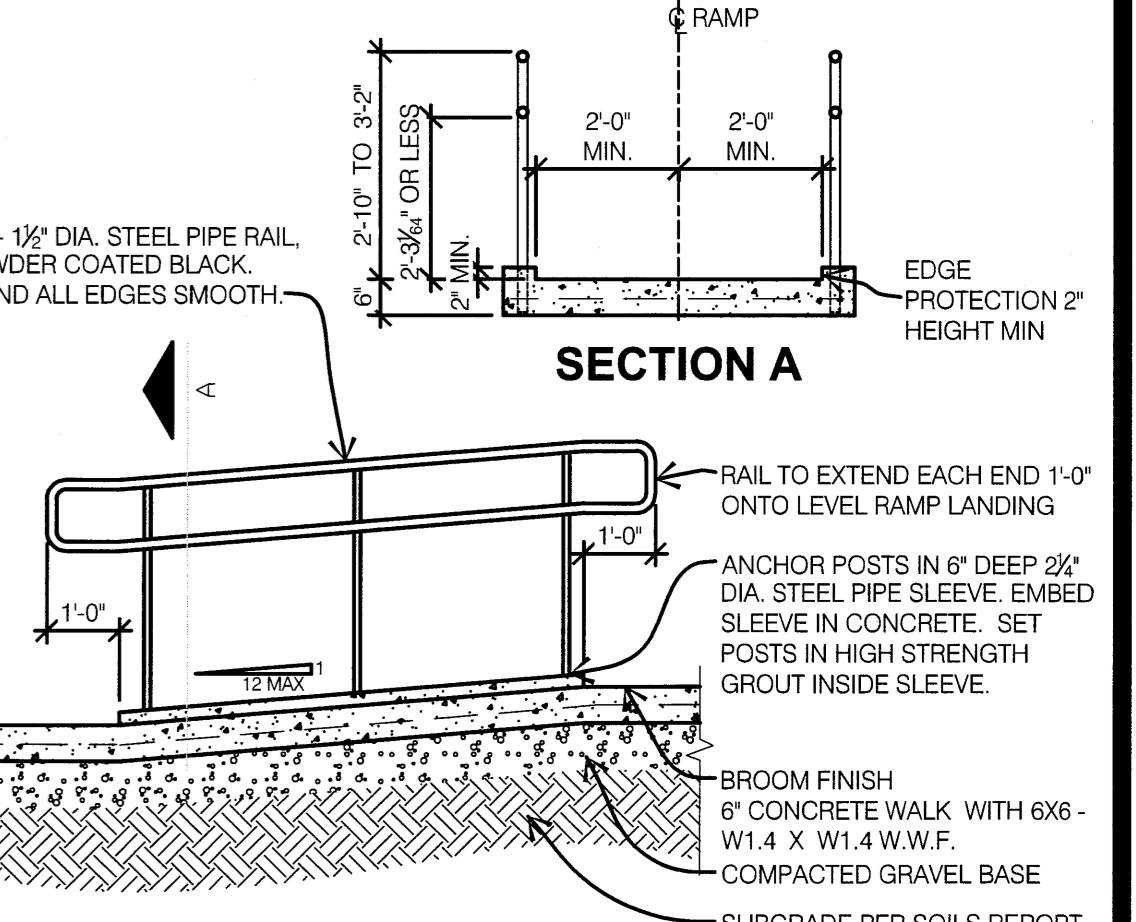
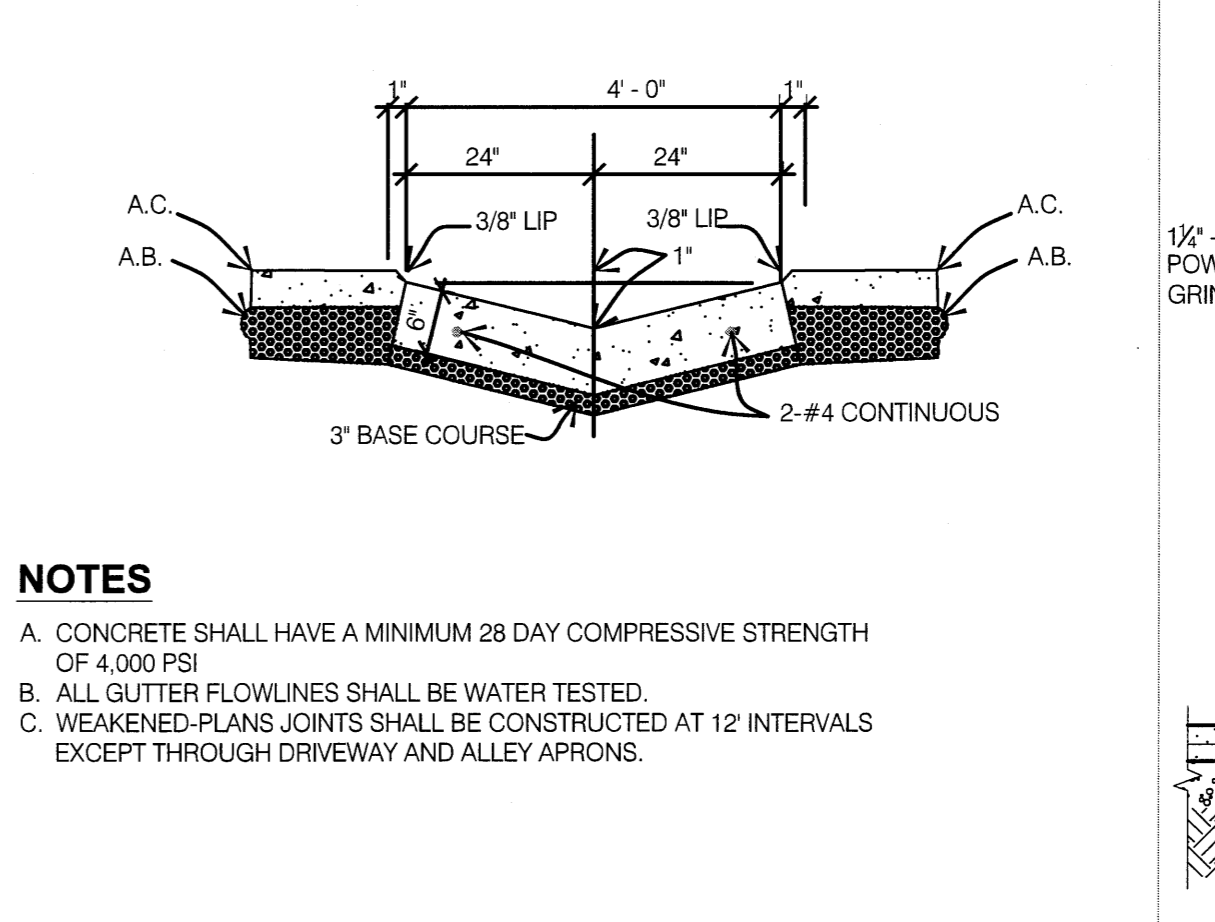
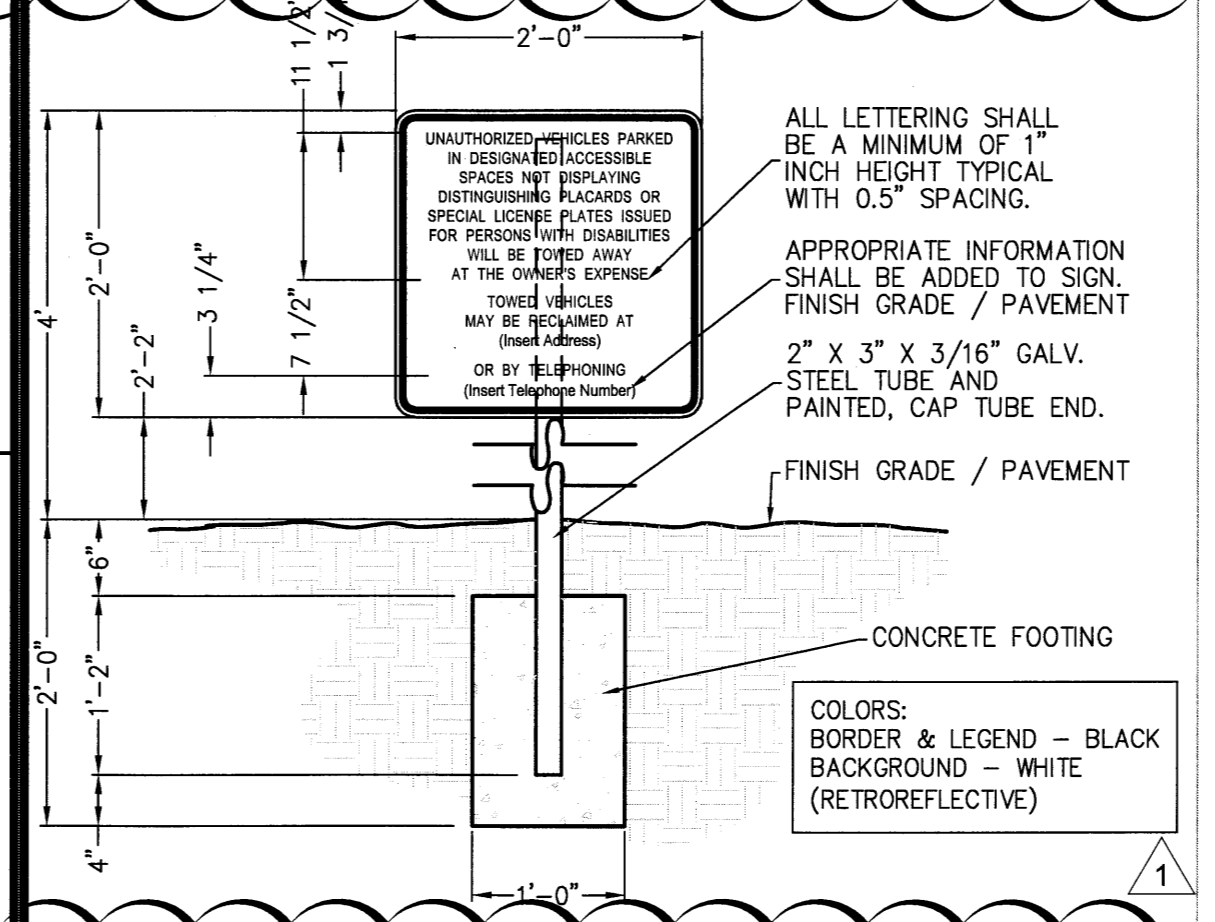
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CITY OF IRVINE PUBLIC WORKS
CONCRETE CLASS USE TABLE

| CONSTRUCTION | CONCRETE CLASS | MAX. SLUMP | EQUIV. RACK MIX |
|---|----------------|------------|-----------------|
| STREET SURFACE IMPROVEMENTS | 500-A-2500 | 3" | 5.5 |
| CONCRETE PAVEMENT (W/ OR W/O CURB) | 500-C-2500 | 3" | 5.5 |
| CONCRETE CURB & GUTTERS | 500-D-2500 | 1.5" | 5.5 |
| SEWER & STORM DRAINAGE FACILITIES | 500-E-3500* | 5" | 5.5 |
| PIPE COLLARS, BEAM SUPPORT FOR PIPE, PRE-CAST MANHOLE | 500-C-2500 | 3" | 5.5 |
| CONCRETE CURB & GUTTERS | 500-D-2500 | 1.5" | 5.5 |
| REINFORCED STRUCTURES | 500-G-3500* | 4" | 6 |
| REINFORCED CONCRETE WALLS | 500-H-3500* | 4" | 6 |
| REINFORCED CONCRETE SLABS | 500-I-3500* | 4" | 6 |
| REINFORCED CONCRETE BEAMS | 500-J-3500* | 4" | 6 |
| MISCELLANEOUS | 500-K-3500* | 4" | 6 |
| STREET LIGHT & TRAFFIC SIGNAL FOUNDATIONS, SURVEY MONUMENTS | 500-L-3500 | 4" | 6 |
| FENCE & GEOTECHNICAL FOUNDATIONS | 500-M-3500 | 4" | 6 |
| CONCRETE JOINTS | 500-N-3500 | 4" | 6 |
| AIR PLACED CONCRETE, METHOD "B" | 500-O-3500 | 4" | 6 |

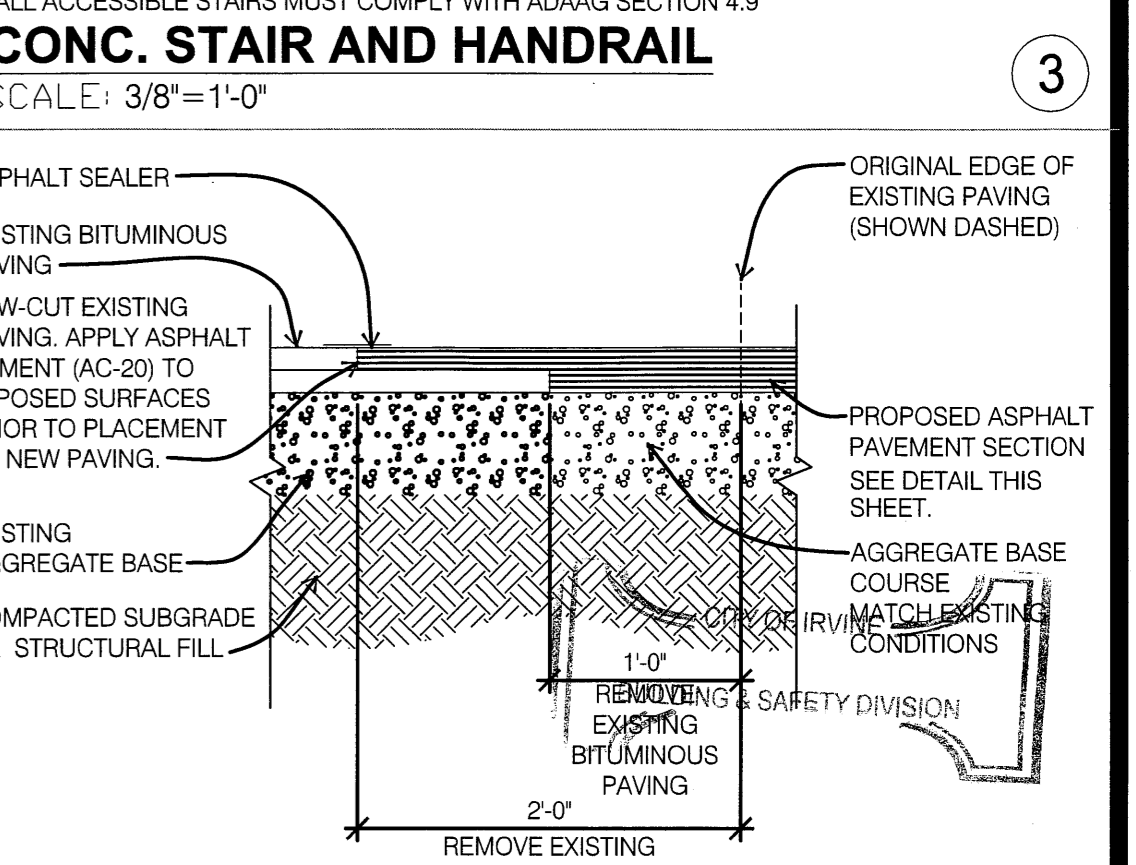
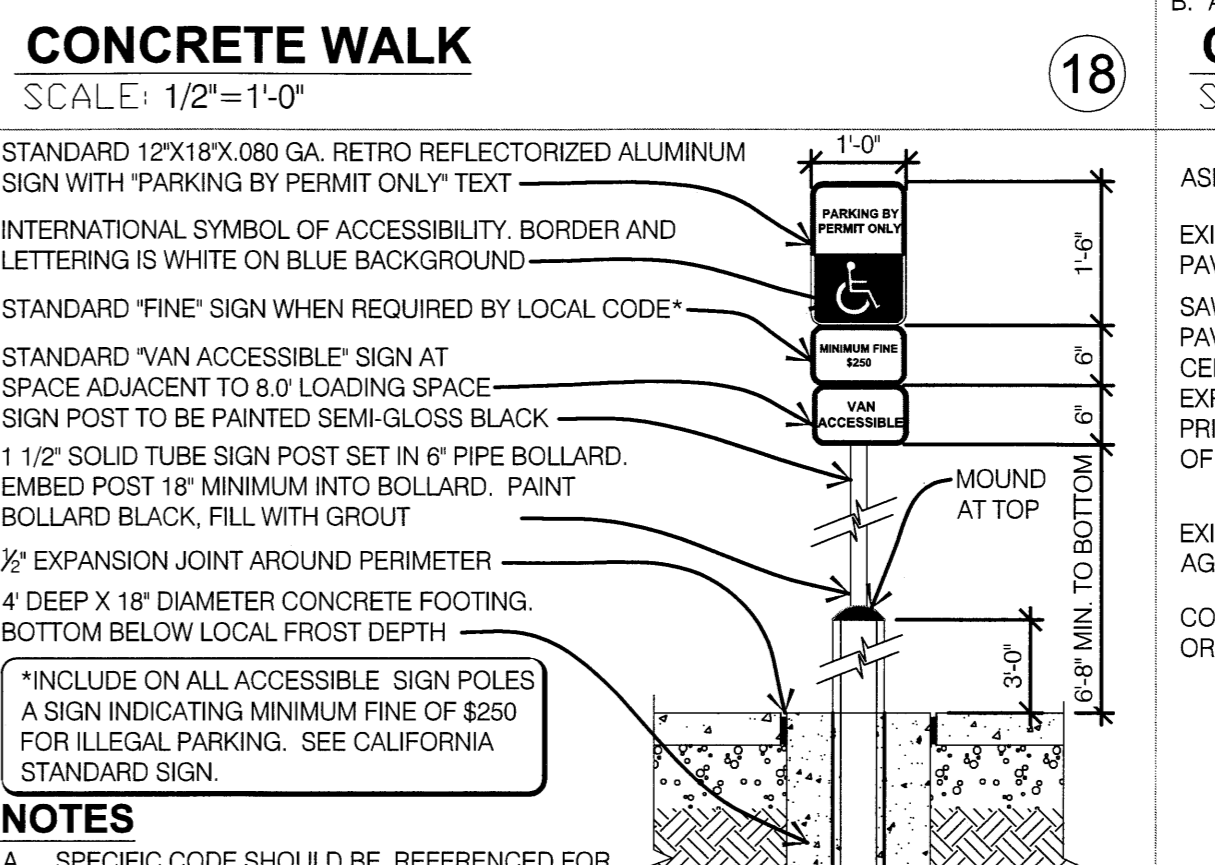
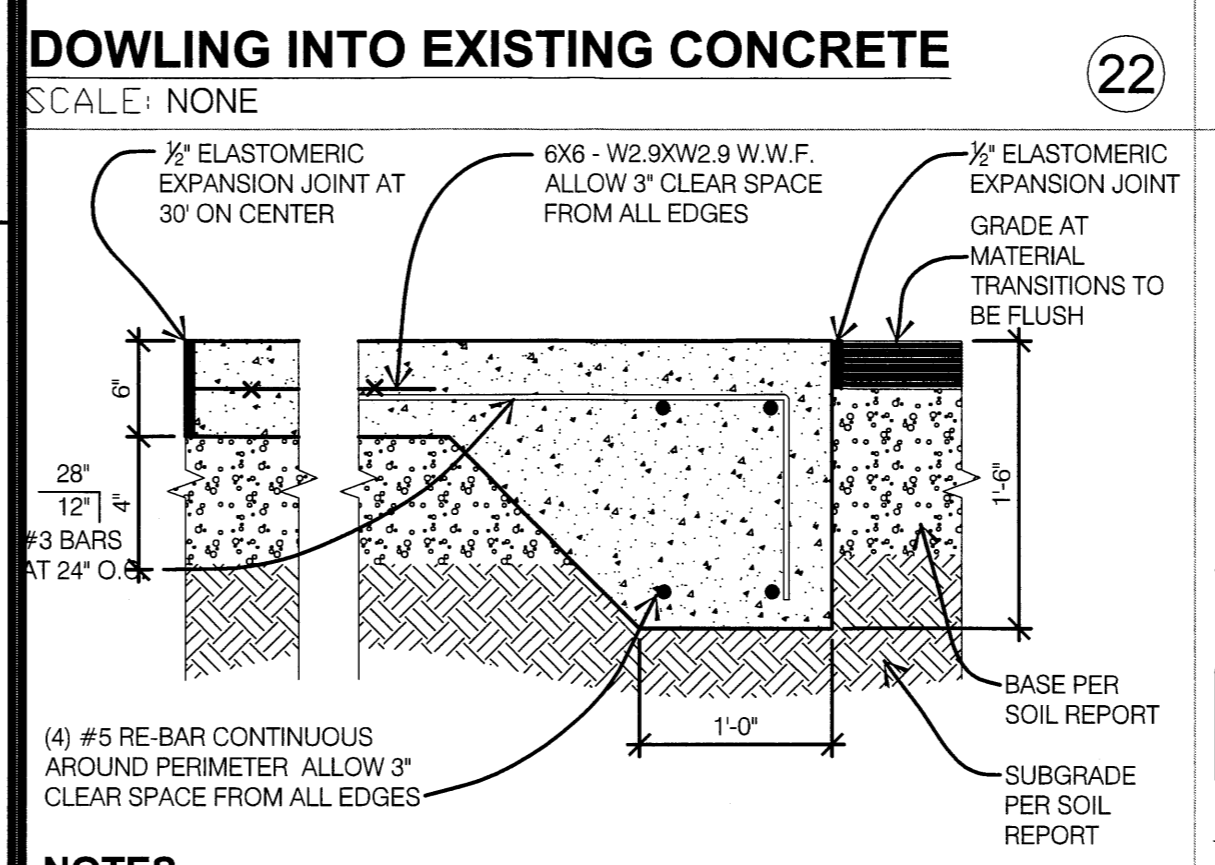
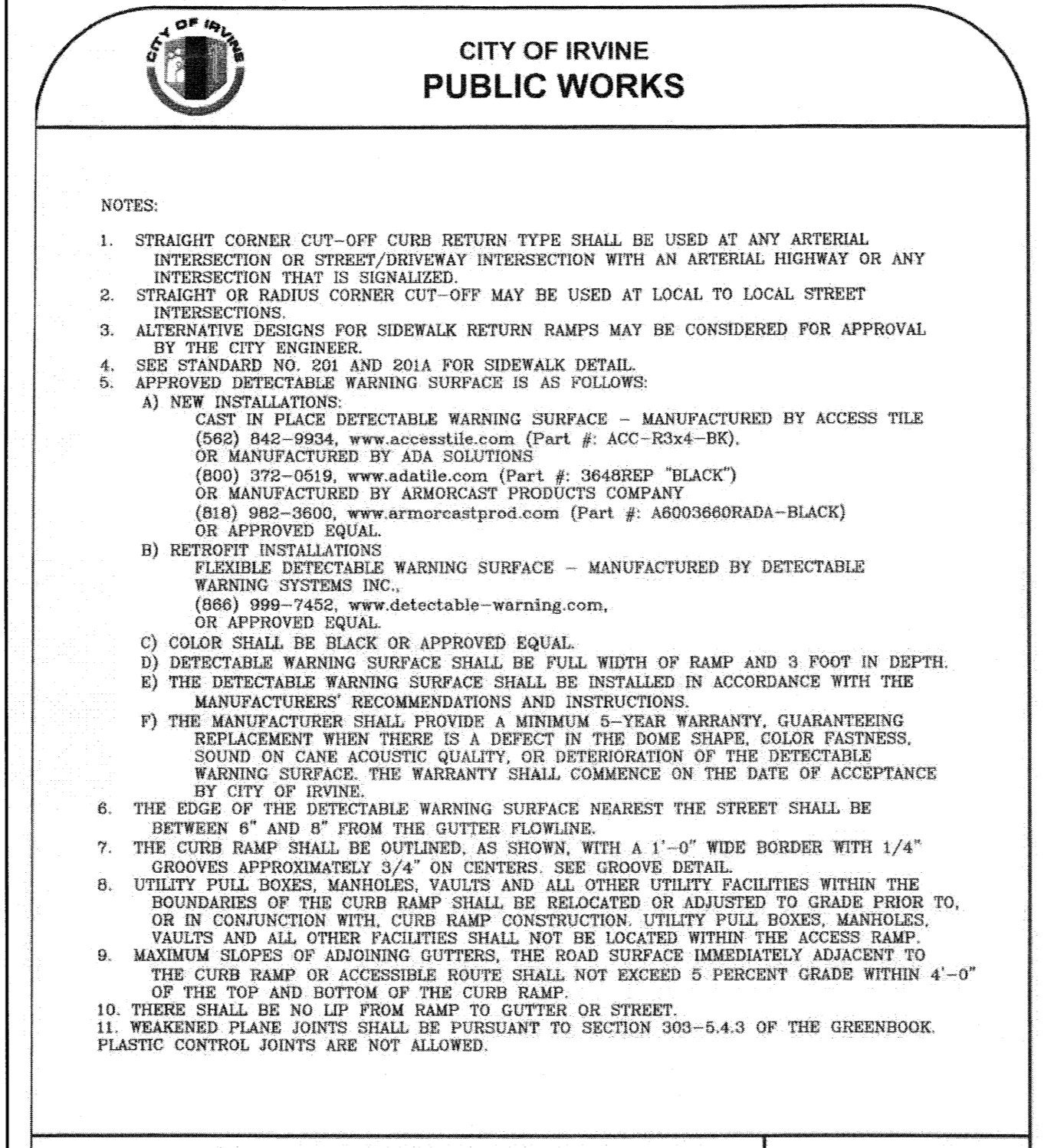
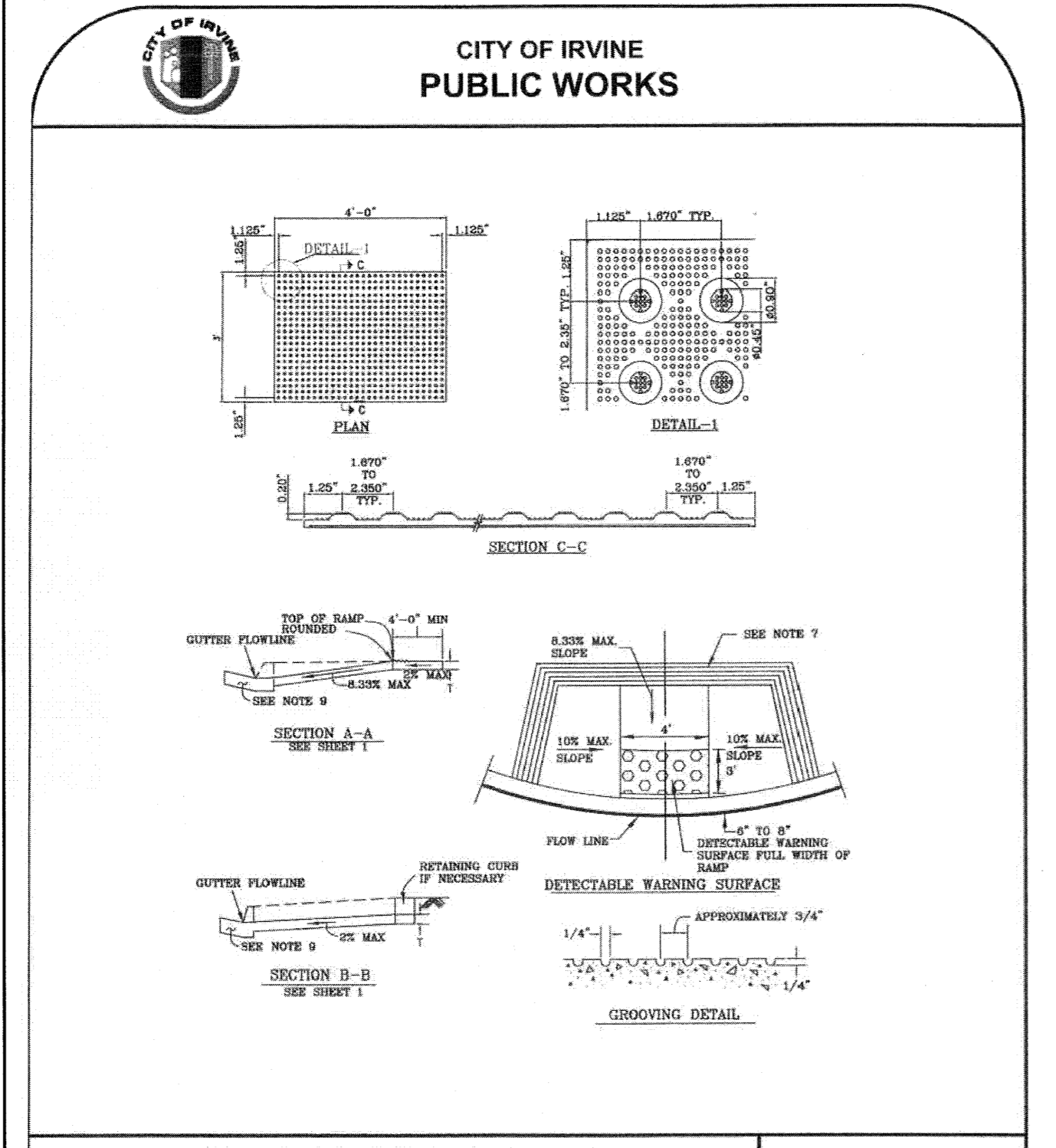
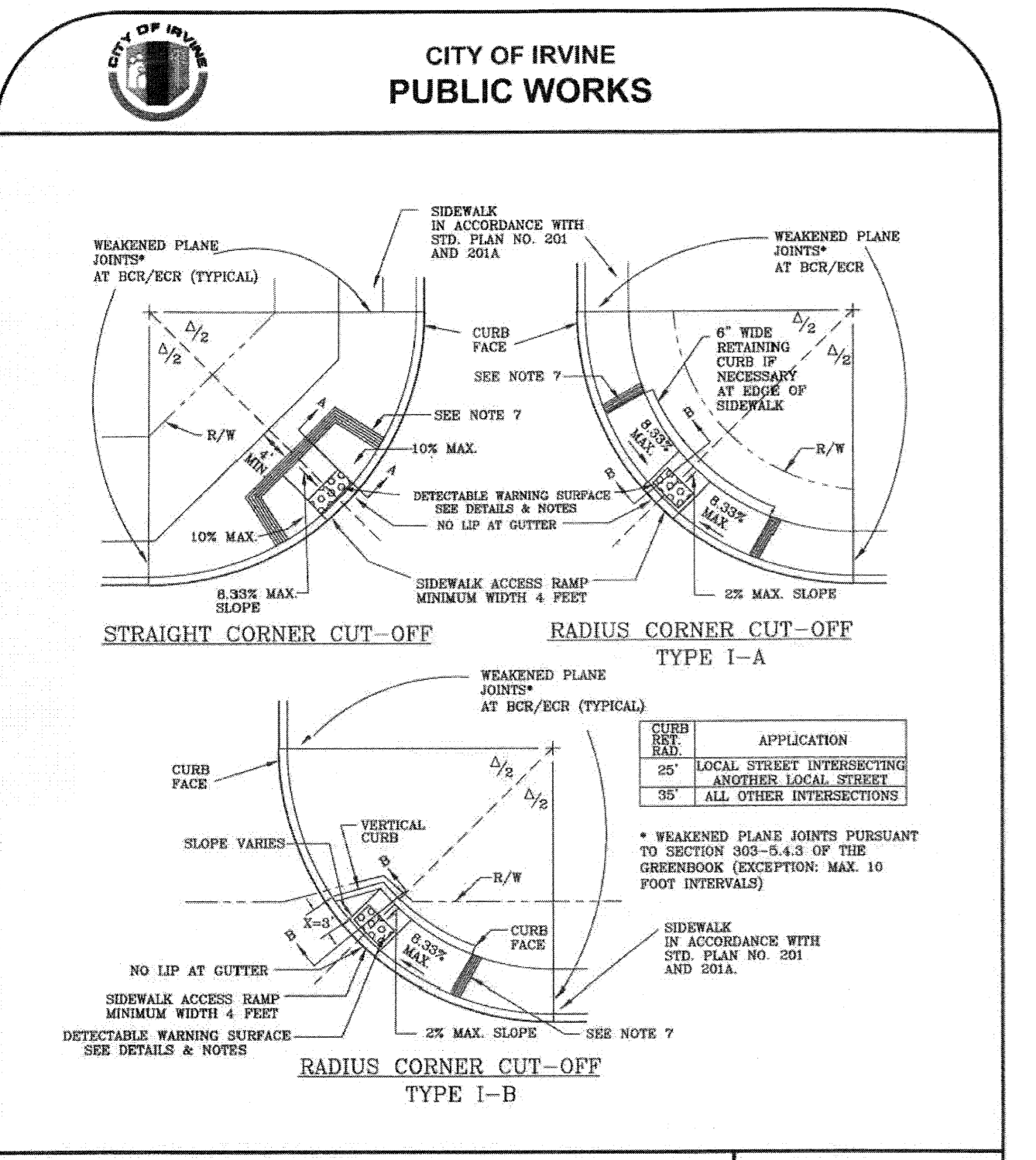
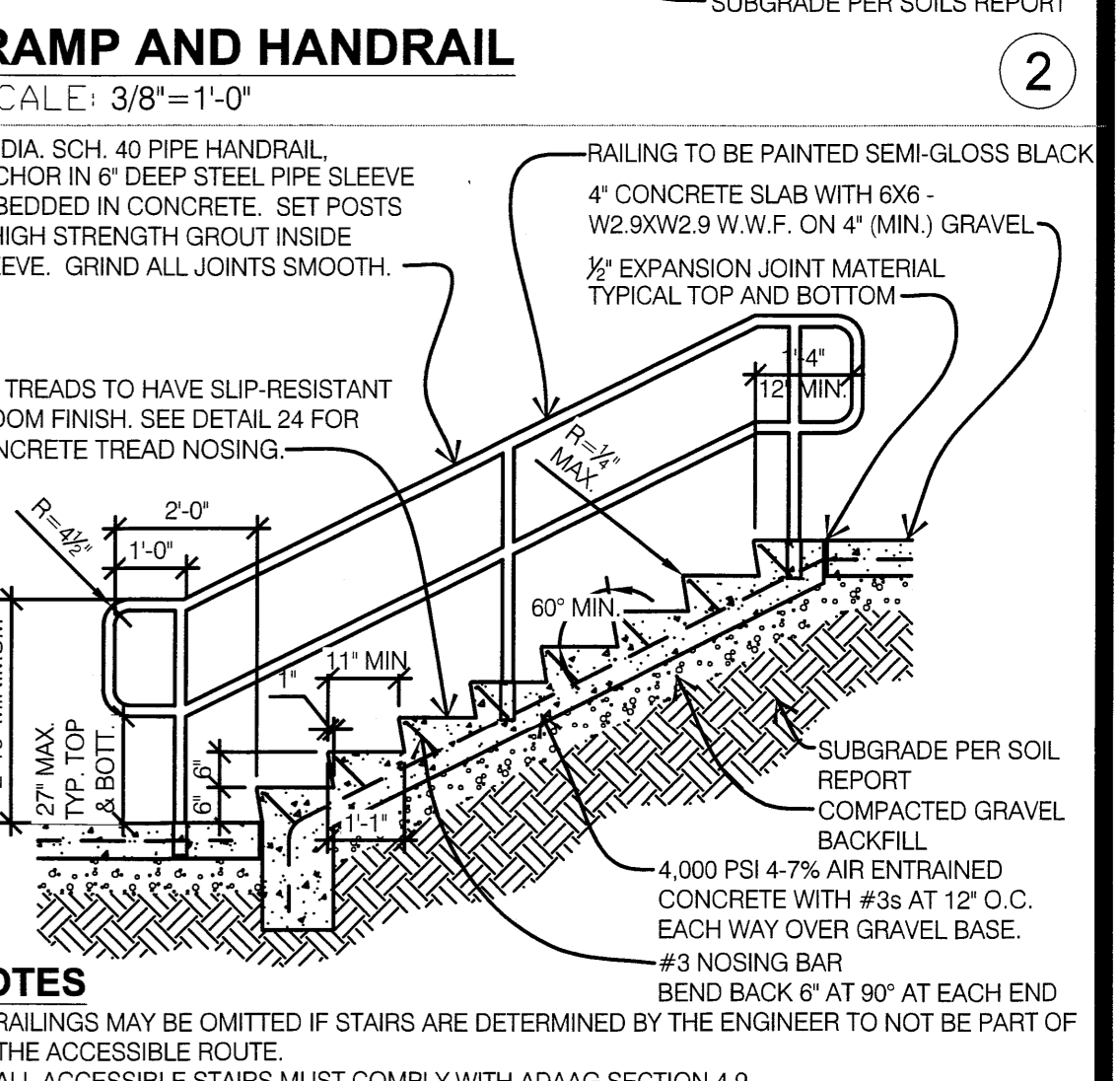
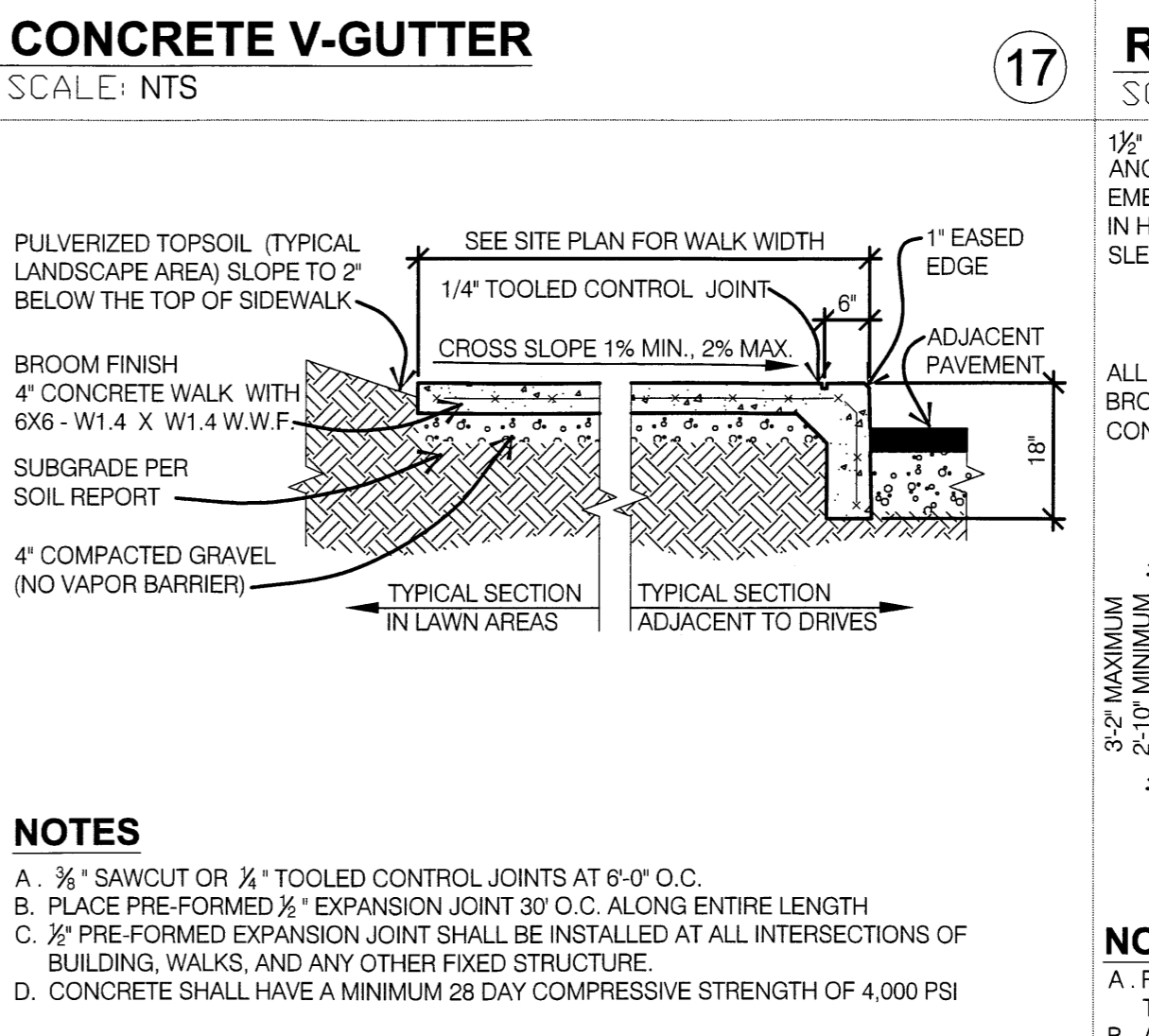
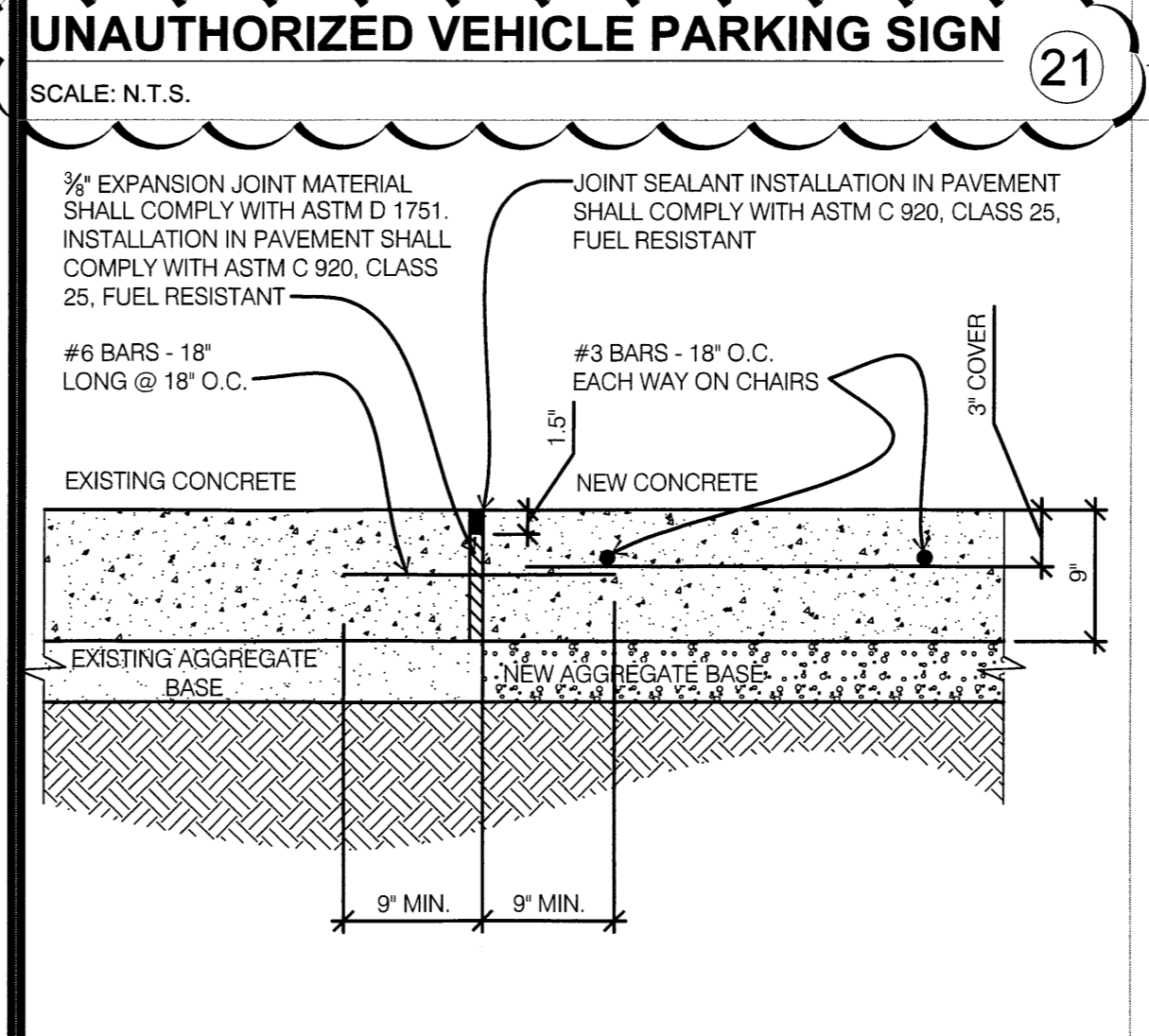
CONCRETE CLASS USE TABLE
SCALE: N.T.S.



CITY OF IRVINE PUBLIC WORKS
CONCRETE CLASS USE TABLE

| CONSTRUCTION | CONCRETE CLASS | MAX. SLUMP | EQUIV. RACK MIX |
|---|----------------|------------|-----------------|
| STREET SURFACE IMPROVEMENTS | 500-A-2500 | 3" | 5.5 |
| CONCRETE PAVEMENT (W/ OR W/O CURB) | 500-C-2500 | 3" | 5.5 |
| CONCRETE CURB & GUTTERS | 500-D-2500 | 1.5" | 5.5 |
| SEWER & STORM DRAINAGE FACILITIES | 500-E-3500* | 5" | 5.5 |
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| MISCELLANEOUS | 500-K-3500* | 4" | 6 |
| STREET LIGHT & TRAFFIC SIGNAL FOUNDATIONS, SURVEY MONUMENTS | 500-L-3500 | 4" | 6 |
| FENCE & GEOTECHNICAL FOUNDATIONS | 500-M-3500 | 4" | 6 |
| CONCRETE JOINTS | 500-N-3500 | 4" | 6 |
| AIR PLACED CONCRETE, METHOD "B" | 500-O-3500 | 4" | 6 |

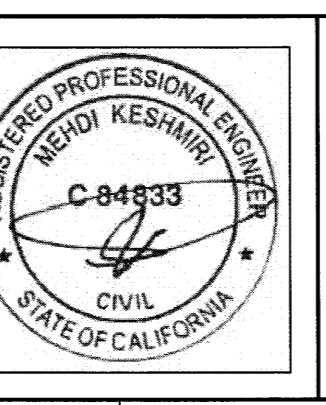
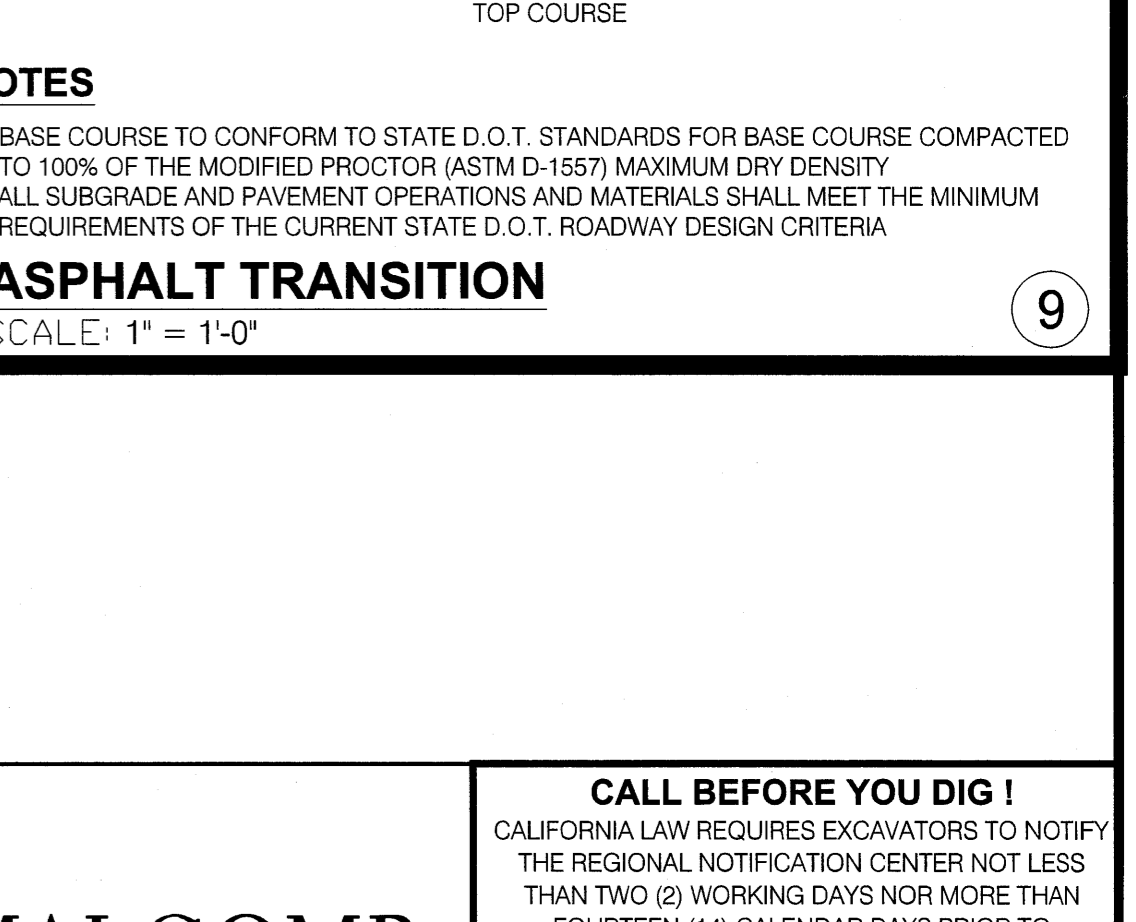
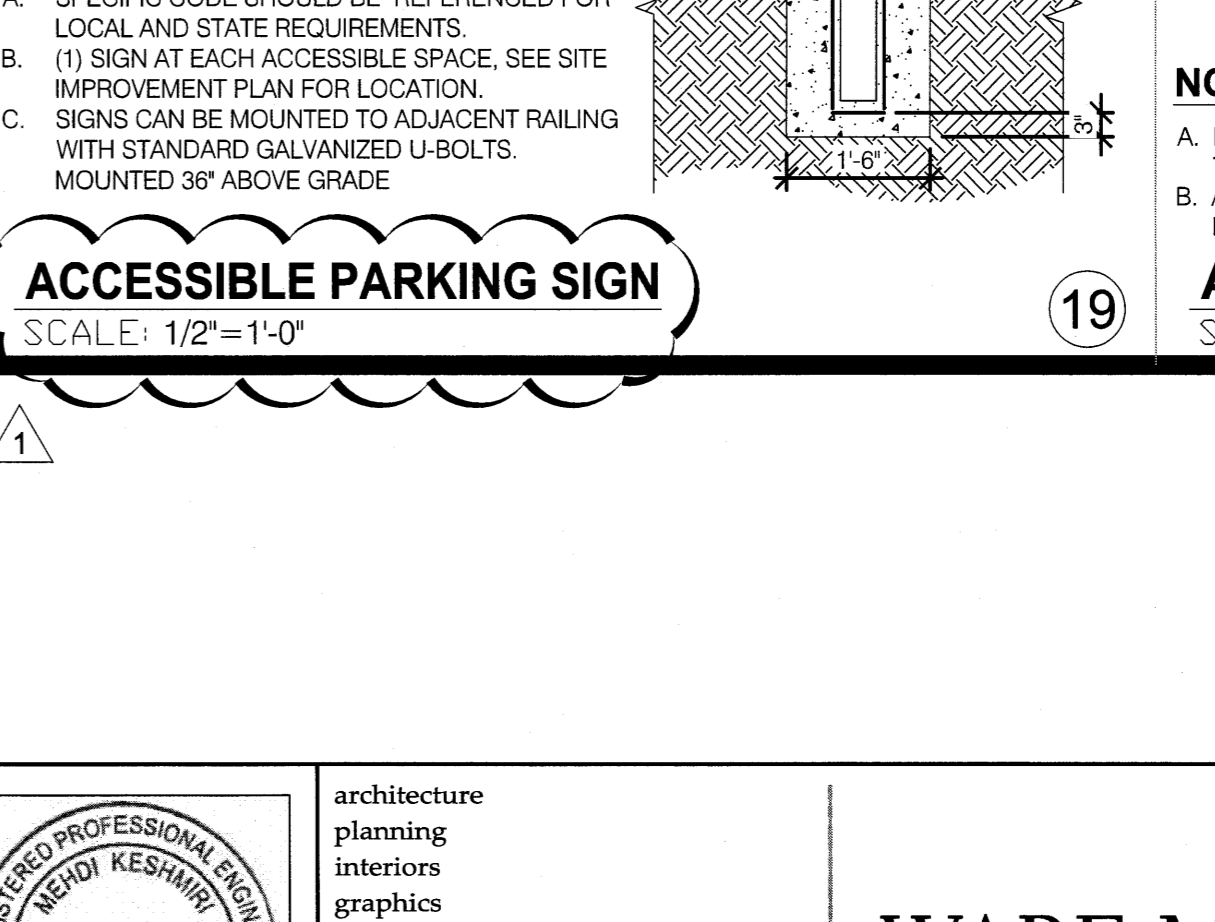
CONCRETE CLASS USE TABLE
SCALE: N.T.S.



CITY OF IRVINE PUBLIC WORKS
CURB RETURN DETAILS
SCALE: 1/2"=1'-0"

CITY OF IRVINE PUBLIC WORKS
CURB RETURN DETAILS
SCALE: 1/2"=1'-0"

CITY OF IRVINE PUBLIC WORKS
CURB RETURN DETAILS
SCALE: 1/2"=1'-0"



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1-800-227-2600

CITY OF IRVINE
PREPARED BY: RCE # 84833 03-31-18
CIVIL ENGINEER LICENSE NO. EXP. DATE
PREPARED FOR: PUBLIC WORKS DEPARTMENT
CITY OF IRVINE
6427 OAK CANYON IRVINE, CA
ERIC GRUBER
PH: (949) 724-6699
FAX: (949) 724-7565
LICENSE NO. EXP. DATE

GEOTECHNICAL & GEOLOGICAL FIRM:
BENCHMARK: 3B-117-13 - FOUND 4" OCS ALUMINUM DESCRIBED BY OCS 2013 - FOUND "3B-117-13" SET IN THE TOP OF TEH SOUTHWESTERLY RAIL ROAD BRIDGE WALL CORNER NORTHEAST OF THE RAILROAD TRACKS. MONUMENT IS LOCATED 4'-7" 420' SWLY OF THE INTERSECTION OF SAND CANYON ROAD AND BURNT ROAD
ELEV=38.984 FEET NAVD88 YEAR 2013

LEGAL DESCRIPTION:
SITING: 0.125 AC. GR.

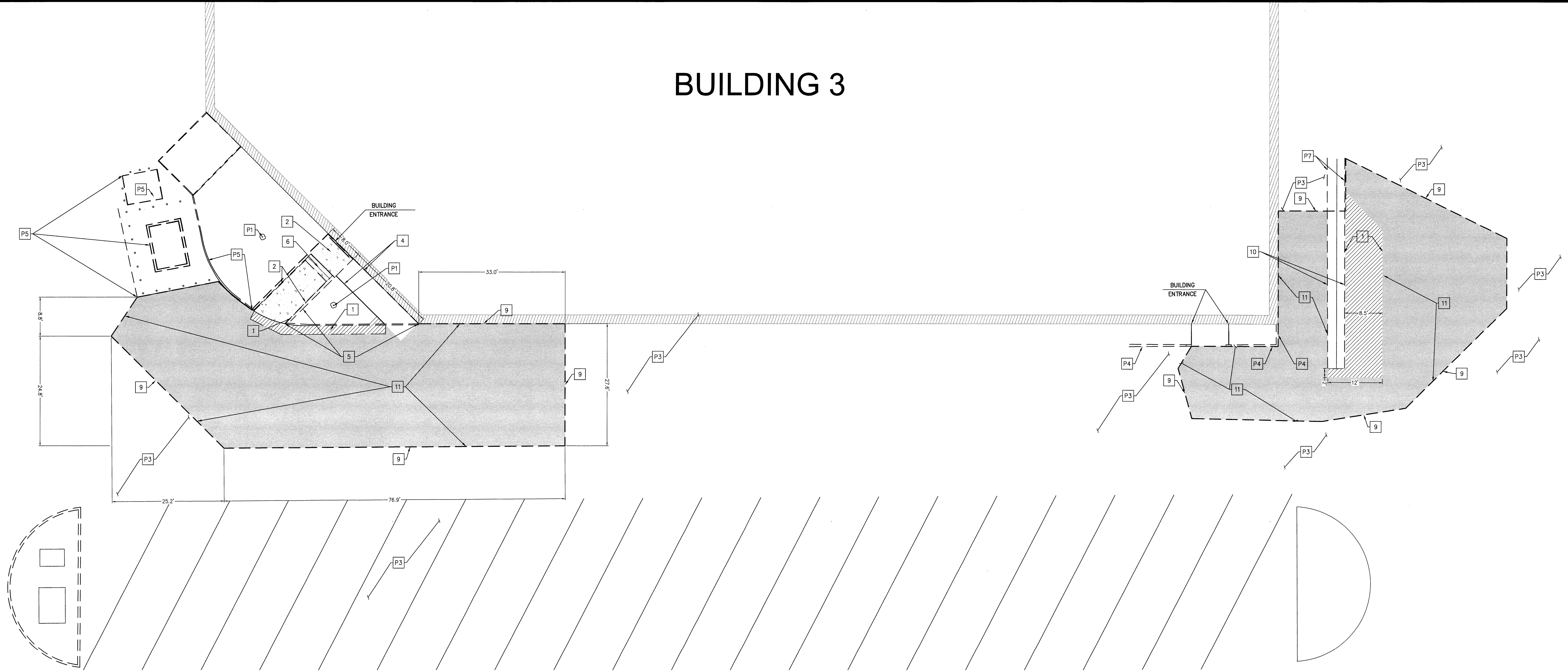
ADA IMPROVEMENTS OPERATIONS SUPPORT FACILITY PRECISE GRADING SITE DETAILS

CITY OF IRVINE
COMMUNITY DEVELOPMENT DEPARTMENT


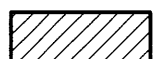

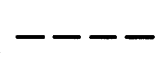
PRELIMINARY GRADING PERMIT
 PRECISE GRADING PERMIT
GRADING PLAN CHECK # 00687070-CTI
GRADING PERMIT # _____

SHEET 5 OF 7

BUILDING 3

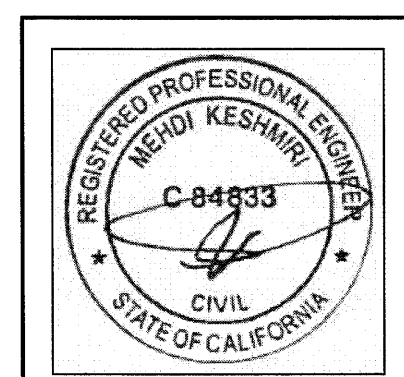
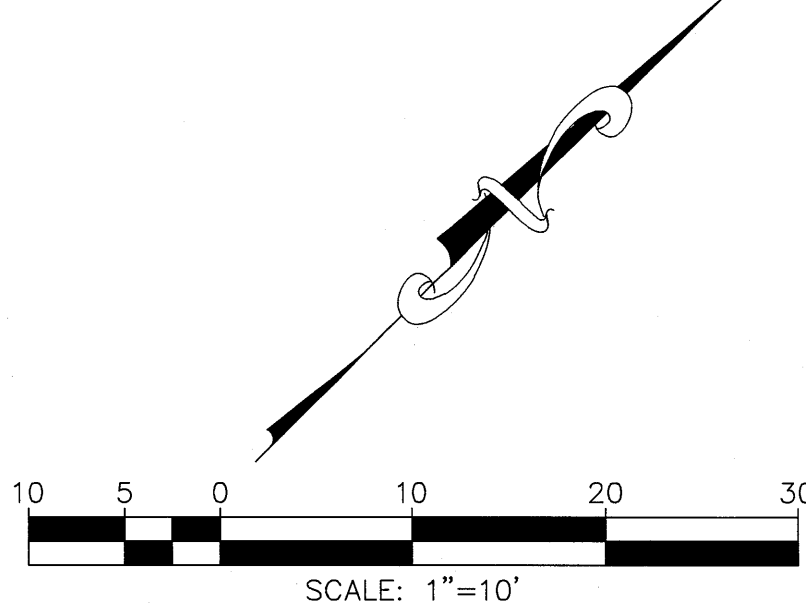
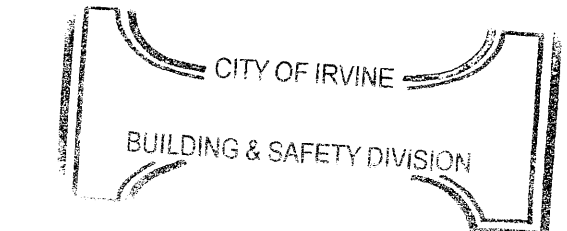


DEMOLITION LEGEND

-  REMOVE EXISTING CONCRETE
-  REMOVE EXISTING ASPHALT PAVEMENT
-  REMOVE EXISTING ASPHALT PAVEMENT
-  LIMIT OF DEMOLITION

DEMOLITION NOTES

| | |
|----|---|
| 1 | REMOVE EXISTING ASPHALT PAVEMENT |
| 2 | REMOVE EXISTING CONCRETE PAVEMENT |
| 3 | REMOVE EXISTING CONCRETE CURB AND GUTTER |
| 4 | REMOVE EXISTING LANDSCAPE AND IRRIGATION SYSTEM - SALVAGE ANY PLANTING AND IRRIGATION EQUIPMENT AT OWNER'S DISCRETION |
| 5 | REMOVE EXISTING CONCRETE PLANTER |
| 6 | REMOVE EXISTING CONCRETE STAIRS |
| 7 | REMOVE EXISTING STEEL HAND RAILS |
| 8 | PROTECT IN PLACE EXISTING BOLLARDS |
| 9 | LIMIT OF DEMOLITION |
| 10 | REMOVE EXISTING CONCRETE LONGITUDINAL GUTTER |
| 11 | GRIND EXISTING PAVEMENT FOR AC OVERLAY PER GRADING PLANS |
| P1 | PROTECT IN PLACE EXISTING TREE |
| P2 | PROTECT IN PLACE EXISTING CONCRETE PAVEMENT |
| P3 | PROTECT IN PLACE EXISTING ASPHALT PAVEMENT |
| P4 | PROTECT IN PLACE EXISTING CONCRETE PLANTER |
| P5 | PROTECT IN PLACE EXISTING STRUCTURE |
| P6 | PROTECT IN PLACE EXISTING CONCRETE CURB AND GUTTER |
| P7 | PROTECT IN PLACE EXISTING LONGITUDINAL GUTTER |



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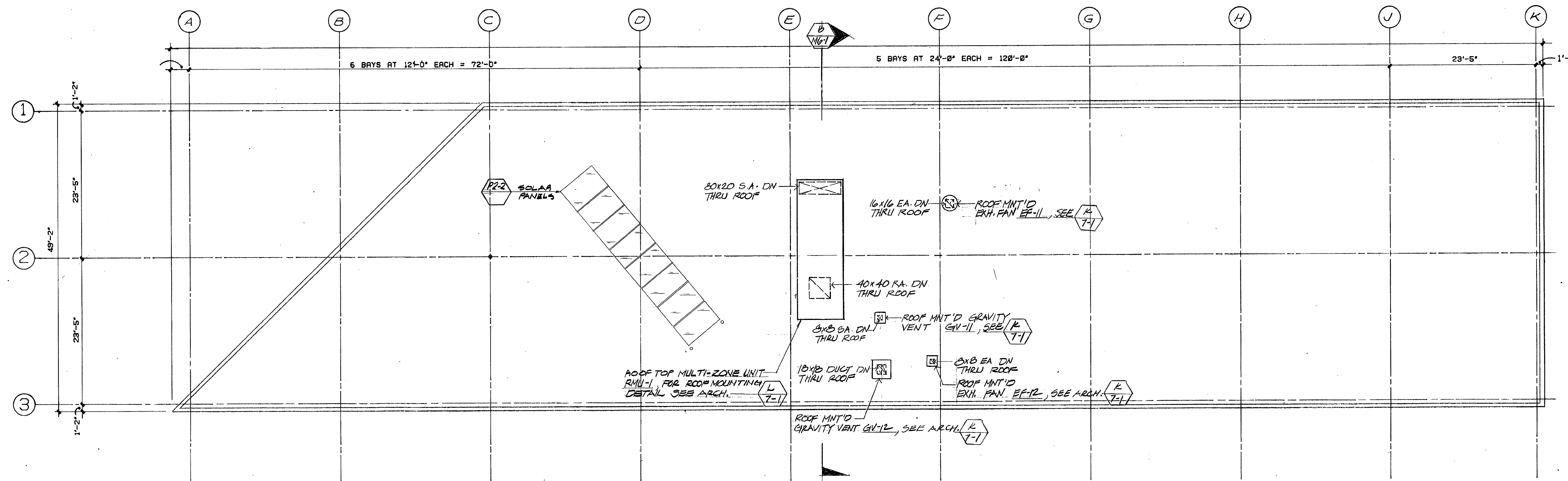
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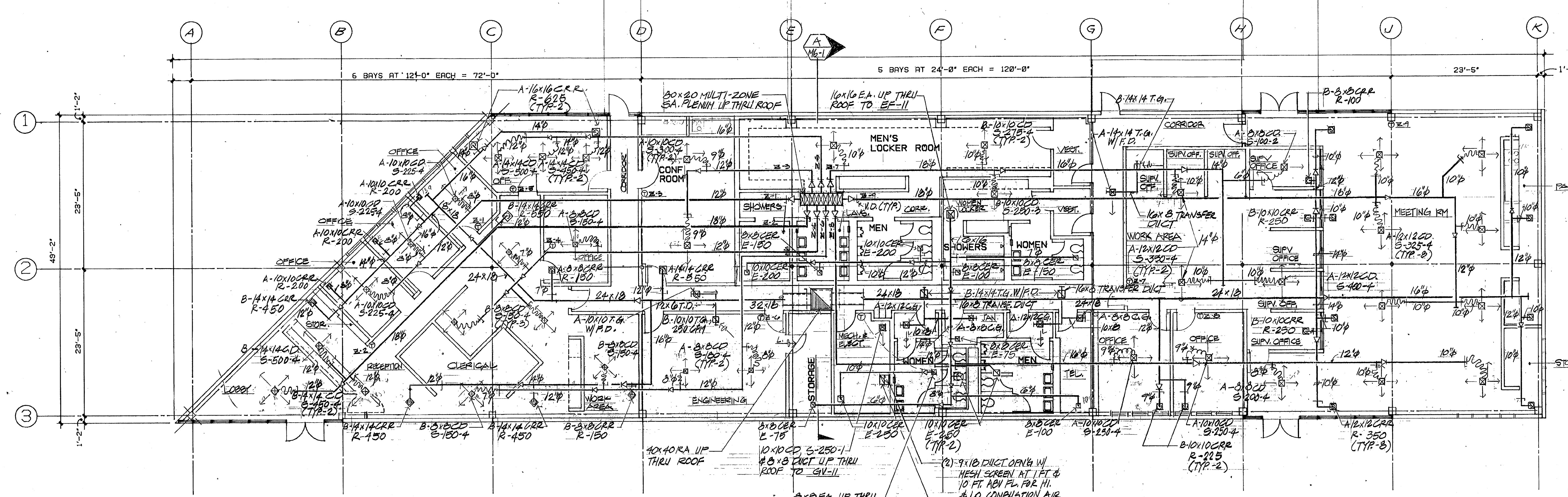
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| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------------|---|--|---|--|---|--|---|--|---|--|---|------------|-----|------|--|--|----------------|--|-------------|-------------|------------|----------|----------------------------|-----------|---------------|-------------------------|----------------|-----------------|------------|------------|------|------|--|--|----------------------------------|--|----------------------|--|---|--|------------------|------------------|--------------------|--|-----------------------------|--|--|--|
| <table border="1"> <tr><td>6</td><td></td></tr> <tr><td>5</td><td></td></tr> <tr><td>4</td><td></td></tr> <tr><td>3</td><td></td></tr> <tr><td>2</td><td></td></tr> <tr><td>1</td><td>04/14/2016</td></tr> <tr><td>NO.</td><td>DATE</td></tr> </table> | | 6 | | 5 | | 4 | | 3 | | 2 | | 1 | 04/14/2016 | NO. | DATE | <table border="1"> <tr><td colspan="2">CITY OF IRVINE</td></tr> <tr><td>PREPARED BY</td><td>ERIC GRUBER</td></tr> <tr><td>RCE# 84833</td><td>03-31-18</td></tr> <tr><td>CIVIL ENGINEER LICENSE NO.</td><td>EXP. DATE</td></tr> <tr><td>PREPARED FOR:</td><td>PUBLIC WORKS DEPARTMENT</td></tr> <tr><td>CITY OF IRVINE</td><td>6427 OAK CANYON</td></tr> <tr><td>IRVINE, CA</td><td>IRVINE, CA</td></tr> <tr><td>APP.</td><td>DATE</td></tr> </table> | | CITY OF IRVINE | | PREPARED BY | ERIC GRUBER | RCE# 84833 | 03-31-18 | CIVIL ENGINEER LICENSE NO. | EXP. DATE | PREPARED FOR: | PUBLIC WORKS DEPARTMENT | CITY OF IRVINE | 6427 OAK CANYON | IRVINE, CA | IRVINE, CA | APP. | DATE | <table border="1"> <tr><td colspan="2">GEO TECHNICAL & GEOLOGICAL FIRM:</td></tr> <tr><td colspan="2">BENCHMARK: 38-117-13</td></tr> <tr><td colspan="2">DESCRIBED BY OCS 2013 - FOUND 4" OCS ALUMINUM BENCHMARK DISK STAMPED "38-117-13", SET IN THE TOP OF TEH SOUTHWESTERLY RAIL ROAD BRIDGE WALL CORNER NORTHEAST OF THE RAILROAD TRACKS. MONUMENT IS LOCATED +/- 420' SWLY OF THE INTERSECTION OF SAND CANYON ROAD AND BURNT ROAD</td></tr> <tr><td>ELEV=38.984 FEET</td><td>NAVD88 YEAR 2013</td></tr> <tr><td colspan="2">LEGAL DESCRIPTION:</td></tr> <tr><td colspan="2">SITE ACREAGE: 0.125 AC. GR.</td></tr> </table> | | GEO TECHNICAL & GEOLOGICAL FIRM: | | BENCHMARK: 38-117-13 | | DESCRIBED BY OCS 2013 - FOUND 4" OCS ALUMINUM BENCHMARK DISK STAMPED "38-117-13", SET IN THE TOP OF TEH SOUTHWESTERLY RAIL ROAD BRIDGE WALL CORNER NORTHEAST OF THE RAILROAD TRACKS. MONUMENT IS LOCATED +/- 420' SWLY OF THE INTERSECTION OF SAND CANYON ROAD AND BURNT ROAD | | ELEV=38.984 FEET | NAVD88 YEAR 2013 | LEGAL DESCRIPTION: | | SITE ACREAGE: 0.125 AC. GR. | | <p>ADA IMPROVEMENTS OPERATIONS SUPPORT FACILITY PRECISE GRADING DEMOLITION PLAN - BUILDING 3</p> <p>CITY OF IRVINE COMMUNITY DEVELOPMENT DEPARTMENT</p> <p><input type="checkbox"/> PRELIMINARY GRADING PERMIT <input checked="" type="checkbox"/> PRECISE GRADING PERMIT GRADING PLAN CHECK # 00867070-CTI GRADING PERMIT #</p> <p>SHEET 7 OF 7</p> <p style="writing-mode: vertical-rl; transform: rotate(180deg);">JOB NO.</p> | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 04/14/2016 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NO. | DATE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CITY OF IRVINE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PREPARED BY | ERIC GRUBER | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RCE# 84833 | 03-31-18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CIVIL ENGINEER LICENSE NO. | EXP. DATE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PREPARED FOR: | PUBLIC WORKS DEPARTMENT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CITY OF IRVINE | 6427 OAK CANYON | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IRVINE, CA | IRVINE, CA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| APP. | DATE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GEO TECHNICAL & GEOLOGICAL FIRM: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BENCHMARK: 38-117-13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DESCRIBED BY OCS 2013 - FOUND 4" OCS ALUMINUM BENCHMARK DISK STAMPED "38-117-13", SET IN THE TOP OF TEH SOUTHWESTERLY RAIL ROAD BRIDGE WALL CORNER NORTHEAST OF THE RAILROAD TRACKS. MONUMENT IS LOCATED +/- 420' SWLY OF THE INTERSECTION OF SAND CANYON ROAD AND BURNT ROAD | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ELEV=38.984 FEET | NAVD88 YEAR 2013 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LEGAL DESCRIPTION: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SITE ACREAGE: 0.125 AC. GR. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

File: \\ware-malcomb.com\project\cadd\2016\04\14\16-002-02-demolition-support-facility\cadd\plan\00867070-01.dwg (revision) Plotfile: 8/15/2016 8:05:26 AM (revision)



ROOF PLAN - BUILDING 1 - ADMINISTRATION
SCALE: 1/8" = 1'-0"



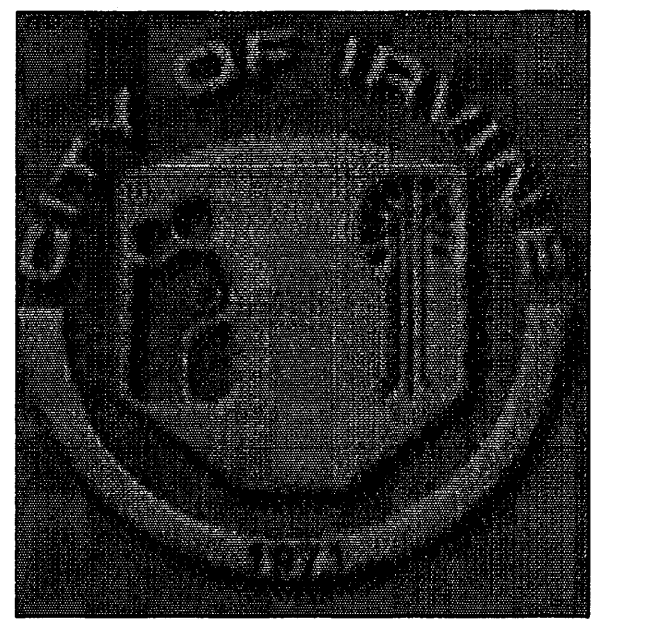
FLOOR PLAN - BUILDING 1 - ADMINISTRATION
SCALE: 1/8" = 1'-0"

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| 7 | | DATE |
| 6 | | NO. |
| 5 | | DATE |
| 4 | | NO. |
| 3 | | DATE |
| 2 | | NO. |
| 1 | | DATE |

DRAWN BY: P.N.
 DESIGNED BY: P.N.
 CHECKED BY: H.Y.
 ALBERT C. MARTIN AND ASSOCIATES
 ARCHITECTURE / PLANNING / ENGINEERING
 17505 CALLENDAR STREET, IRVINE, CALIFORNIA 92714 (714) 752-7552

PLANS PREPARED BY:
Albert C. Martin and Associates
 ARCHITECTURE / PLANNING / ENGINEERING
 17505 CALLENDAR STREET, IRVINE, CALIFORNIA 92714 (714) 752-7552

For Reference Only



CITY OF IRVINE

OFFICE OF:
COMMUNITY SERVICES DEPARTMENT

1 CIVIC CENTER PLAZA
P.O. BOX 19875
TEL:(949) 724-6675 FAX:(949) 724-8608



Henrikson Owen & Associates
5 GOODYEAR STREET
IRVINE, CA 92618
TEL: 949/880-4900

ENGINEER:

STAMP:

AGENCY APPROVAL:

REVISION: DESCRIPTION: DATE:

AS-BUILT

HVAC UPGRADE TO THE
OPERATION SUPPORT
FACILITY BUILDING 1

MECHANICAL/ELECTRICAL ROOF AND FIRST FLOOR
NEW PLANS

PROJECT NO:

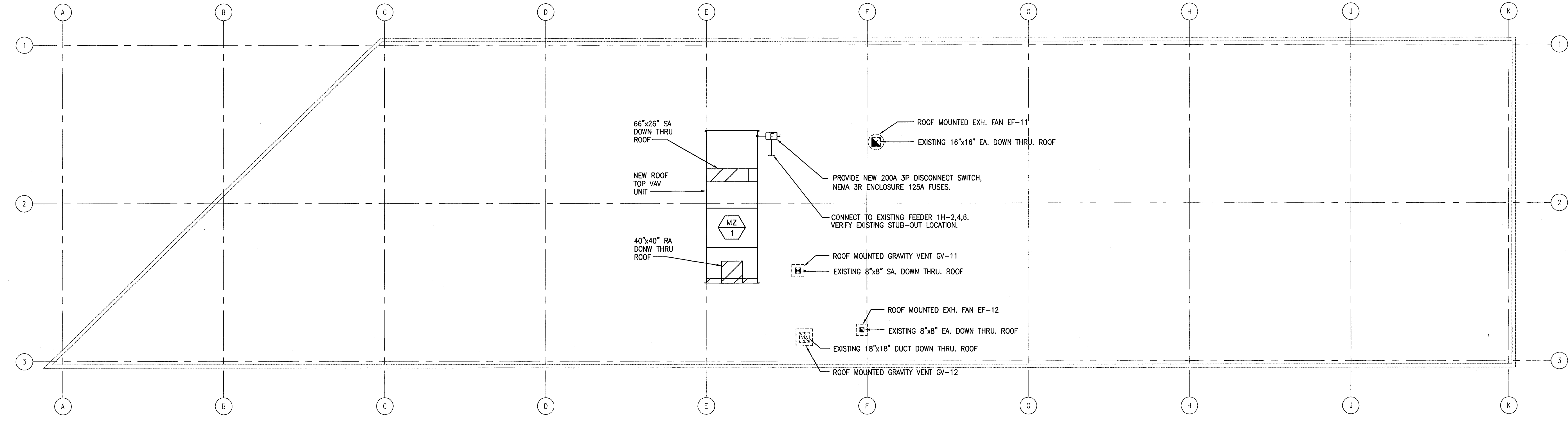
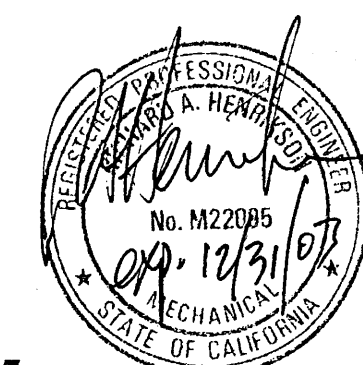
501.5115.1

DATE:

04/30/2001

SHEET NO:

M-3



MECHANICAL/ELECTRICAL NEW ROOF PLAN
SCALE: 1/8"=1'-0"

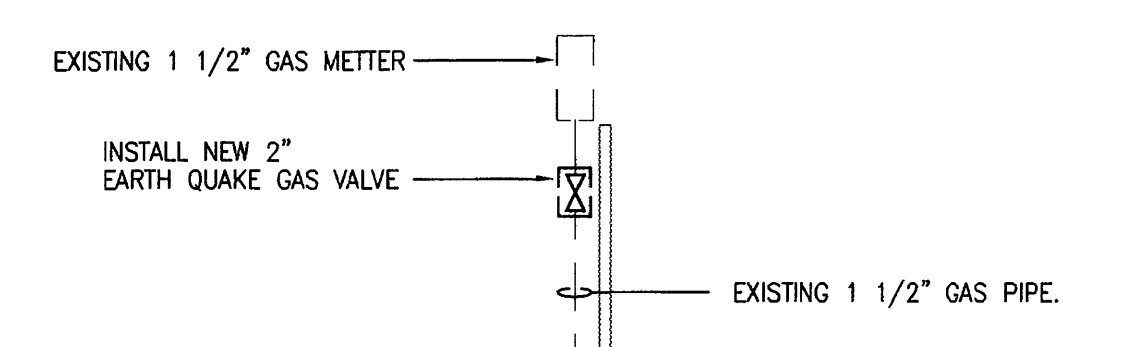
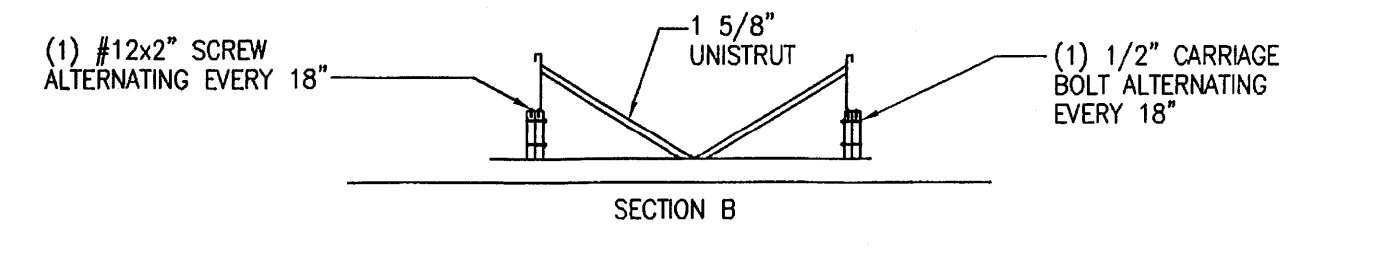
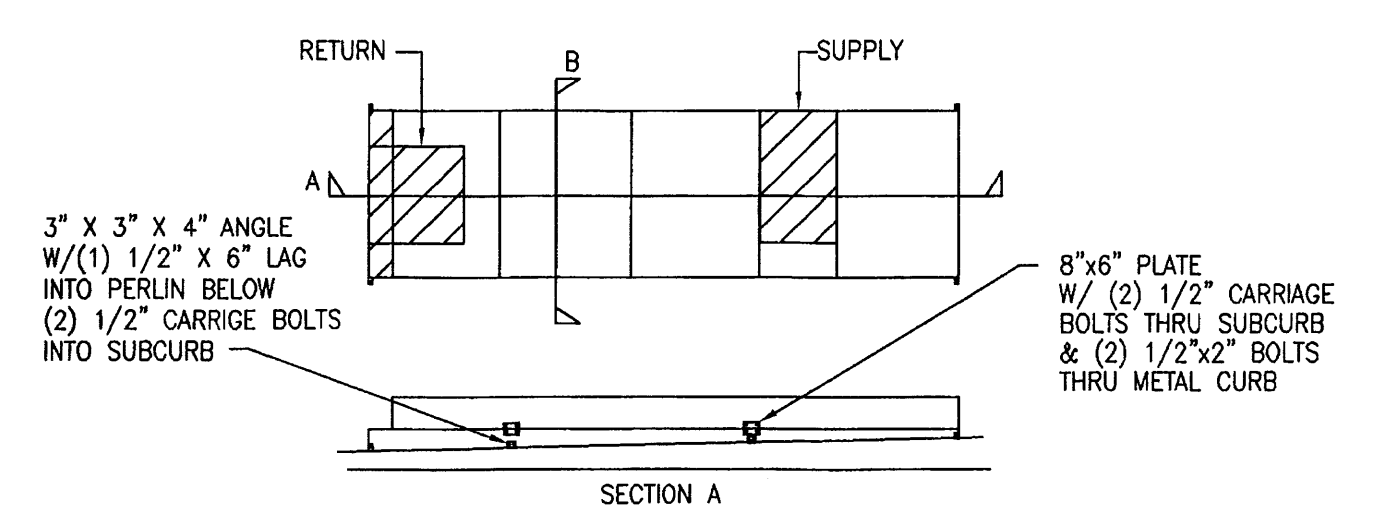
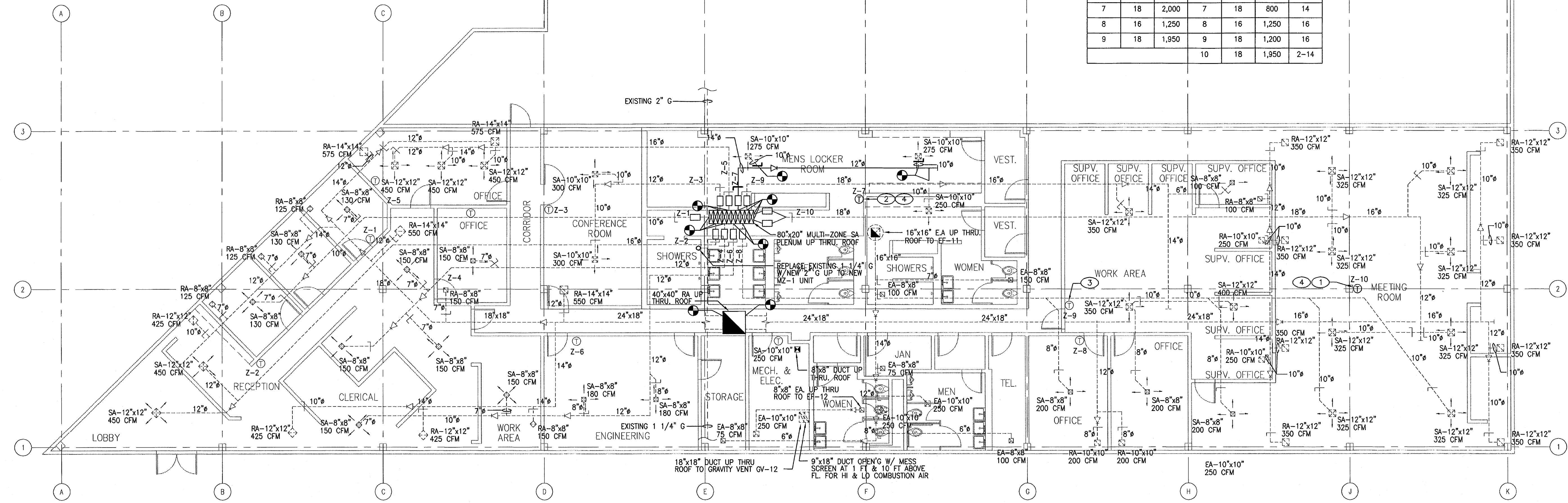
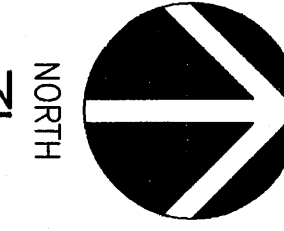


Table with 7 columns: ZONE, SIZE, CFM, ZONE, SIZE, CFM, DAMPER. It lists damper schedules for zones 1 through 10.



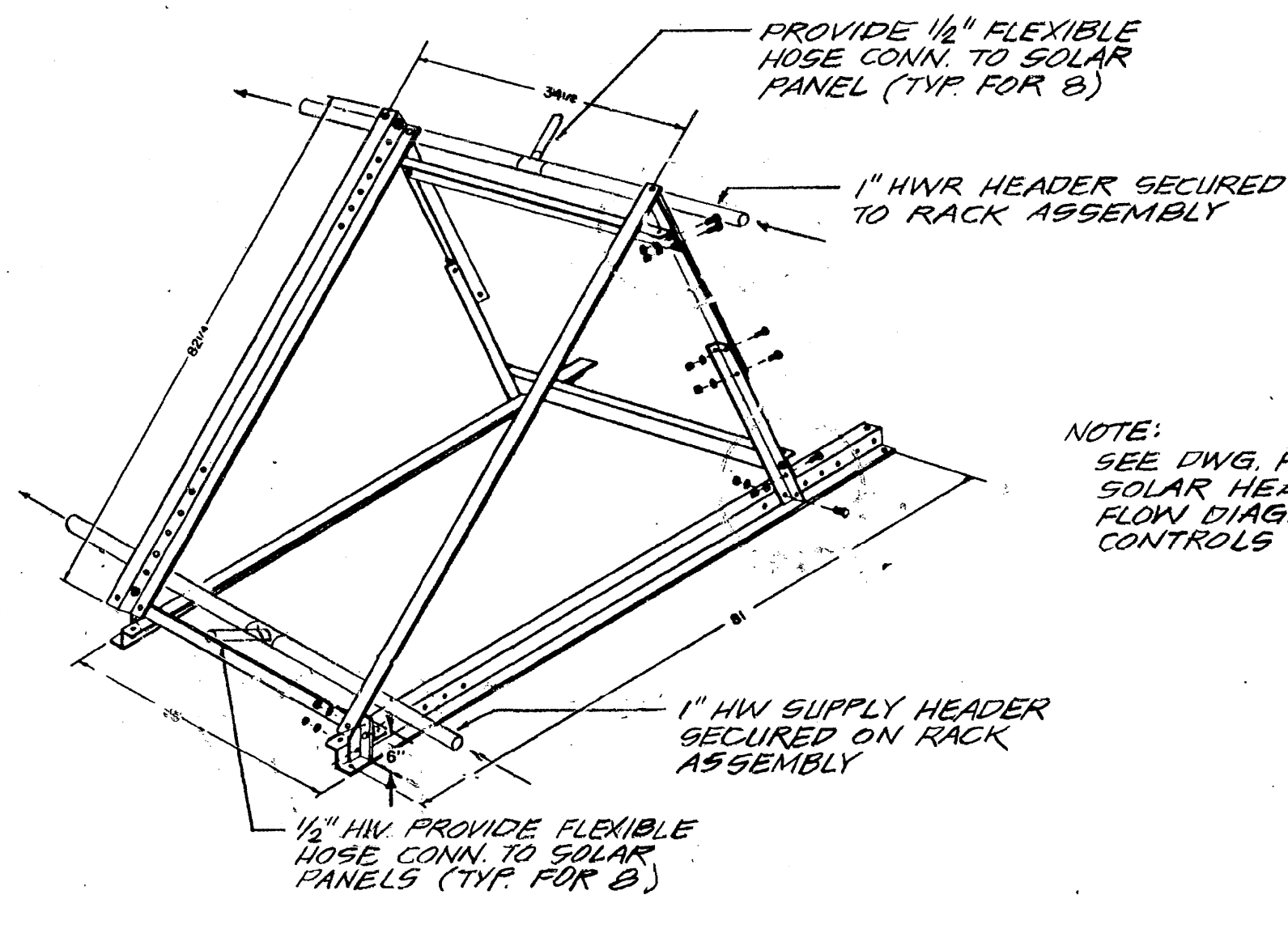
MECHANICAL/ELECTRICAL FIRST FLOOR NEW PLAN
SCALE: 1/8"=1'-0"



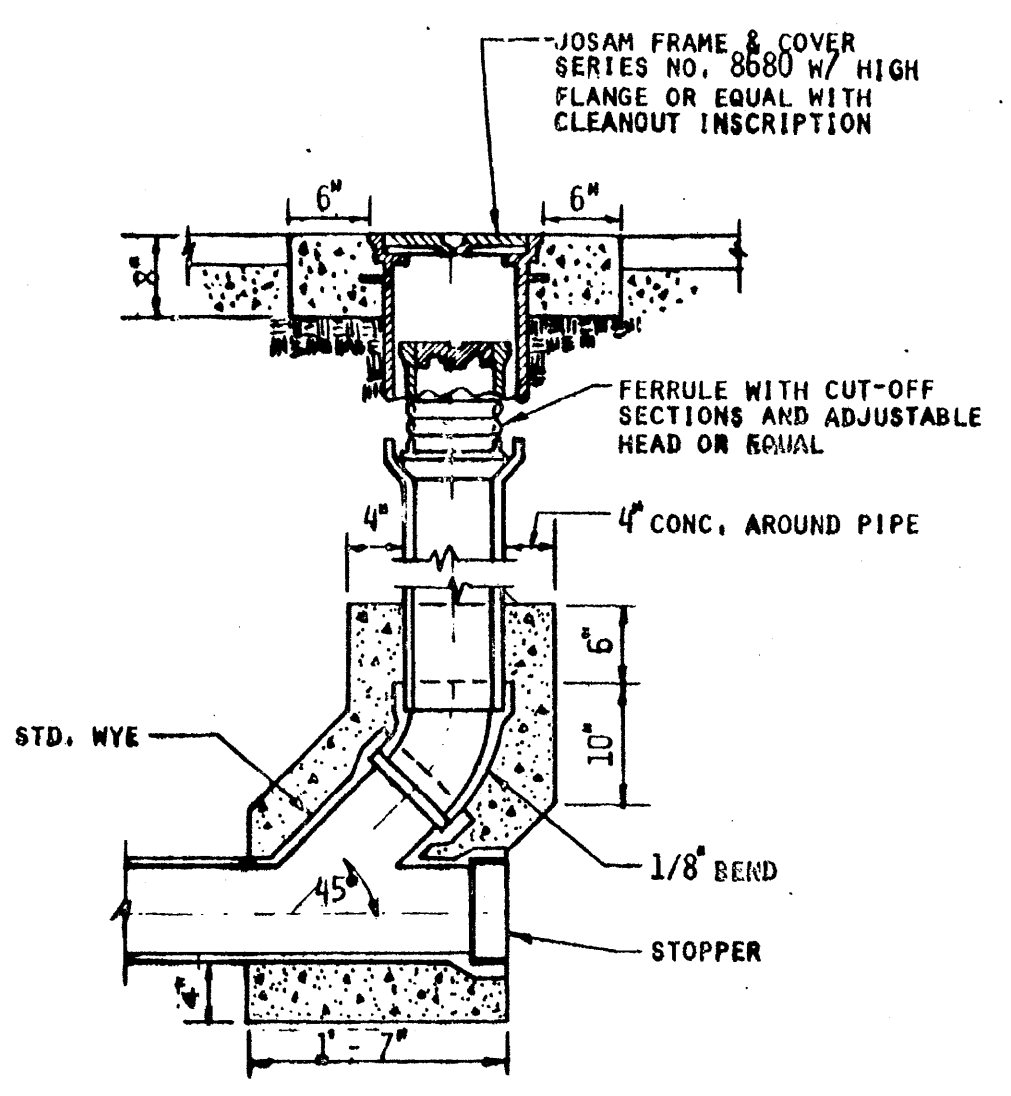
REFERENCE NOTES:

- 1 REINSTALL EXISTING T'STAT (ZONE 9) TO NEW LOCATION AS SHOWN WITH ZONE 10.
2 INSTALL A NEW T'STAT WITH ZONE 7.
3 RENAME EXISTING T'STAT FROM ZONE 7 TO ZONE 9.
4 1/2C-W/ CONTROL WIRING TO NEW MZ-1.

For Reference Only

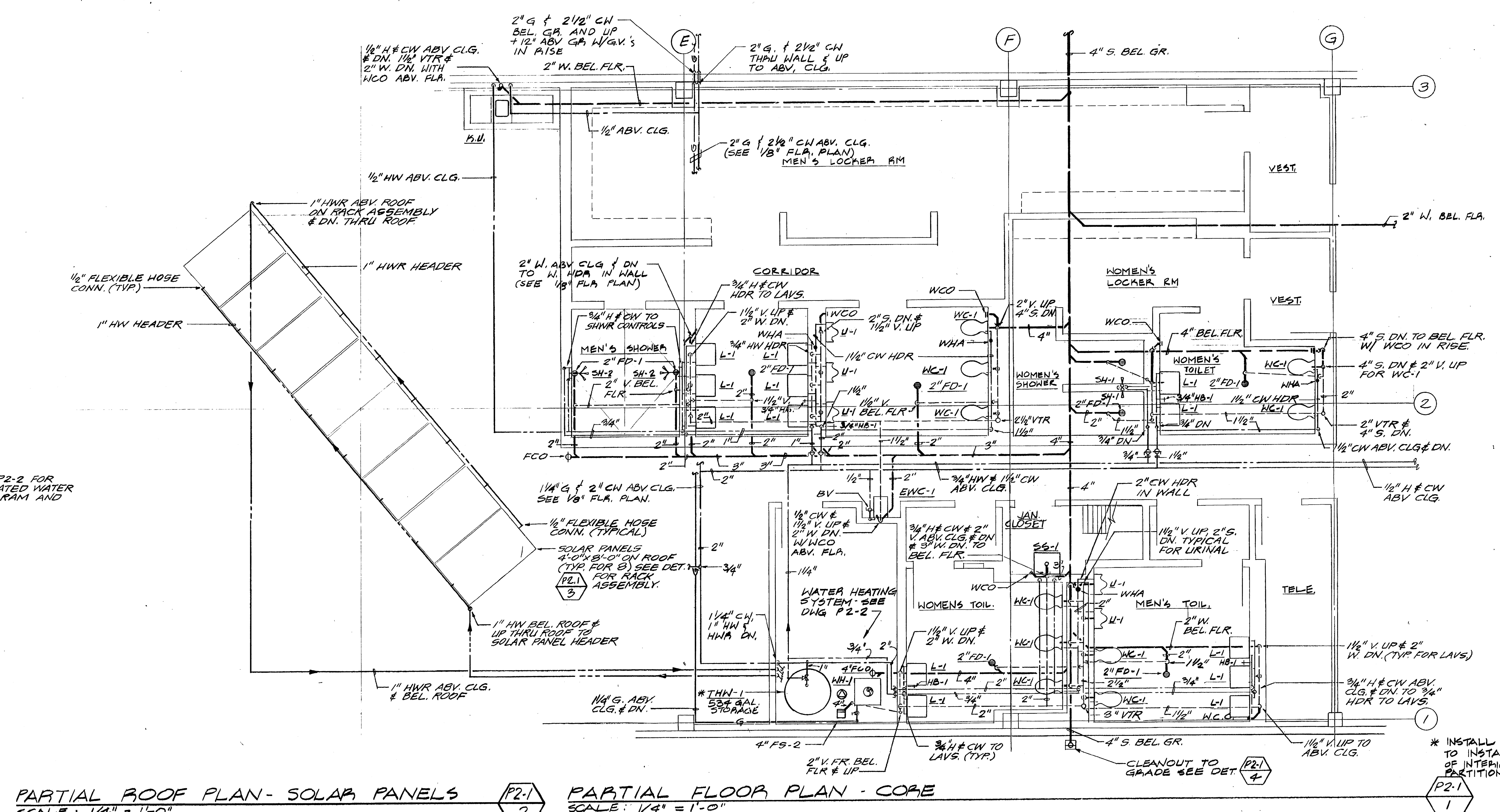


SOLAR PANEL BACK ASSEMBLY P2-1
NO SCALE



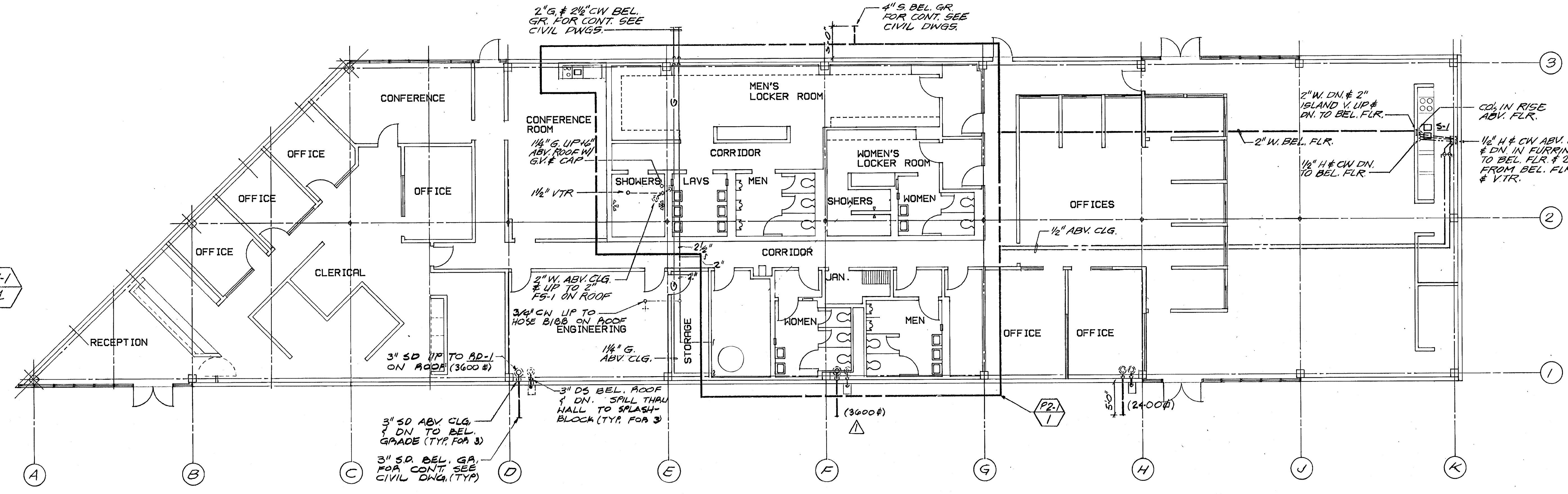
DETAIL-CLEANOUT TO GRADE P2-1
NO SCALE

NOTE:
SEE DWG. P2-2 FOR
SOLAR HEATED WATER
FLOW DIAGRAM AND
CONTROLS

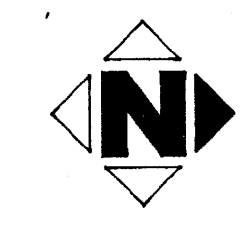


PARTIAL FLOOR PLAN - SOLAR PANELS P2-1
SCALE: 1/4" = 1'-0"

PARTIAL FLOOR PLAN - CORE P2-1
SCALE: 1/4" = 1'-0"



FLOOR PLAN - BUILDING 1 - ADMINISTRATION
SCALE: 1/8" = 1'-0"



| NO. | DATE | REVISIONS |
|-----|----------|-----------|
| 1 | 11-22-71 | 1-55-8-2 |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |
| 6 | | |
| 7 | | |

DRAWN BY: J. OGDEN / J. HANAWAY
 DESIGNED BY: M. H. VAUGHAN
 CHECKED BY: A. BOYD
 PLANS PREPARED BY: Albert C. Martin and Associates
 Architecture / Planning / Engineering
 17205 Dufferin Street Irvine, California 92714 (714) 752-7552
 BUILDING NO. 1 - ADMINISTRATION
 PLAN AND DETAILS

Operations Support Facility
 15029 Sand Canyon Ave. Irvine, California 92618-0108
CITY OF IRVINE
 COMMUNITY DEVELOPMENT DEPARTMENT

For Reference Only

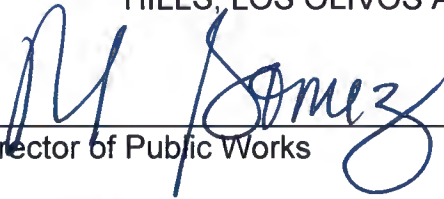
2.10



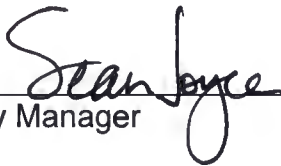
REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: AUGUST 8, 2017

TITLE: NOTICE OF PENDING APPROVAL FOR TRACT MAPS IN ORCHARD HILLS, LOS OLIVOS AND PORTOLA SPRINGS



Director of Public Works



City Manager

RECOMMENDED ACTION

Receive and file.

EXECUTIVE SUMMARY

The subject notice to the City Council is provided in accordance with City of Irvine Ordinance No. 07-12, notifying the City Council of nine final tract maps pending approval by the City Engineer. Ordinance No. 07-12 delegates authority to the City Engineer for approval of final tract maps and requires notice to the City Council following receipt of such maps for review and again prior to approval/disapproval by the City Engineer. The subject notice satisfies this requirement. This is a ministerial matter and there is no discretionary action to be taken by the City Council with regard to this matter. The tract maps covering property referenced in this staff report are located in Orchard Hills, Los Olivos and Portola Springs and are available for public review in the Public Works Department.

Tract Map No. 17759 (Los Olivos) is located near the intersection of Bake Parkway and Irvine Center Drive, as shown in Attachment 2. The map for this property contains the subdivision of 187 acres into 32 lots. The property is proposed for the development of 1,950 apartments, one public park and one elementary school. The Los Olivos development is consistent with the Los Olivos Environmental Impact Report, approved by City Council in June 2006, which considered area-wide impacts associated with the ultimate build-out for residential units, parks and schools within the corresponding planning area.

Tract Map Nos. 18009-18014 (Orchard Hills) are located near Portola Parkway and Orchard Hills Drive, as shown in Attachment 3. The maps for these properties contain the subdivision of 81.3 acres into 495 lots. The properties are proposed for development of 220 single-family residences and 367 condominium units. The Orchard Hills development project implements land development anticipated in the Northern Sphere Area Final Environmental Impact Report, approved by City Council in June 2002.

Tract Map Nos. 18073 and 18074 (Portola Springs) are located near the intersection of Portola Parkway and Portola Springs, as shown in Attachment 4. The maps for these properties contain the subdivision of 66 acres into 95 lots. The properties are proposed for development of 348 condominiums. The Portola Springs development project is

consistent with the Northern Sphere Area Final Environmental Impact Report, approved by City Council in June 2002, which considered area-wide impacts associated with the ultimate build-out for residential units, open space, parks and schools within the corresponding planning area.

COMMISSION/BOARD/COMMITTEE RECOMMENDATION

Prior to City Engineer approval of a final tract map, the Planning Commission reviews and approves the corresponding tentative tract map based on consistency with the City's General Plan, Subdivision Ordinance and Zoning Code. The underlying tentative maps referenced in this staff report were approved by the Planning Commission as follows:

On June 15, 2017, the Planning Commission approved the underlying tentative map for Tract Map No. 17759 (Los Olivos) by a vote of 4-0 (Commissioners Duong, Kuo, Nirschl and Smith voting in favor; Commissioner Bartlett absent).

On February 2, 2017, the Planning Commission approved the underlying tentative map for Tract Map Nos. 18009, 18010, 18011, 18012, 18013 and 18014 (Orchard Hills) by a vote of 4-1 (Commissioners Bartlett, Kuo, Nirschl and Smith voting in favor; Commissioner Duong abstaining).

On February 16, 2017, the Planning Commission approved the underlying tentative map for Tract Map Nos. 18073 and 18074 (Portola Springs) by a vote of 5-0, with all members present.

ANALYSIS

The approval of tract maps is a multi-step process that assures development is reflective and compliant with the City's General Plan and with respective provisions of the City's development standards. City of Irvine Ordinance No. 07-12 authorizes the City Engineer to approve final tract maps if they substantially conform to the approved underlying tentative map and all applicable conditions of approval have been satisfied. The ordinance further requires staff to notify the City Council upon receipt of such maps for review and prior to approval/disapproval of a final tract map by the City Engineer. In addition, the State Subdivision Map Act requires the approval of final maps if the City Engineer has found that the final map substantially conforms to the underlying tentative map.

The tract maps listed below have been reviewed and are pending the City Engineer's final approval. Following approval and a 15-day appeal period, the map will be released for recordation. Recordation of the maps is required prior to the issuance of building permits.

| Submitted by | Tract Map No. | No. of Lots | Location | Status |
|--|---------------|-------------|--|------------------|
| Irvine Community Development Company, LLC | 17759 | 32-lot map | Bake Parkway and Irvine Center Drive (<i>Los Olivos</i>) | Pending Approval |
| | 18009 | 70-lot map | Portola Parkway and Orchard Hills Drive (Orchard Hills) | Pending Approval |
| | 18010 | 110-lot map | Portola Parkway and Orchard Hills Drive (Orchard Hills) | Pending Approval |
| | 18011 | 64-lot map | Portola Parkway and Orchard Hills Drive (Orchard Hills) | Pending Approval |
| | 18012 | 83-lot map | Portola Parkway and Orchard Hills Drive (Orchard Hills) | Pending Approval |
| | 18013 | 92-lot map | Portola Parkway and Orchard Hills Drive (Orchard Hills) | Pending Approval |
| | 18014 | 76-lot map | Portola Parkway and Orchard Hills Drive (Orchard Hills) | Pending Approval |
| | 18073 | 52-lot map | Portola Parkway and Portola Springs (Portola Springs) | Pending Approval |
| | 18074 | 43-lot map | Portola Parkway and Portola Springs (Portola Springs) | Pending Approval |

ALTERNATIVES CONSIDERED

An alternative to this notification was not considered. Pursuant to the State Subdivision Map Act and City of Irvine Ordinance 07-12, when approval authority of tract maps is delegated to the City Engineer, notification to the City Council of receipt and approval of such maps is required.

FINANCIAL IMPACT

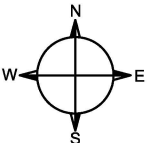
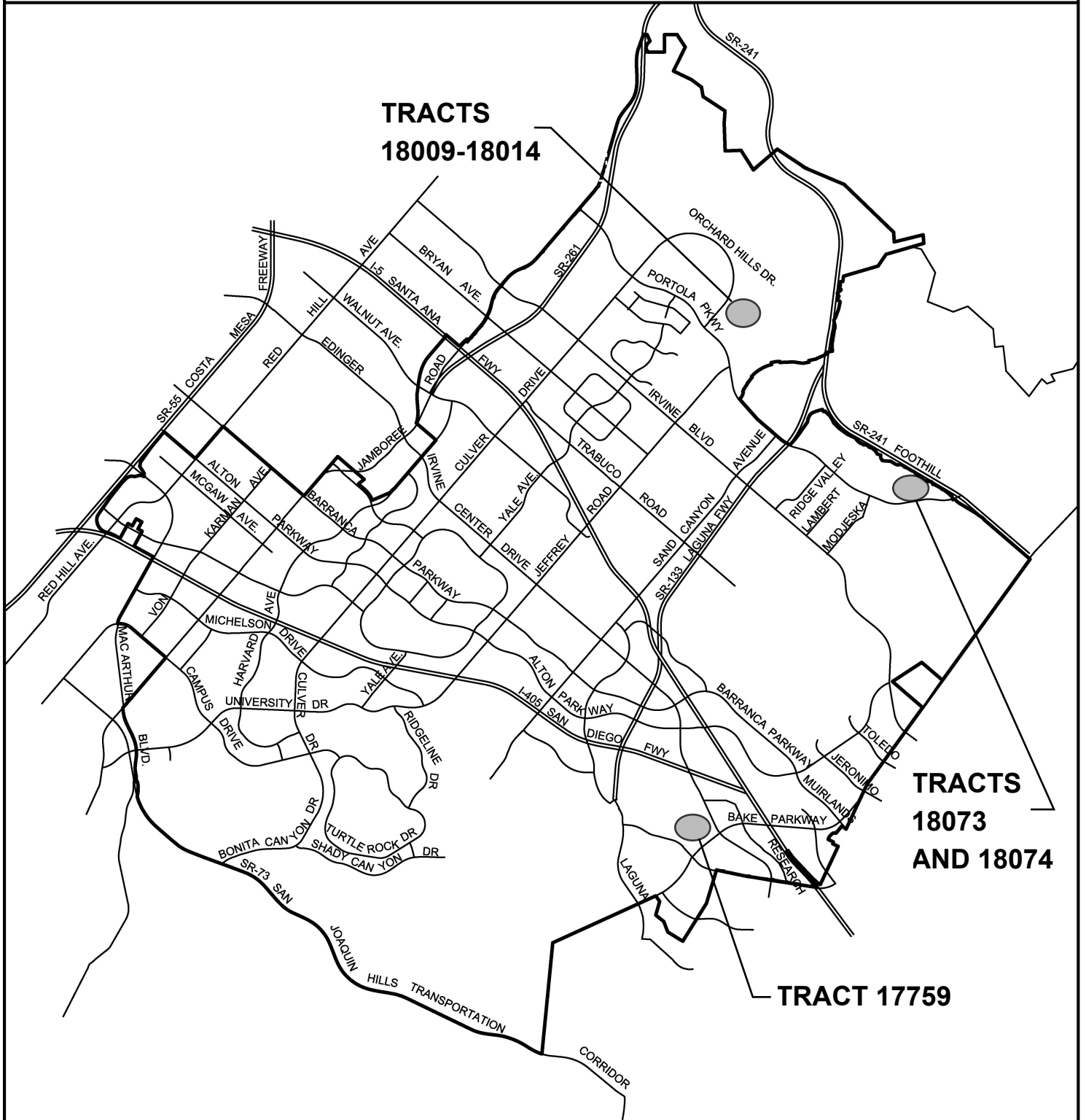
The administrative cost to the City for processing the maps is offset by developer fees paid by the applicant submitting the maps.

REPORT PREPARED BY Stacy DeLong, Associate Engineer

ATTACHMENTS

1. Vicinity Map
2. Site Map – Tract 17759 (Los Olivos)
3. Site Map – Tracts 18009-18014 (Orchard Hills)
4. Site Map – Tracts 18073 and 18074 (Portola Springs)

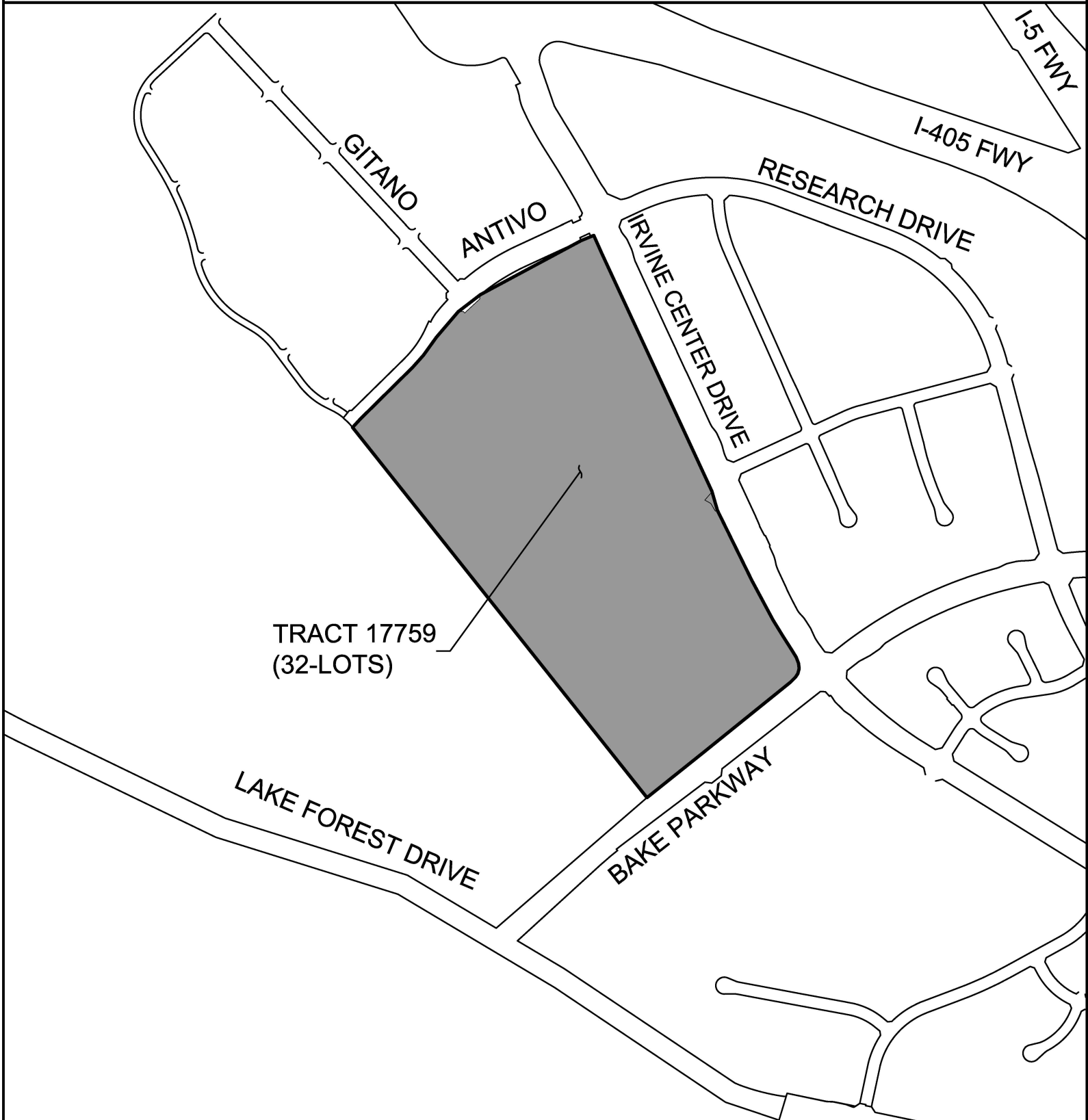
FINAL TRACT MAP Nos. 17759, 18009-18014, 18073 AND 18074



VICINITY MAP



FINAL TRACT MAP No. 17759
LOS OLIVOS



TRACT 17759
(32-LOTS)

LAKE FOREST DRIVE

BAKE PARKWAY

GITANO

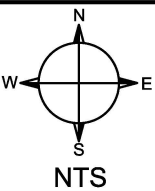
ANTIVO

IRVINE CENTER DRIVE

RESEARCH DRIVE

I-405 FWY

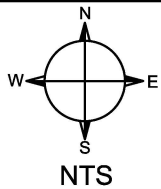
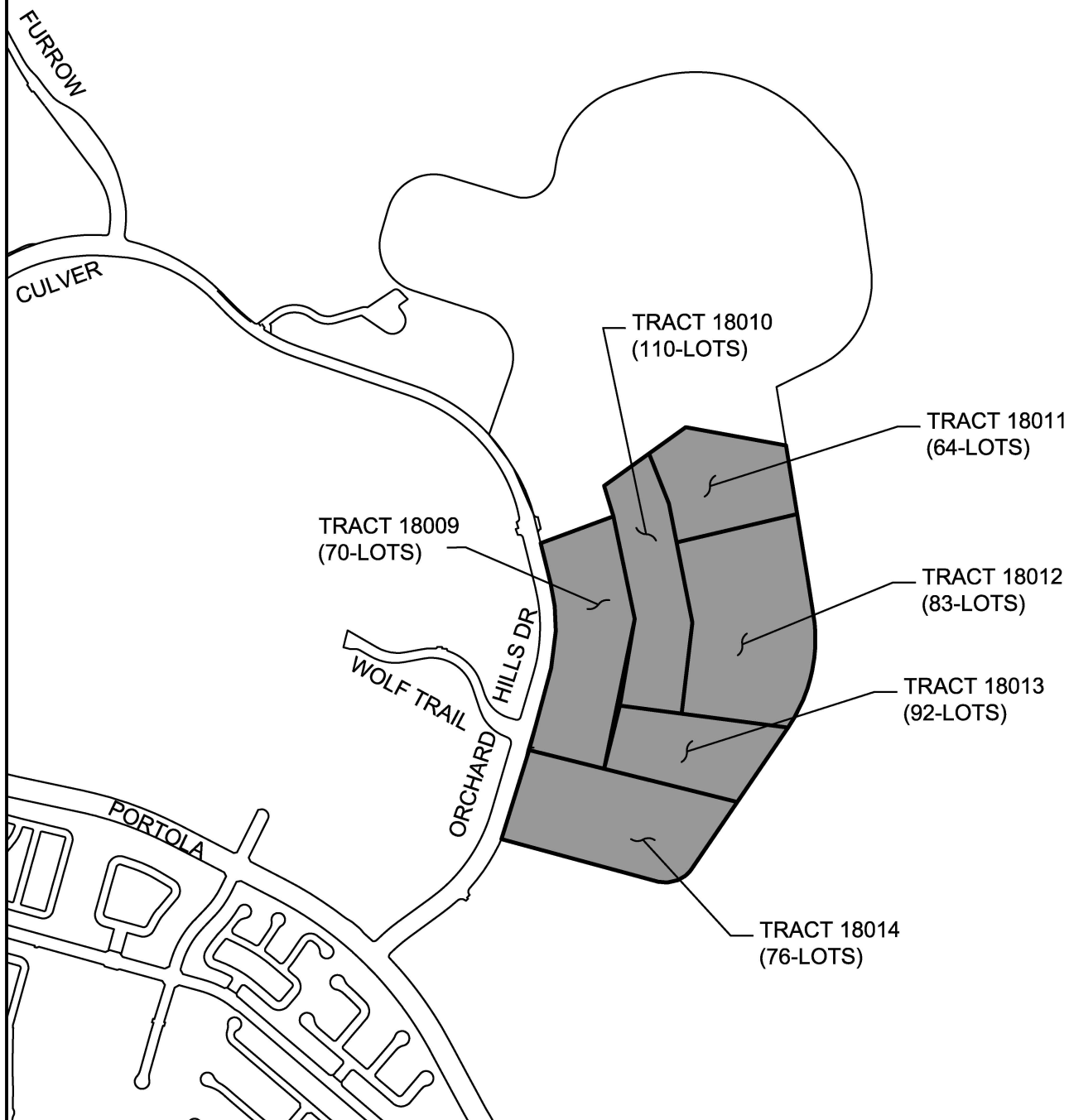
I-5 FWY



SITE MAP



FINAL TRACT MAP Nos. 18009-18014 ORCHARD HILLS

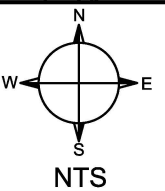
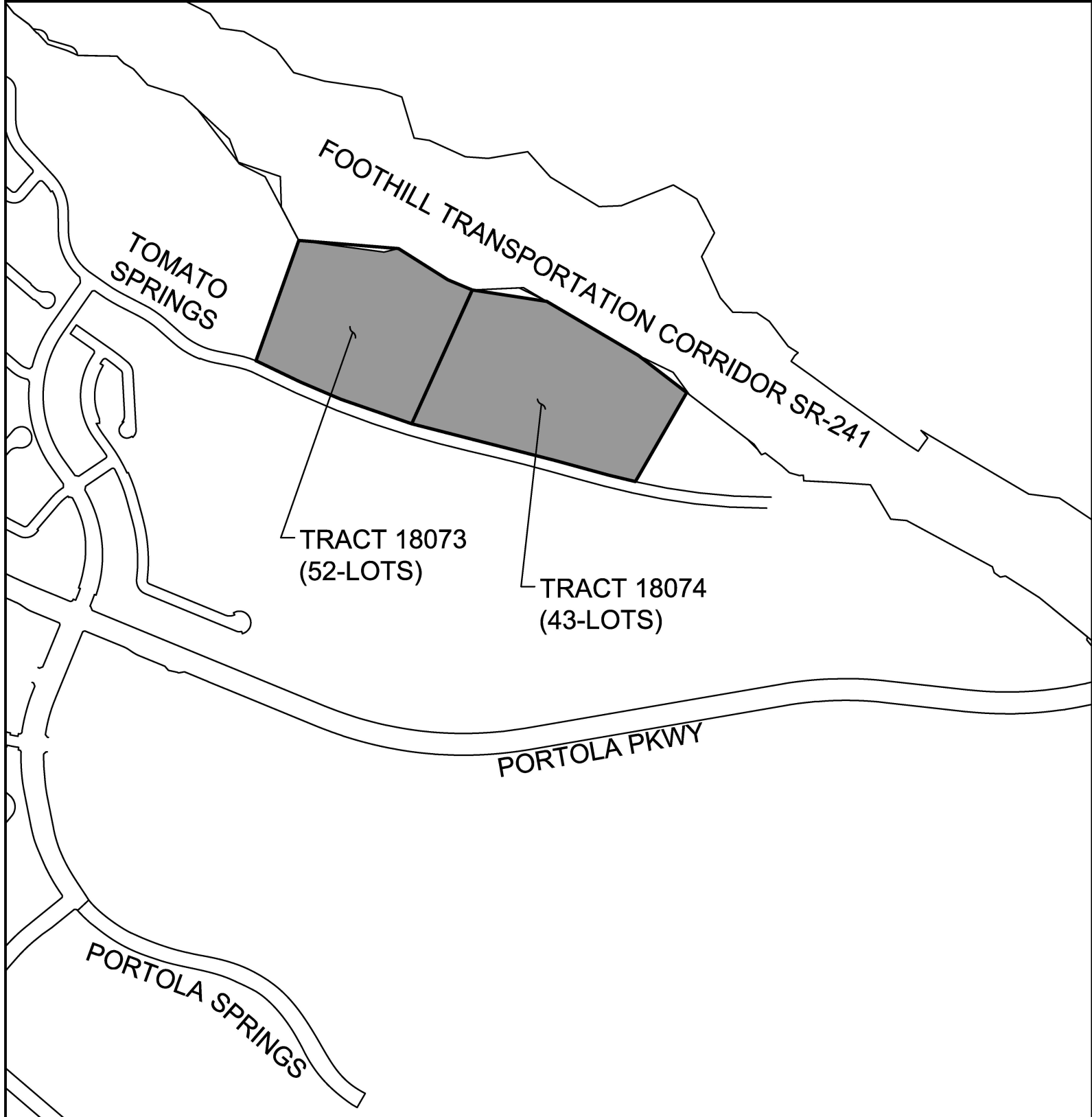


SITE MAP

ATTACHMENT 3



FINAL TRACT MAP Nos. 18073 AND 18074 PORTOLA SPRINGS



SITE MAP



2.11

Memo

RECEIVED
CITY OF IRVINE
CITY CLERK'S OFFICE

2017 AUG -1 PM 2: 50

RECEIVED

AUG 01 2017

CITY OF IRVINE
CITY MANAGER'S OFFICE

To: Sean Joyce, City Manager
From: Lynn Schott, Mayor Pro Tem *LS*
Date: August 1, 2017
Re: Community Partnership Fund Grant Nomination
Irvine Korean Evergreen Association

The Irvine Korean Evergreen Association is a nonprofit organization providing activities and support for Korean American seniors, with special emphasis on meeting their social and physical welfare needs by encouraging individuals to remain actively engaged in the Irvine community.

Please place an item on the August 8, 2017 agenda asking the City Council to approve a \$1,000 community partnership grant to the Irvine Korean Evergreen Association in support of their programs.

If approved, the City Manager will be authorized to prepare and execute the appropriate Funding Agreement.

cc: Irvine City Council
Molly McLaughlin, City Clerk

Memo


RECEIVED
CITY OF IRVINE
CITY CLERK'S OFFICE

2017 AUG -1 PM 2: 50

RECEIVED

AUG 01 2017

CITY OF IRVINE
CITY MANAGER'S OFFICE

To: Sean Joyce, City Manager
From: Lynn Schott, Mayor Pro Tem 
Date: August 1, 2017
Re: **Community Partnership Fund Grant Nomination
Irvine Barclay Theatre**

The Irvine Barclay Theatre is a unique partnership made up of the City of Irvine, the University of California Irvine and the private sector, and has become known for its wide-ranging artistic performances as well as its intimate atmosphere.

As the City's representative on the Irvine Barclay Theatre board, I'm very pleased with the enthusiasm and energy of our staff, volunteers, and board members as we have embarked on our second 25 years of excellence. There is renewed purpose, passion, and all new programming, including a focus on bringing arts into our community to our youth.

Out of a desire to contribute to our City's unique and beloved theatre, please place an item on the August 8, 2017 agenda asking the City Council to approve a \$2,000 community partnership grant to the Irvine Barclay Theatre.

If approved, the City Manager will be authorized to prepare and execute the appropriate Funding Agreement.

cc: Irvine City Council
Molly McLaughlin, City Clerk

Memo

RECEIVED
CITY OF IRVINE
CITY CLERK'S OFFICE

2017 AUG -1 PM 2: 50

RECEIVED

AUG 01 2017

CITY OF IRVINE
CITY MANAGER'S OFFICE

To: Sean Joyce, City Manager
From: Lynn Schott, Mayor Pro Tem *LS*
Date: August 1, 2017
Re: Community Partnership Fund Grant Nomination
New Outlook Center

The New Outlook Center is a nonprofit organization providing a network of assistance, services and activities such as workshops and classes to inform and instruct underprivileged ethnic families and minority single parents to enable them to acclimate, integrate, and ultimately participate in the American social process.

At this time in our nation, I cannot think of a more important mission than to assist the underprivileged to truly become independent community members.

Please place an item on the August 8, 2017 agenda asking the City Council to approve a \$2,000 community partnership grant to the New Outlook Center in support of their mission and goals.

If approved, the City Manager will be authorized to prepare and execute the appropriate Funding Agreement.

cc: Irvine City Council
Molly McLaughlin, City Clerk

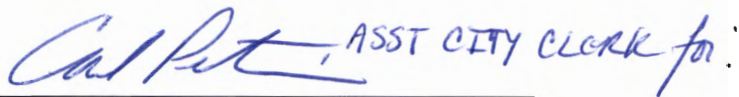
3.1



REQUEST FOR CITY OF IRVINE AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY ACTION

MEETING DATE: AUGUST 8, 2017

TITLE: MINUTES


Secretary

RECOMMENDED ACTION:

- 1) Approve the minutes of a regular joint meeting of the City of Irvine as Successor Agency to the dissolved Irvine Redevelopment Agency with the Irvine City Council held on March 28, 2017.
- 2) Approve the minutes of a regular joint meeting of the City of Irvine as Successor Agency to the dissolved Irvine Redevelopment Agency with the Irvine City Council held on July 11, 2017.



MINUTES

**CITY COUNCIL
REGULAR MEETING
AND
REGULAR JOINT MEETING
WITH THE CITY OF IRVINE AS
SUCCESSOR AGENCY TO THE
DISSOLVED IRVINE
REDEVELOPMENT AGENCY**

**March 28, 2017
City Council Chamber
One Civic Center Plaza
Irvine, CA 92606**

CALL TO ORDER

The regular meeting of the Irvine City Council and regular joint meeting with the City of Irvine as Successor Agency to the Irvine Redevelopment Agency was called to order at 4:09 p.m. on March 28, 2017 in the City Council Chamber, Irvine Civic Center, One Civic Center Plaza, Irvine, California; Mayor/Chairman Wagner presiding.

ROLL CALL

| | | | |
|----------|---|------------------------------------|------------------|
| Present: | 5 | Councilmember/Boardmember: | Melissa Fox |
| | | Councilmember/Boardmember: | Jeffrey Lalloway |
| | | Councilmember/Boardmember: | Christina Shea |
| | | Mayor Pro Tempore/Vice Chairwoman: | Lynn Schott* |
| | | Mayor/Chairman: | Donald P. Wagner |

* Mayor Pro Tempore/Vice Chairwoman Schott arrived at 4:10 p.m.

1. CLOSED SESSION

City Attorney Melching announced the following Closed Session item:

- 1.1 CONFERENCE WITH LABOR NEGOTIATORS (Pursuant to Government Code Section 54957.6) Agency Negotiators: Sean Joyce, City Manager; Grace Leung, Assistant City Manager; Michelle Grettenberg, Assistant to the City Manager; Jimmee Medina, Manager of Human Resources; Brian King, Human Resources Administrator; Peter Brown, Liebert, Cassidy, Whitmore; Employee Organizations: Associated Supervisory/ Administrative Personnel (ASAP); Irvine City Employees Association (ICEA); Irvine Professional Employees Association (IPEA); Irvine Police Association (IPA); Irvine Police Management Association (IPMA); Management and Non-Represented Employees; Confidential Employees; and Part-Time Employees**

There were no requests to speak to the Closed Session item.

RECESS

Mayor Wagner convened the City Council meeting to Closed Session at 4:11 p.m.

RECONVENE TO THE CITY COUNCIL MEETING

Mayor Wagner reconvened the regular City Council meeting at 5:10 p.m. City Attorney Melching, on behalf of the City Council, announced that no reportable action was taken in Closed Session.

PLEDGE OF ALLEGIANCE

Mayor Wagner led the Pledge of Allegiance.

INVOCATION

Mayor Wagner invited Pastor John Shin from Saddleback Church in Irvine to provide the invocation.

2. PRESENTATIONS

- 2.1 Proclaim April 9-15, 2017 as “National Public Safety Telecommunicators Week”**

Mayor Wagner introduced individuals from Public Safety and presented a proclamation in recognition of April 9-15, 2017 as “National Public Safety Telecommunicators Week.

2.2 Proclaim April 2017 as "National Child Abuse Prevention Month"

Mayor Wagner introduced Exchange Club of Irvine representatives Ed Benoe, President, and Carlos Carney, Member, who presented a donation check based on proceeds from the 2016 Thanksgiving Prayer Breakfast to The Raise Foundation for its continued efforts in preventing child abuse. Mayor Pro Tempore Schott, as a Member of the Exchange Club of Irvine, also provided brief comments; and Mike Hamel, Director of Public Safety/Chief of Police, provided a brief report on how the City prevents and addresses child abuse.

Following remarks, Mayor Wagner presented a proclamation to The Raise Foundation recognizing April 2017 as "National Child Abuse Prevention Month," following which Scott Trotter, Executive Director, Child Abuse Prevention Center, presented each Councilmember with a plaque in appreciation of the City's efforts in preventing child abuse.

CITY MANAGER'S REPORT

There was no report.

ANNOUNCEMENTS/COMMITTEE REPORTS/COUNCIL REPORTS

Councilmember Fox, as the City's representative to the Santa Ana Flood Control Protection Agency, provided a brief update on the Agency's recent efforts to control the capture and conservation of water from the Prado Dam due to the recent storms, which as a result, was able to handle the 20,000 cubic feet per second that was at the capacity. She also noted that although the City of Irvine did not suffer any major damage from these storms, FEMA money was available for any damaged infrastructure in neighboring cities.

Mayor Pro Tempore Schott made the following announcements:

- Fourteen of the nineteen puppies rescued by the Irvine Police Department Animal Services Unit were adopted from the Irvine Animal Care Center last week, which were among those recovered in January when a woman was taken into custody after selling sick animals to unsuspecting customers. Irvine Animal Care Center staff cared for and nursed the puppies back to health over the past two months. For information on how to adopt an animal, call 949-724-7740 or visit cityofirvine.org/animals.

- Irvine and Orange County residents are invited to the last of five community meetings as part of the City's public outreach regarding the Orange County Great Park. This final event will be held on Sunday, April 2 at 10 a.m. at the South Coast Chinese Cultural Center in Irvine. The presentation will be provided in English and Mandarin. No RSVP is needed. For information, visit cityofirvine.org.

Mayor Wagner made the following announcements:

- WalletHub, an online financial website that rates many categories of American cities, determined that Irvine was the third happiest city in which to live in the United States. Three criteria were used and Irvine ranked in the top nine in all three categories, which included: 1) emotional and physical well-being, 2) income and employment, and 3) community and environment.
- A Donation Drive is underway to help fill spring baskets for the families of the adopted 2nd Battalion, 11th Marine Regiment, 1st Marine Division. Donations of plastic eggs, candy, small toys, stuffed animals and gift baskets can be dropped off at the Irvine Civic Center through Monday, April 3. Sponsored by the City and 2/11 Marines Adoption Committee, the donation drive is a great way to show support for servicemen and women and their families.
- The Wyland Foundation's National Mayor's Challenge for Water Conservation is a competition that encourages cities across the nation to ask their residents to be water wise. The Challenge runs from April 1-30, during which time residents can go online to conserve water, energy, and other national resources. There is no cost to participate. For information, visit cityofirvine.org and click the pledge button to sign up.

ADDITIONS AND DELETIONS

There were no additions or deletions to the agenda; however, City Manager Joyce noted an errata memo with respect to Consent Calendar Item No. 3.1.

CONVENE TO THE REGULAR JOINT MEETING

Mayor/Chairman Wagner convened to the regular joint meeting with the City of Irvine as Successor Agency to the dissolved Irvine Redevelopment Agency at 5:41 p.m.

3. CONSENT CALENDAR - CITY COUNCIL

ACTION: Moved by Councilmember/Boardmember Lalloway, seconded by Councilmember/Boardmember Shea, and unanimously carried to approve City Council Consent Calendar Item Nos. 3.1 through 3.10, and Successor Agency Consent Calendar Item Nos. 4.1 and 4.2, with the exception of City Council Consent Item Nos. 3.7 and 3.9, which were removed for separate discussion.

3.1 MINUTES

ACTION:

Approved the minutes of a regular meeting of the Irvine City Council held on March 14, 2017 **as amended** per the errata memo dated March 28, 2017.

3.2 WARRANT AND WIRE TRANSFER RESOLUTION

ACTION:

Adopted RESOLUTION NO. 17-21 - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ALLOWING CERTAIN CLAIMS AND DEMANDS AND SPECIFYING THE FUNDS OUT OF WHICH THE SAME ARE TO BE PAID

3.3 TREASURER'S REPORT FOR THE QUARTER ENDED DECEMBER 31, 2016

ACTION:

Received and filed the Treasurer's Report for the quarter ended December 31, 2016.

3.4 NAMING OF THE ARENA RINK AT THE GREAT PARK COMMUNITY ICE FACILITY

ACTION:

Authorized the City Manager to execute a letter approving the Irvine Ice Foundation's request to name the Arena at the Great Park Community Ice Facility.

(Unless otherwise directed by a member of the City Council, the vote on this matter will reflect the prior action of each Councilmember when he or she sat and voted as a member of the Board of Directors of the Orange County Great Park Corporation. However, if a Councilmember is not present at the City Council meeting, his or her vote will be reflected as absent.)

Approved 5-0.

3.5 BUDGET ADJUSTMENT FOR CONSTRUCTION OF TEMPORARY PEDESTRIAN WALKWAY FOR PARKING LOT ACCESS IN THE WESTERN SECTOR

ACTION:

Approved a budget appropriation in the amount of \$16,080 from the Orange County Great Park Fund unallocated fund balance to construct a temporary pedestrian walkway between the Festival Lot and North Athletic Fields in the Western Sector of the Orange County Great Park.

(Unless otherwise directed by a member of the City Council, the vote on this matter will reflect the prior action of each Councilmember when he or she sat and voted as a member of the Board of Directors of the Orange County Great Park Corporation. However, if a Councilmember is not present at the City Council meeting, his or her vote will be reflected as absent.)

Approved 5-0.

3.6 APPROVAL OF PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS FOR CONSTRUCTION OF A NEW TRAFFIC SIGNAL AT KAZAN/WALNUT

ACTION:

- 1) Approved the construction plans, specifications and contract documents for the Kazan/Walnut Traffic Signal, Capital Improvement Project 331607.
- 2) Approved the Engineer's Estimate, Construction Contingency and Project Funding Summary.
- 3) Authorized staff to solicit competitive bids and award the construction contract to the lowest responsive and responsible bidder, in accordance with the City's purchasing policies and procedures, within the approved project budget.

3.7 NOTICE OF REVIEW AND PENDING APPROVAL FOR TRACT MAPS IN GREAT PARK NEIGHBORHOODS (HERITAGE HILLS), ORCHARD HILLS, EASTWOOD, LOS OLIVOS AND PORTOLA SPRINGS

This item was removed for separate discussion by the following individuals, who requested the withdrawal of approval for Tract Map No. 17759 (Los Olivos) pending a subsequent environmental impact report and renewed review of the Tract Map by the Planning Commission:

Michael Aguirre, Aguirre & Severson
Daniel Kim, Aguirre & Severson
Doug Bender

Bill Klassen
Zeki Kayiran

Mayor Wagner noted that the item before the City Council was to receive and file, and therefore, no action was necessary. City Manager Joyce further noted that the item was procedural pursuant to Irvine Municipal Code Section 5-5-704, and that the underlying Tentative Tract Map 17759 was tentatively scheduled for the May 20 Planning Commission meeting.

Councilmember Shea noted that the May 20 Planning Commission meeting/hearing would provide an opportunity for individuals to bring forward their concerns. City Attorney Melching also reiterated that the item was for reporting purposes only by the City Engineer and that the subject Tentative Tract Map was currently under review.

ACTION: Moved by Councilmember Lalloway, seconded by Councilmember Shea, and unanimously carried to:

Receive and file.

3.8 DESIGNATION OF CITY MANAGER AS OWNER REPRESENTATIVE FOR CITY OWNED PROPERTY AT THE ORANGE COUNTY GREAT PARK AND NOTICE OF PENDING APPROVAL FOR A PARCEL MAP IN THE ORANGE COUNTY GREAT PARK

ACTION:

- 1) Authorized the City Manager to sign the ownership certificate statement for Parcel Map 2016-152 as the property owner representative for the City of Irvine.
- 2) Authorized the City Manager to sign the ownership certificate statement for future maps, as necessary for City owned property at the Orange County Great Park, as the property owner representative for the City of Irvine, subject to notification to the City Council of the same.

3.9 APPROVAL OF PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS FOR THE LAKEVIEW SENIOR CENTER OUTDOOR PATIO AND ROSE GARDEN REHABILITATION

This item was removed for separate discussion at the request of Councilmember Lalloway, who suggested the item be reviewed by the Senior Citizens Council prior to approval by the City Council.

ACTION: Moved by Councilmember Lalloway, seconded by Councilmember Shea, to:

Refer the item to the Senior Citizens Council for its review and return to the City Council forthwith.

City Council discussion included: also including review by the Irvine Residents with Disabilities Advisory Board, and expressed concern about delaying the project based on CDBG funding and related deadlines.

Manuel Gomez, Director of Public Works, noted that staff would work with Community Services to immediately agendaize the item before the Irvine Residents with Disabilities Advisory Board and Senior Citizens Council and return to the City Council as soon as possible to ensure that any deadlines pertaining to Community Development Block Grant (CDBG) funding would be met.

ACTION: A friendly amendment was made by Mayor Pro Tempore Schott, accepted by Councilmembers Lalloway and Shea as the maker and seconder, and unanimously carried to:

Refer the item to the Senior Citizens Council and Irvine Residents with Disabilities Advisory Board for review and return to the City Council forthwith.

3.10 COMMUNITY PARTNERSHIP FUND GRANT NOMINATIONS

ACTION:

- 1) Approved Councilmember Shea's requests for Community Partnership Fund Grant nominations to Roosters Foundation in the amount of \$200 and Tender Touch Ministries in the amount of \$700 both in support of program costs.
- 2) Authorized the City Manager to prepare and sign the funding agreements listed in Action 1.

4. CONSENT CALENDAR - SUCCESSOR AGENCY

4.1 MINUTES

ACTION:

Approved the minutes of a regular joint meeting of the City of Irvine as Successor Agency to the dissolved Irvine Redevelopment Agency with the Irvine City Council held on January 10, 2017.

4.2 WARRANT AND WIRE TRANSFER RESOLUTION – CITY COUNCIL AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY

ACTION:

Adopted RESOLUTION NO. 17-02 – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY ALLOWING CERTAIN CLAIMS AND DEMANDS OF THE CITY COUNCIL AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY AND SPECIFYING THE FUNDS OUT OF WHICH THE SAME ARE TO BE PAID

PUBLIC COMMENT - SUCCESSOR AGENCY

There were no requests to speak.

ADJOURNMENT OF REGULAR JOINT MEETING TO AN ADJOURNED REGULAR JOINT MEETING - April 4, 2017, 4 p.m., City Council Chamber, 1 Civic Center Plaza, Irvine, CA 92606

Moved by Councilmember/Boardmember Lalloway, seconded by Councilmember/Boardmember Shea, and unanimously carried to adjourn the regular joint meeting with the Successor Agency to an adjourned regular joint meeting on April 4, 2017 at 4 p.m.

CHAIRMAN, SUCCESSOR AGENCY

July 25, 2017

SECRETARY, SUCCESSOR AGENCY



MINUTES

CITY COUNCIL REGULAR MEETING AND REGULAR JOINT MEETING WITH THE CITY OF IRVINE AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY

July 11, 2017
City Council Chamber
One Civic Center Plaza
Irvine, CA 92606

CALL TO ORDER

The regular meeting of the Irvine City Council and regular joint meeting with the City of Irvine as Successor Agency to the dissolved Irvine Redevelopment Agency was called to order at 4:03 p.m. on July 11, 2017 in the City Council Chamber, Irvine Civic Center, One Civic Center Plaza, Irvine, California; Mayor/Chairman Wagner presiding.

ROLL CALL

| | | | |
|----------|---|------------------------------------|------------------|
| Present: | 5 | Councilmember/Boardmember: | Melissa Fox |
| | | Councilmember/Boardmember: | Jeffrey Lalloway |
| | | Councilmember/Boardmember: | Christina Shea |
| | | Mayor Pro Tempore/Vice Chairwoman: | Lynn Schott |
| | | Mayor/Chairman: | Donald P. Wagner |

1. CLOSED SESSION

City Attorney Melching announced the following Closed Session item:

- 1.1 CONFERENCE WITH LEGAL COUNSEL - ANTICIPATED LITIGATION: *Initiation of litigation pursuant to paragraph (4) of subdivision (d) of Section 54956.9: 1 potential case***

RECESS

Mayor/Chairman Wagner convened the regular joint meeting with the Successor Agency to Closed Session at 4:04 p.m.

RECONVENE TO THE REGULAR JOINT MEETING

Mayor/Chairman Wagner reconvened the regular joint meeting with the Successor Agency at 4:33 p.m. City Attorney Melching, on behalf of the City Council and Successor Agency, announced that no reportable action was taken in Closed Session.

ADJOURNMENT - REGULAR JOINT MEETING

Moved by Councilmember/Boardmember Shea, seconded by Councilmember/Boardmember Lalloway, and unanimously carried to adjourn the regular joint meeting with the City of Irvine as Successor Agency to the dissolved Irvine Redevelopment Agency at 4:34 p.m.

CHAIRMAN, SUCCESSOR AGENCY

July 25, 2017

SECRETARY, SUCCESSOR AGENCY

3.2



REQUEST FOR CITY OF IRVINE AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY ACTION

MEETING DATE: AUGUST 8, 2017

TITLE: WARRANT AND WIRE TRANSFER RESOLUTION – CITY
COUNCIL AS SUCCESSOR AGENCY TO THE DISSOLVED
IRVINE REDEVELOPMENT AGENCY

Director of Administrative Services

City Manager

RECOMMENDED ACTION

Adopt – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY ALLOWING CERTAIN CLAIMS AND DEMANDS OF THE CITY COUNCIL AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY AND SPECIFYING THE FUNDS OUT OF WHICH THE SAME ARE TO BE PAID

EXECUTIVE SUMMARY

On December 29, 2011, the California Supreme Court upheld Assembly Bill x1 26 (the Dissolution Act) and directed that all redevelopment agencies in the state be dissolved effective February 1, 2012. On January 10, 2012, the City Council elected to become the Successor Agency to the Irvine Redevelopment Agency. As the Successor Agency, the City will wind down the affairs of the former redevelopment agency, including the payment of invoices for services related to the dissolution.

The attached Register of Warrants and Wire Transfers contain payments totaling \$29,342.50 for legal and consulting services. The payments will be released on Wednesday, August 9, 2017.

ATTACHMENT Resolution

SUCCESSOR AGENCY RESOLUTION NO. 17-

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY ALLOWING CERTAIN CLAIMS AND DEMANDS OF THE CITY COUNCIL AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY AND SPECIFYING THE FUNDS OUT OF WHICH THE SAME ARE TO BE PAID

(SEE ATTACHED)

PASSED AND ADOPTED by the City Council of the City of Irvine, as Successor Agency to the dissolved Irvine Redevelopment Agency, at a regular meeting held on the 8th day of August 2017.

CHAIR, SUCCESSOR AGENCY

ATTEST:

SECRETARY, SUCCESSOR AGENCY

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, Secretary to the Successor Agency, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine, as Successor Agency to the dissolved Irvine Redevelopment Agency, held on the 8th day of August 2017.

AYES: 0 BOARDMEMBERS:
NOES: 0 BOARDMEMBERS:
ABSENT: 0 BOARDMEMBERS:

SECRETARY, SUCCESSOR AGENCY

SUCCESSOR AGENCY 17-

ATTACHMENT

7/19/2017 through 7/25/2017

**City of Irvine as Successor Agency to the Irvine Redevelopment Agency
Register of Warrants and Wire Transfers**

| Fund | Fund Description | Amount |
|-------------|---------------------------|------------------|
| 791 | REDEVELOPMENT OBLIGTN RET | 28,150.00 |
| | GRAND TOTAL | 28,150.00 |

7/26/2017 through 8/1/2017

**City of Irvine as Successor Agency to the Irvine Redevelopment Agency
Register of Warrants and Wire Transfers**

| Fund | Fund Description | Amount |
|-------------|---------------------------|-----------------|
| 791 | REDEVELOPMENT OBLIGTN RET | 1,192.50 |
| | GRAND TOTAL | 1,192.50 |

3.3



REQUEST FOR CITY OF IRVINE AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY ACTION

MEETING DATE: AUGUST 8, 2017

TITLE: ASSIGNMENT AND ASSUMPTION OF FIVE POINT OFFICE
VENTURE I LLC TO BE A PARTY TO THE APPROVED
AMENDED AND RESTATED DEVELOPMENT AGREEMENT
(00470035-PDA)

A handwritten signature in black ink, appearing to read "David", written over a horizontal line.

Director of Community Development

A handwritten signature in black ink, appearing to read "Sean Byrce", written over a horizontal line.

City Manager

RECOMMENDED ACTION

Adopt – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY APPROVING THE ASSIGNMENT AND ASSUMPTION OF CERTAIN OBLIGATIONS UNDER THE APPROVED AMENDED AND RESTATED DEVELOPMENT AGREEMENT (00470035-PDA) BY AND BETWEEN THE CITY OF IRVINE, CITY OF IRVINE AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY AND O.C. PROPERTY COMPANY LLC TO FIVE POINT OFFICE VENTURE I LLC FOR THE GREAT PARK NEIGHBORHOODS DEVELOPMENT DISTRICT 3 CORPORATE CAMPUS PROJECT LOCATED IN PLANNING AREA 51

EXECUTIVE SUMMARY

On September 8, 2009, the City Council approved an Amended and Restated Development Agreement (“ARDA”) (Attachment 1) between the City of Irvine, City of Irvine as Successor Agency to the Dissolved Irvine Redevelopment Agency and Heritage Fields El Toro LLC, (“Heritage Fields”) by a 3-2 vote (Councilmembers Agran, Krom, and Kang voting in favor; Councilmembers Choi and Shea voting against). The ARDA is a statutory development agreement which, among other things, vests the entitlement approvals for the Heritage Fields/Great Park Neighborhoods development located within Planning Area 51.

Under the terms of the ARDA, the developer may assign its rights and obligations to a buyer of all or a portion of the developable land in Planning Area 51, so long as it obtains the City’s and Successor Agency’s consent prior to any such assignment. The City and Successor Agency approved such an assignment in 2015, when Heritage Fields sold a portion of its land to O.C. Property Company LLC (a Broadcom affiliate) in

connection with the contemplated development of a corporate campus along Marine Way just outside the boundaries of the Orange County Great Park ("Broadcom Campus").

O.C. Property Company has recently notified the City that it is under contract to re-sell the Broadcom Campus to a Five Point Communities affiliate -- Five Point Office Venture I, LLC. As part of the transaction, Broadcom will lease back from Five Point Office Venture I, LLC two of the four buildings under construction. City and Successor Agency approval of a Partial Assignment and Assumption of Development Agreement and Site Specific Approvals is required. The partial assignment will allow (and oblige) Five Point Office Venture to perform under the ARDA and associated site specific approvals.

COMMISSION/ADVISORY BOARD RECOMMENDATION

Not applicable.

ANALYSIS

On June 9, 2017, City staff received a proposed Partial Assignment and Assumption of the Development Agreement and Site Specific Approvals for the Broadcom Campus. The following summary outlines the entities involved and the sequence of events leading up to this assignment request:

- The ARDA originally executed between Heritage Fields, the City of Irvine and the Irvine Redevelopment Agency was approved by City Council on September 8, 2009.
- In July 2014, the Planning Commission approved Vesting Tentative Parcel Map 2014-211 (00604519-PTP) and a Master Plan (00604018-PMP) was approved by the Planning Commission by a vote, which allows for the development of the Broadcom Campus.
- In March 2015, Heritage Fields and O.C. Property Company LLC entered into a Partial Assignment and Assumption of a Development Agreement and Site Specific Approvals to facilitate O.C. Property Company's purchase of the Broadcom Campus from Heritage Fields; the City and the Successor Agency approved the assignment from Heritage Fields to O.C. Property Company.
- Recently, O.C. Property Company LLC and Five Point Office Venture I, LLC have agreed to a transaction whereby O.C. Property Company LLC will re-sell the Broadcom Campus and transfer the rights and obligations under the ARDA to Five Point Office Venture I, LLC. Similar to the March 2015 transfer, the proposed transfer requires the consent of the City and the Successor Agency.

Under the ARDA, O.C. Property Company LLC may assign its rights and obligations in connection with the transfer of the Broadcom Campus to Five Point Office Venture I, LLC. After the sale is completed, Five Point Office Venture I, LLC shall be liable for the

performance of the designated obligations under the ARDA, with respect to the portion of the Heritage Fields property so transferred.

Financial Condition and Development Experience of Five Point Office Venture I, LLC

As the leading developer of the Great Park Neighborhoods project in Planning Area 51 and assignee, Five Point Office Venture I, LLC, an affiliated company of Five Point Communities (master developer) possesses reasonable ownership structure, sufficient management and development experience to assume ownership and responsibility for the Broadcom Campus project. While primarily a home builder, the assignee has the financial means and has demonstrated extensive development experience to carry out the development of the project as described in the ARDA and project site approvals.

Current Status of the Broadcom Campus

In July 2014, the Planning Commission approved Vesting Tentative Parcel Map 2014-211 (00604519-PTP) and a Master Plan (00604018-PMP) to allow for the development of the Broadcom Campus. The project site is developed with a total of four buildings and associated parking. Development consists as follows:

- (i) Parcel 1, commonly referred to as 15101 Alton Parkway, containing approximately 3.5 acres and improved with a five-story building containing approximately 287,726 square feet of gross floor area;
- (ii) Parcel 4, commonly referred to as 15131 Alton Parkway, containing approximately 3.4 acres and improved with a four-story building containing approximately 189,064 square feet of gross floor area;
- (iii) Parcel 5, commonly referred to as 15161 Alton Parkway, containing approximately 3.2 acres and improved with a four-story building containing approximately 189,064 square feet of gross floor area;
- (iv) Parcel 7, commonly referred to as 15191 Alton Parkway, containing approximately 4.4 acres and improved with a five-story building containing approximately 373,167 square feet of gross floor area;
- (v) Parcels 2, 3, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16 and 17 are undeveloped and, as of today, consist of surface parking and landscaping; and
- (vi) Fee title to the vehicular and pedestrian bridges and related improvements constructed on the property and extending over Marine Way pursuant to that certain Irrevocable Offer of Dedication and Agreement Regarding Marine Way Bridge Ownership and Maintenance executed by O.C. Property Company LLC, and recorded in the Official Records of Orange County, California (the "Official Records") on March 10, 2015.

A total of 1,039,021 square feet of research and development intensity exists on the project site, and a total of 960,979 square feet of research and development intensity still remains for future buildout of the project site.

ALTERNATIVES CONSIDERED

The Successor Agency could choose not to adopt the resolution. If that occurs, the transaction between O.C. Property Company, LLC and Five Point Office Venture I, LLC cannot be completed, and OC Property Company, LLC would remain responsible to comply with all obligations related to the Broadcom Campus under the ARDA and associated entitlement approvals.

FINANCIAL IMPACT

There is no financial impact anticipated to the City, as this is a transaction between two private developers.

REPORT PREPARED BY Hernan DeSantos, Senior Planner

ATTACHMENTS

- Attachment 1: Amended Restated Development Agreement (00470035-PDA)
- Attachment 2: Partial Assignment and Assumption of Development Agreement
 and Site Specific Approvals
- Attachment 3: Successor Agency Resolution 17-XX

cc: Darlene Nicandro, Interim Manager of Planning Services
 Jennifer Bohan, Five Point Communities Management Inc.
 Gregory B. Caligari, Cox Castle Nicholson (gcaligari@coxcastle.com)
 Emily Webb, Rutan and Tucker (EWebb@rutan.com)

Recorded in Official Records, Orange County
Tom Daly, Clerk-Recorder

RECORDING REQUESTED BY
AND WHEN RECORDED MAIL TO:



NO FEE

2010000700065 03:57pm 12/27/10

93 401 A12 232

0.00 0.00 0.00 0.00 693.00 0.00 0.00 0.00

CITY OF IRVINE
One Civic Center Plaza
P.O. Box 19575
Irvine, CA 92623-9575
Attention: City Clerk

(Space Above For Recorder's Use Only)

This Development Agreement is recorded at the request
and for the benefit of the City of Irvine and is exempt
from the payment of a recording fee pursuant to
Government Code § 27383

AMENDED AND RESTATED DEVELOPMENT AGREEMENT

Between

THE CITY OF IRVINE AND THE IRVINE REDEVELOPMENT AGENCY

And

HERITAGE FIELDS EL TORO, LLC

TABLE OF CONTENTS

| | <u>Page</u> |
|---|--------------------|
| 1. DEFINITIONS..... | 5 |
| 2. EFFECT OF AGREEMENTS | 17 |
| 2.1 Effect Of Amended And Restated Development..... | 17 |
| 2.2 Effect Of Original Development Agreement..... | 17 |
| 2.3 Term..... | 18 |
| 2.4 Termination Upon Sale Of Individual Lots To Public And Completion Of Construction..... | 18 |
| 3. DEVELOPMENT OF THE PROPERTY..... | 19 |
| 3.1 Applicable Regulations; Vested Right To Develop..... | 19 |
| 3.2 Tentative Subdivision Maps | 20 |
| 3.3 Financing And Conveyance Maps..... | 20 |
| 3.4 Processing Of Applications And Permits | 20 |
| 3.5 Other Governmental Permits | 21 |
| 3.6 Subsequent General Plan Amendments And Zone Changes | 21 |
| 3.7 Assurances To Heritage Fields | 21 |
| 3.8 Reservations Of Authority | 22 |
| 3.9 Uses of City Property..... | 24 |
| 3.10 Homeless Assistance Provider Accommodations..... | 28 |
| 3.11 Density Bonus..... | 28 |
| 3.12 Traffic | 28 |
| 3.13 RDA Obligations | 31 |
| 3.14 Cooperation in Land Use Planning For Edge Conditions..... | 31 |
| 4. ARDA Overlay Plan | 31 |
| 4.1 ARDA Overlay Plan | 31 |
| 4.2 Priority Of ARDA Overlay Plan..... | 31 |
| 4.3 Changes in Land Use, Circulation Access and Mitigation Requirements | 32 |
| 5. FEES | 32 |
| 5.1 Development Fees..... | 32 |
| 5.2 Other Fees And Charges | 32 |
| 6. NORTH IRVINE TRANSPORTATION INFRASTRUCTURE | 32 |
| 6.1 NITM Ordinance..... | 32 |
| 6.2 Concurrent Agreement(s) With North Irvine Adjacent Lands Owner..... | 33 |
| 6.3 Waiver Of Objections Due To Allocation And Apportionment Of NITM Fees..... | 33 |
| 6.4 Limitation On Heritage Fields' Obligation To Pay NITM Fees For City Property..... | 33 |

| | <u>Page</u> |
|------|---|
| 6.5 | Commitment Regarding Payment Of NITM Fee Established For Each Future Development Area..... 34 |
| 6.6 | Notice Of NITM Program To Heritage Fields And Purchasers Of The Property..... 34 |
| 6.7 | Commitment Regarding Sale Price For Right-Of-Way Land Owned By Heritage Fields Specified In NITM Program 34 |
| 6.8 | NITM Account..... 34 |
| 6.9 | Independent Nature Of Obligations 34 |
| 6.10 | City Covenant To Obtain NITM Or Fair Share Fees From North Irvine Adjacent Lands..... 35 |
| 6.11 | City Covenant To Obtain NITM Or Fair Share Fees From All Property Owners In The North Irvine Adjacent Lands..... 35 |
| 6.12 | City Covenant To Use NITM Fees And NITM Account For NITM Program..... 35 |
| 6.13 | Certificate of NITM Compliance..... 35 |
| 6.14 | Satisfaction Of Mitigation Obligations Or Other Traffic Conditions 36 |
| 6.15 | Independence Of Obligations 36 |
| 7. | CONSTRUCTION AND MAINTENANCE OF PUBLIC IMPROVEMENTS; FINANCING OF SAME..... 36 |
| 7.1 | Heritage Fields' Obligations to Construct and Fund Construction..... 36 |
| 7.2 | Authorized Services 38 |
| 7.3 | Additional Backbone Infrastructure..... 38 |
| 7.4 | Value Limitation 38 |
| 7.5 | Capacity Allocation on the Project 39 |
| 7.6 | Application of Special Taxes 40 |
| 7.7 | Formation of the CFD 42 |
| 7.8 | Issuance of Non-Subordinate Bonds..... 44 |
| 7.9 | Apportionment; Application to County Property 46 |
| 7.10 | Waiver of Challenge to Special Tax Requirement 46 |
| 8. | PROPERTY-WIDE ACTIVITIES 47 |
| 8.1 | Master Subdivision Map 47 |
| 8.2 | Property-Wide Permits..... 47 |
| 8.3 | City Cooperation..... 48 |
| 9. | DEDICATIONS AND CONVEYANCES OF PROPERTY INTERESTS 48 |
| 9.1 | Police Site 48 |
| 9.2 | ARDA Transfer Site and Exchange Properties..... 49 |
| 9.3 | Park Dedications 50 |
| 9.4 | Dedication Of School Site To IUSD..... 51 |
| 9.5 | Dedication Of Streets To City..... 51 |
| 9.6 | Modifications To Property Boundaries..... 51 |
| 9.7 | Administrative Changes To Reflect Property Ownership Changes..... 51 |
| 9.8 | Rights of Way Reservation 51 |
| 9.9 | Assignment Of LIFOCs 51 |

| | <u>Page</u> |
|------|--|
| 9.10 | Recordation of Restrictive Covenant..... 52 |
| 10. | PUBLIC BENEFIT FEE..... 52 |
| 10.1 | Public Benefit Fee..... 52 |
| 10.1 | Waivers Regarding Public Benefit Fee..... 52 |
| 11. | UTILITIES..... 52 |
| 11.1 | Utility Easements..... 52 |
| 11.2 | Water Rights..... 53 |
| 12. | CC&Rs..... 53 |
| 13. | RUNWAY HARDSCAPE..... 53 |
| 14. | DEFAULT, REMEDIES, AND TERMINATION..... 53 |
| 14.1 | Notice And Opportunity To Cure..... 53 |
| 14.2 | Default Remedies..... 54 |
| 14.3 | Limitations on Defaults..... 54 |
| 14.4 | Parties' Exclusive Remedies..... 55 |
| 14.5 | Force Majeure/Supervening Events..... 56 |
| 14.6 | Dispute Resolution..... 57 |
| 14.7 | Arbitration of Disputes..... 58 |
| 15. | ANNUAL REVIEW..... 59 |
| 15.1 | Timing Of Annual Review..... 59 |
| 15.2 | Standards For Annual Review..... 59 |
| 15.3 | Certificate Of Compliance..... 60 |
| 16. | MORTGAGEE RIGHTS..... 60 |
| 16.1 | Encumbrances On The Property..... 60 |
| 16.2 | Mortgagee Protection..... 60 |
| 16.3 | Mortgagee Not Obligated..... 60 |
| 16.4 | Notice Of Default To Mortgagee; Right Of Mortgagee To Cure..... 61 |
| 17. | ASSIGNMENT..... 61 |
| 17.1 | Right To Assign..... 61 |
| 17.2 | Assignee Subject To Terms Of Agreement..... 61 |
| 17.3 | Release Upon Transfer..... 61 |
| 18. | INSURANCE AND INDEMNITY..... 62 |
| 18.1 | Insurance..... 62 |
| 18.2 | Indemnity By Heritage Fields..... 63 |
| 18.3 | Indemnity By City..... 63 |
| 19. | THIRD-PARTY LEGAL CHALLENGE..... 63 |
| 20. | MISCELLANEOUS..... 64 |

| | <u>Page</u> |
|---|-------------|
| 20.1 Covenants..... | 64 |
| 20.2 Entire Agreement, Waivers And Amendments | 64 |
| 20.3 Legal Expenses | 64 |
| 20.4 Constructive Notice And Acceptance | 64 |
| 20.5 No Third-Party Beneficiaries..... | 65 |
| 20.6 Relationship Of Parties | 65 |
| 20.7 Severability | 65 |
| 20.8 Further Actions And Instruments..... | 65 |
| 20.9 Estoppel Certificate..... | 65 |
| 20.10 Applicable Law; Venue | 65 |
| 20.11 Non-Liability Of Officers, Employees and Other Parties..... | 66 |
| 20.12 Notices | 66 |
| 20.13 Representation As To Ownership | 67 |
| 20.14 Authority To Execute..... | 67 |
| 20.15 Execution Of Agreement; Counterparts..... | 67 |
| 20.16 Exhibits | 68 |

AMENDED AND RESTATED DEVELOPMENT AGREEMENT

This AMENDED AND RESTATED DEVELOPMENT AGREEMENT (“**Amended and Restated Development Agreement**”) is entered into this 22 day of December, 2010, by and between the CITY OF IRVINE, a California charter city (the “**City**”) and Heritage Fields El Toro LLC, a Delaware limited liability company (“**Heritage Fields**”). This AGREEMENT (“**RDA Agreement**”) is also entered into by and between the Irvine Redevelopment Agency, a redevelopment agency formed pursuant to Health and Safety Code Sections 33000 *et seq.* (“**RDA**”) and Heritage Fields. This Amended and Restated Development Agreement and RDA Agreement are collectively referred to as the “**Amended and Restated Agreement.**” The City, Heritage Fields and RDA are collectively referred to herein as the “**Parties**” and individually as a “**Party.**”

RECITALS

All capitalized terms used in the Recitals shall have the meanings given to such terms in Section 1 of this Amended and Restated Agreement.

A. To strengthen the public planning process, encourage private participation in comprehensive planning, and reduce the economic risk of development, the Legislature of the State of California adopted the “**Development Agreement Statute,**” Sections 65864 *et seq.*, of the California Government Code. The Development Agreement Statute authorizes the City to enter into an agreement with any person having a legal or equitable interest in real property, to provide for the development of such property and to vest certain development rights therein. Pursuant to the authorization set forth in the Development Agreement Statute, the City adopted its Resolution No. 82-68 on July 13, 1982, establishing procedures for the consideration and approval of development agreements (“**City Development Agreement Regulations**”).

B. In accordance with the Development Agreement Statute, the City Development Agreement Regulations and applicable law, on July 8, 2003, the City Council of the City of Irvine (“**City Council**”) adopted Ordinance No. 03-19 approving a draft version of a development agreement (the “**2003 Agreement Draft Version**”) in anticipation of entering into an actual development agreement with the eventual purchaser(s) of the former Marine Corps Air Station, El Toro (“**MCAS El Toro**”).

C. On July 1, 2004, the City’s Planning Commission held a public hearing on the 2003 Agreement Draft Version, made certain findings and determinations with respect thereto and recommended to the City Council that such version be approved. On October 12, 2004, the City Council also held a public hearing on a revised draft version of a development agreement, considered the recommendations of the Planning Commission, found that the revised draft version of a development agreement (the “**2004 Agreement Draft Version**”) was consistent with the City’s General Plan, and adopted Ordinance No. 04-13 approving the 2004 Agreement Draft Version. The City again

prepared the 2004 Agreement Draft Version in anticipation of entering into a development agreement with the eventual purchaser(s) of the former MCAS El Toro.

D. Subsequently, the City determined to further revise the 2004 Agreement Draft Version to address, among other issues, completion of the bidding process for the acquisition of the former MCAS El Toro by a single bidder. On May 5, 2005, the City's Planning Commission held a public hearing on the proposed development, made certain findings and determinations with respect thereto, and recommended to the City Council that a further revised draft of a development agreement ("**Original Development Agreement**") be approved. On May 10, 2005, the City Council also held a public hearing on the Original Development Agreement, considered the recommendations of the Planning Commission, and found that the Original Development Agreement was consistent with the General Plan. In accordance with the Development Agreement Statute, the City Development Agreement Regulations, and applicable law, on May 24, 2005, the City Council adopted Ordinance No. 05-10 approving the Original Development Agreement.

E. On or about July 12, 2005, Heritage Fields LLC ("**HF**") purchased, or leased with a right to future conveyance, approximately 3,705 acres from the United States Department of the Navy ("**DON**"), which constituted a significant portion of the former MCAS El Toro ("**Property**"). The Property is depicted on Exhibit "A" attached hereto.

F. Concurrently with HF's acquisition of the Property and pursuant to the Development Agreement Statute and the City Development Agreement Regulations, the City and HF executed the Original Development Agreement dated July 12, 2005, substantially as approved by Ordinance No. 05-10, and as adopted by the City Council on May 24, 2005, which became effective on July 12, 2005 and was recorded with the Orange County Recorder's office as Document No. 2005000538136 on July 12, 2005.

G. On or about July 12, 2005, HF transferred certain real property consisting of approximately 1,117 acres in fee title or as a lease in expectation of a fee title (as described below) to the City for purposes of creating a great metropolitan park known as the Orange County Great Park (the "**Great Park**"). The portion of the Property initially conveyed to the City in July 2005 (either in fee title or as a lease in furtherance of conveyance of fee title) is hereinafter referred to as the "**Initial City Park Property**" and is depicted on Exhibit "B" attached hereto. Since July 12, 2005, the Parties have agreed to consider, pursuant to Section 8.1.4 of the Original Development Agreement, certain boundary adjustments to the properties conveyed and retained, to account for, among other things, changes in rights of way configurations, which will result in some portions of the Property currently owned by the City being re-conveyed to Heritage Fields (the "**Initial Heritage Fields Exchange Properties**") and other portions of the Property currently owned by Heritage Fields being conveyed to the City (the "**Initial City Exchange Properties**"). The Initial Heritage Fields Exchange Properties contains not less than 44 acres and are shown as Property Identification Areas ("**PIAs**") 7, 8, 31, 34, and 36 on Exhibit "I." The Initial City Exchange Properties contain approximately not less than 44 acres and are shown as PIAs 9, 32, 33 and 35 on Exhibit "I." The Initial Heritage Fields Exchange Properties and the Initial City Exchange Properties are

collectively referred to as the “**Exchange Properties**,” as further depicted on Exhibit “C.” The Parties acknowledge that some portions of the Initial City Park Property and Exchange Properties are currently held by the Parties as a lease in furtherance of conveyance (“**LIFOC**”), as depicted on Exhibit “N.” and that fee title to such portions of the Initial City Park Property and Exchange Properties will be conveyed ultimately to the Party by the DON. The Parties will execute appropriate property exchange documents and approvals necessary to effectuate such adjustments. The Initial City Park Property, the Initial City Exchange Properties and, upon the conveyance of the same to the City, the ARDA Transfer Site (as defined below) are collectively referred to herein as the “**Great Park Property.**”

H. On or about July 12, 2005, HF also conveyed approximately 294 acres to the City for non-Great Park purposes (the “**Original Non-Park Property**”), as depicted on Exhibit “D.” Heritage Fields has also promised to convey to the City approximately five and one-half (5 ½) acres (the “**Police Site**”), as generally depicted on Exhibit “F.” The Original Non-Park Property and the Police Site shall be collectively referred to herein as the “**Non-Park Property**”).

I. In consideration of the covenants and agreements of the City set forth in this Amended and Restated Agreement, Heritage Fields has also agreed to commit to and execute the transfer of approximately 130.5 acres to the City, as more fully described and subject to the conditions in Section 9.2 below (hereinafter, the “**ARDA Transfer**”). The real property to be transferred to the City pursuant to the ARDA Transfer is hereinafter referred to as the “**ARDA Transfer Site**” and such property is generally depicted on Exhibit “G.” and is more fully described as PIAs 28 and 30 on Exhibit “I.” but may be subject to adjustment in accordance with Section 9.2 below. Upon transfer, the ARDA Transfer Site will become a part of the Great Park Property.

J. The Great Park Property and the Non-Park Property are collectively referred to as the “**City Property.**”

K. The portions of the Property which have been or will be retained by Heritage Fields or conveyed to Heritage Fields as part of the Initial Heritage Fields Exchange Properties will contain approximately 2,157 acres, in the aggregate, and are collectively referred to as the “**Heritage Fields Property**” as depicted on Exhibits “H,” “H-1” and “H-2,” and more fully described as PIAs 1, 5, 7, 8, 16, 21, 22, 23, 26, 27, 31, 34, 36, 38, 39, 41, 42, 45, and 48 on Exhibit “I.”

L. On or about December 22, 2005, HF conveyed all of the Property it owned at that time to Heritage Fields. Heritage Fields is the successor-in-interest to HF for all purposes under the Original Development Agreement.

M. Subsequent to the Parties’ execution of the Original Development Agreement: (i) Heritage Fields and the City entered into that certain Master Implementation Agreement dated June 27, 2006 (the “**MIA**”); (ii) the City initiated, and on October 24, 2006 approved, a General Plan Amendment and Zone Change Ordinance No. 06-18 (the “**2006 GPA/ZC**”); (iii) the City approved Tentative Parcel Map No. 2006-271, which

when recorded will constitute a Financing and Conveyance Map; (iv) Heritage Fields sought and obtained certain Agency Permits; (v) the City initiated, and on April 10, 2007 adopted, an amendment to its Affordable Housing Ordinance (Section 2-3 of the Zoning Code) pursuant to which the City updated such ordinance so that it is in compliance with the State of California's density bonus law; (vi) Heritage Fields prepared and the City approved on May 17, 2007 a Master Subdivision Map, Vesting Tentative Tract Map No. 17008, (as amended, the "MSM"); (vii) Heritage Fields timely paid to the City the aggregate amount of \$200,000,000.00 in Development Agreement Fees, which payments satisfy Heritage Fields Development Agreement Fee obligations; (viii) Heritage Fields prepared, and the City approved certain amendments to Tentative Parcel Map No. 2006-271; (ix) the City approved on September 27, 2007 Orange County Great Park Master Plan 00434337-PMP (the "**Great Park Master Plan**"); (x) Heritage Fields prepared and the City approved on October 16, 2008 certain amendments to the MSM, together with a Master Landscape and Trails Plan, certain modifications to the Orange County Great Park Master Streetscape Design Guidelines approved by City's Planning Commission on October 16, 2008 (including subsequent refinements mutually approved by Heritage Fields and the Director of Community Development and as further supplemented and/or amended from time to time mutually by Heritage Fields and the City, the "**Streetscape Guidelines**"), Vesting Tentative Tract Map No. 17283, and Master Plan No. 00470483-PMP; (xi) the County approved that certain San Diego Creek Flood Control Master Plan Update dated October 2, 2008 and designated County case number EC29320 (City case number 00457521-EMC); (xii) the County approved that certain Planning Area 51 Marshburn Watershed Update dated October 2, 2008 and designated County case number ED 29320 (City case number 00464843-EMC); (xiii) Heritage Fields prepared and the City's Planning Commission approved on November 6, 2008 the Master Affordable Housing Plan ("**MAHP**") for the Heritage Fields Property; (xiv) the IRWD SAMP dated March 17, 2009 was approved; and (xv) the County approved the Conceptual Project Water Quality Management Plan (WCMP), Updating the Integrated Master Plan of Drainage, Water Quality and Habitat Mitigation dated April 23, 2009.

N. The City and Heritage Fields have agreed to amend the Original Development Agreement and enter into this Amended and Restated Agreement to address, among other things, changing the assumptions and conditions for development of the Heritage Fields Property and the Parties' desire to revise development plans for the Heritage Fields Property to benefit Heritage Fields and the City and the desire to add the RDA as a Party. The Original Development Agreement and this Amended and Restated Agreement are intended to be, and shall be construed as, a development agreement within the meaning of the Development Agreement Statute. This Amended and Restated Agreement will eliminate uncertainty in planning for and secure the orderly development of the Heritage Fields Property, ensure a desirable and functional community environment, provide effective and efficient development of public facilities, infrastructure, and services appropriate for the development of the Heritage Fields Property, assure attainment of the maximum effective utilization of resources within the City, and provide other significant public benefits to the City and its residents by otherwise achieving the goals and purposes of the Development Agreement Statute. In exchange for these benefits to the City, Heritage Fields desires to receive, or if vested by the Original Development Agreement, continue to receive, the assurance that it may proceed with the development of the

Heritage Fields Property in accordance with the terms and conditions of this Amended and Restated Agreement, the Existing Land Use Regulations (defined below), and the ARDA Overlay Plan (defined below).

O. The City and Heritage Fields have agreed to amend both the MIA and that certain Agreement Regarding Hardscape Recycling dated May 3, 2006 (“**Tri-Party Agreement**”), and to memorialize said amendments in a single agreement, of near or even date herewith, entitled “Amended and Restated Master Implementation Agreement” (“**Amended MIA**”).

P. The City has determined that the development described in the ARDA Overlay Plan (defined below), the Existing Land Use Regulations (defined below) and this Amended and Restated Agreement is consistent with the goals and policies of the City’s General Plan and that the ARDA Overlay Plan imposes appropriate standards and requirements with respect to the development of the Heritage Fields Property to maintain the overall quality of life and the environment within the City.

Q. On July 3, 2008, the City’s Planning Commission held a public hearing on this Amended and Restated Agreement, made certain findings and determinations with respect thereto, and recommended to the City Council that the Amended and Restated Agreement be approved. On September 8, 2009, the RDA made certain findings and determinations with respect thereto and adopted Resolution No. 09-02 approving this Amended and Restated Agreement. The RDA has considered the environmental impacts of the ARDA Overlay Plan and completed its environmental review of the development approved in this Amended and Restated Agreement. On August 11, 2009, the City Council held a public hearing on the Amended and Restated Agreement, considered the recommendations of the Planning Commission and found that the Amended and Restated Agreement is consistent with the General Plan. In accordance with the Development Agreement Statute, the City Development Agreement Regulations, and applicable law, on August 11, 2009, the City Council adopted for first reading Ordinance No. 09-09 approving this Amended and Restated Agreement. The second reading and adoption of Ordinance No. 09-09 occurred on August 11, 2009. The City has considered the environmental impacts of the ARDA Overlay Plan and completed its environmental review of the development approved in this Amended and Restated Agreement.

A G R E E M E N T

Based upon the foregoing Recitals, which are incorporated herein by this reference, and for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the City and Heritage Fields hereby agree as follows:

1. DEFINITIONS.

The following terms when used in this Amended and Restated Agreement shall have the meanings set forth below:

The term “**1602 Agreement**” shall have the meaning set forth in Section 8.2.1.

The term “**2003 Agreement Draft Version**” shall have the meaning set forth in Recital “B.”

The term “**2003 Project Approvals**” refers to those approvals made by the City Council in Resolution No. 03-60, Ordinance No. 03-18, Ordinance No. 03-19 and implementing approvals.

The term “**2004 Agreement Draft Version**” shall have the meaning set forth in Recital “C.”

The term “**2006 GPA/ZC**” shall have the meaning set forth in Recital “M.”

The term “**401 Certification**” shall have the meaning set forth in Section 8.2.1.

The term “**404 Permit**” shall have the meaning set forth in Section 8.2.1.

The term “**Action**” shall have the meaning set forth in Section 20.3.

The term “**Additional Backbone Infrastructure**” means those items or actions, in addition to the Backbone Infrastructure, that the City and Heritage Fields may mutually agree to pay for in the manner set forth in Section 7.

The term “**Administrative Expenses**” shall have the meaning set forth in the RMA.

The term “**ADT**” shall have the meaning specified in Section 1-2-1 of the Irvine Zoning Code; namely “The total bi-directional volume of traffic passing through a given point during a given period of time in whole days greater than one day and less than one year, excluding Saturdays, Sundays, and holidays, divided by the number of days in that time period, excluding Saturdays, Sundays, and holidays.”

The term “**Agency Permits**” shall have the meaning set forth in Section 8.2.1.

The term “**Amended and Restated Agreement**” shall have the meaning assigned to it in the initial paragraph of this document.

The term “**Amended MIA**” shall have the meaning set forth in Recital “O.”

The term “**Annual Review**” shall have the meaning set forth in Section 15.1.

The term “**ARDA Overlay Plan**” shall have the meaning as set forth in Section 4.1.

The term “**ARDA Traffic Study**” shall have the meaning set forth in Section 3.12.1.

The term “**ARDA Transfer**” shall have the meaning set forth in Recital “I.”

The term “**ARDA Transfer Site**” shall have the meaning set forth in Recital “I.”

The term “**Assumed IRWD Assessment**” shall have the meaning set forth in Section 7.5.2.

The term “**Authorized Facilities**” means Group A Facilities, Group B Facilities, and Group C Facilities.

The term “**Authorized Services – On Park**” means work performed by the City, the OCGP Corporation, or designee, to maintain, to manage, to operate, to provide services for, or to rehabilitate the facets of the Great Park Property to the extent the work is generally consistent with the Great Park plan as it existed in 2005. Work includes but is not limited to: landscape, grass and turf, open space, agriculture, water features, buildings and facilities, parking, and drainage facilities. Work may be performed on a sports park and other sports fields and athletic facilities; on lands comprising a museum district; on utilities for the Great Park Property (to the extent not paid for directly by users/vendors/operators of improvements on the Great Park Property); on public safety and other security services for the Great Park Property; on the Agua Chinon; on the Wildlife Corridor; and on administrative costs including allocated overhead. The totality of administrative costs, overhead or other similar management costs each Fiscal Year shall not, in the aggregate, exceed the amount allocated toward overhead expense in the Full Cost Allocation Plan prepared by the City on a city-wide basis and applicable to such Fiscal Year.

The term “**Authorized Services – Off Park**” means work performed by the City, the OCGP Corporation, or designee, to provide public property maintenance, management, operations, rehabilitation, services, and utilities in the CFD Area and those areas adjacent to the CFD Area that are part of the Property (excluding the Great Park Property and County Property), including but not limited to: neighborhood parks, buildings and facilities within such parks; a fly-away remote airport terminal; street right-of-way including, public roads, bike trails, parking lots, curbs and gutters, sidewalks, drainage facilities, street lighting, street sweeping and other right-of-way care; landscape median, parkway and open space maintenance operations and rehabilitation; traffic signal operations, maintenance, rehabilitation and coordination; public safety and other safety and security services; and, administrative costs including allocated overhead. The totality of administrative costs, overhead or other similar management costs each Fiscal Year shall not, in the aggregate, exceed the amount allocated toward overhead expense in the Full Cost Allocation Plan prepared by the City on a city-wide basis and applicable to such Fiscal Year. Further, the totality of the Authorized Services – Off Park each year shall not exceed seventeen percent (17%) of the Indexed GA for each particular year.

The term “**Authorized Services**” means “**Authorized Services – On Park**” and “**Authorized Services – Off Park**,” but does not include (i) work to maintain, manage, or operate either a lake or a balloon ride feature at the Orange County Great Park, (ii) work to maintain, manage, and operate a canyon feature to the extent the costs of such work exceed the costs of landscaping and maintaining the land area consumed by said canyon feature if that feature had not been constructed, or (iii) work or costs for or related to special events on the Great Park Property.

The term “**Backbone Infrastructure**” or “**Proposed Project Facilities**” shall collectively mean the Group A Facilities, and the Group B Facilities as described, respectively, in Exhibits E-1 and E-2.

The term “**Bond Costs**” means for (i) any Non-Subordinate Bond issue and (ii) all Subordinate Bonds, all debt service payments, administrative expenses, and amounts required to establish or replenish any reserve funds, or any other use of Special Taxes for such bond issue, as required by the indenture, fiscal agent agreement, or other agreement governing the terms of such bond issue.

The term “**Bosque Site**” shall mean that site identified as PIA 11a in Exhibit “I.”

The term “**CC&Rs**” shall have the meaning set forth in Section 12.

The term “**CEQA**” or “**California Environmental Quality Act**” means the California Environmental Quality Act (California Public Resources Code Section 21000 *et seq.*), as may be amended from time to time.

The term “**CFD**” shall mean the Community Facilities District allowed to be formed pursuant to the CFD Act by a Local Agency.

The term “**CFD Act**” shall mean the Mello-Roos Community Facilities Act of 1982 (California Government Code Section 53311 *et seq.*), as may be amended from time to time.

The term “**CFD Area**” shall mean the area within the geographic boundaries of the CFD.

The term “**CFD Administrator**” means an official of the City, or designee thereof, responsible for determining the Special Tax Requirement, and providing for the levy and collection of the Special Taxes.

The term “**CFD Bonds**” shall mean one or more series of bonds issued by a CFD on behalf of an Improvement Area, including Non-Subordinate Bonds and Subordinate Bonds.

The term “**CFD Petition**” shall have the meaning set forth in Section 7.7.1.

The term “**Change Proceedings**” shall have the meaning set forth in Section 7.7.7.

The term “**City**” shall have the meaning set forth in the opening paragraph of this Amended and Restated Development Agreement.

The term “**City Council**” shall have the meaning set forth in Recital “B.”

The term “**City Development Agreement Regulations**” shall mean the regulations establishing procedures and requirements for the consideration of

development agreements set forth in City's Resolution No. 82-68 and adopted by the City Council on July 13, 1982.

The term "**City's Designee**" shall mean: (i) the OCGP Corporation; or (ii) Heritage Fields, with regard to the performance of one or more of the responsibilities, obligations or undertakings of the City pursuant to this Amended and Restated Agreement and/or the Amended MIA; or (iii) the governmental or non-profit entity(ies) that the City in its sole and absolute discretion designates to receive all or some portion of City Property, or that the City in its sole and absolute discretion assigns to perform any one or more of the responsibilities, obligations or undertakings of the City under this Amended and Restated Agreement.

The term "**City Property**" shall have the meaning set forth in Recital "J."

The term "**Conceptual Overlay Plan**" shall mean the conceptual plan attached to the Original Development Agreement as Exhibit "B" for the development of the Property in accordance with the Overlay Plan (as defined in Exhibit "C" of the Original Development Agreement).

The term "**Construction Manager**" shall have the meaning set forth in Section 7.1.1.

The term "**County**" shall mean the County of Orange, a political subdivision of the State of California.

The term "**County Agreement**" shall mean that certain "Property Tax Transfer and Pre-Annexation Agreement Among the City of Irvine, the Irvine Redevelopment Agency, and the County of Orange, Regarding the Annexation and Reuse of Former MCAS El Toro", dated March 4, 2003.

The term "**Defaulting Party**" shall have the meaning set forth in Section 14.1.

The term "**Density Bonus Units**" shall have the meaning set forth in Section 3.11.1.

The term "**Development Agreement Fee**" or "**Development Agreement Fees**" shall mean the fees paid to the City by Heritage Fields pursuant to Section 4.2 of the Original Development Agreement.

The term "**Development Agreement Statute**" refers to Sections 65864 through 65869.5 of the California Government Code, as such sections may have been amended from time to time prior to the Second Effective Date.

The term "**Development Fees**" shall mean the monetary consideration charged by the City in connection with mitigating the Project-specific impacts of the Project and development of the public facilities related to development of the Project. Development Fees shall not include (i) the City's normal fees for processing, environmental assessment/review, tentative tracts/parcel map review, plan checking, site review, site

approval, administrative review, building permit (plumbing, mechanical, electrical, building), inspection and similar fees imposed to recover the City's costs associated with processing, review and inspection of applications, plans, specifications, etc. (except for the original approval of the Master Subdivision Map); (ii) fees and charges levied by any other public agency, utility, district or joint powers authority whether or not such fees are collected by the City; or (iii) any mitigation charges or public facilities included in the Proposed Project Facilities.

The term "**DON**" shall have the meaning set forth in Recital "E."

The term "**EIR**" shall mean the Orange County Great Park Environmental Impact Report certified by the City Council on May 27, 2003 (SCH No. 2002101020; Irvine City Council Resolution No. 03-60), and any and all addenda thereto.

The term "**Excess Special Tax Capacity**" shall have the meaning set forth in Section 7.5.8.

The term "**Exchange Properties**" shall have the meaning set forth in Recital "G."

The term "**Existing Land Use Regulations**" shall mean the City's General Plan, Zoning Code and all other ordinances, resolutions, rules and regulations and written adopted policies of the City governing the development and use of the Heritage Fields Property in effect as of July 12, 2005, except that the Existing Land Use Regulations shall include: (i) those entitlements and approvals issued by the City and described in Recital "M," including all conditions and requirements imposed by the City therein, as such conditions may from time to time be amended by mutual agreement of the City and Heritage Fields (other than the Great Park Master Plan and Streetscape Guidelines), (ii) amendments approved subsequently to comply with state law in effect as of July 12, 2005 (Section 2-3 of the Zoning Code); (iii) General Plan Amendment/Zone Change No. 09-89 approved concurrently with this Amended and Restated Agreement; and (iv) amendments to the General Plan approved in Ordinance No. 08-09 (Marine/Bake intersection). The Existing Land Use Regulations shall include without limitation the permitted uses of the Heritage Fields Property, the density and intensity of use, maximum height and size of proposed buildings, development fee requirements, provisions for the reservation and dedication of land for public purposes and construction standards and specifications (not including the Uniform Construction Codes pertaining to construction adopted for general application in the City).

The term "**Financing and Conveyance Map**" shall mean any final subdivision map pursuant to the Subdivision Map Act, Government Code Sections 66410 *et seq.* which divides the Heritage Fields Property into parcels or lots for financing and conveyance purposes only and which does not authorize development of any kind.

The term "**Fiscal Year**" shall mean the period starting July 1 and ending on the following June 30.

The term "**Force Majeure**" shall have the meaning set forth in Section 14.5.

The term “**General Plan**” shall mean the General Plan of the City as it existed on the Initial Effective Date, and as expressly amended by (i) the 2006 GPA/ZC (ii) General Plan Amendment/Zone Change No. 09-89 approved concurrently with this Amended and Restated Agreement; (iii) amendments approved in Ordinance No. 08-09 (Marine/Bake intersection); and (iv) amendments applicable to the Heritage Fields Property, as approved by Heritage Fields in the manner specified in Section 3.6,

The term “**Great Park**” shall have the meaning set forth in Recital “G.”

The term “**Great Park Master Plan**” shall have the meaning set forth in Recital “M.”

The term “**Great Park Property**” shall have the meaning set forth in Recital “G.”

The term “**Group A Facilities**” shall mean those certain off-property facilities described in Exhibit “E-1,” as such list of facilities may be amended by the mutual consent of the City and Heritage Fields. A narrative description of the Group A and Group B Facilities is attached hereto as Exhibit “E-3”.

The term “**Group B Facilities**” shall mean those certain on-property facilities described in Exhibit “E-2,” as such list of facilities may be amended by the mutual consent of the City and Heritage Fields. A narrative description of the Group A and Group B Facilities is attached hereto as Exhibit “E-3”.

The term “**Group C Facilities**” shall mean those facilities depicted and/or described in the approved Master Plan for the Orange County Great Park, as that master plan may be amended from time to time.

The term “**Guaranteed Amount**” shall have the meaning set forth in the RMA.

The term “**Heritage Fields**” shall have the meaning set forth in the opening paragraph of this Amended and Restated Agreement.

The term “**Heritage Fields Property**” shall have the meaning set forth in Recital “K.”

The term “**HF**” shall have the meaning set forth in Recital “E.”

The term “**Improvement Areas**” shall have the meaning set forth in Section 7.7.

The term “**Indenture**” shall have the meaning set forth in Section 7.8.5.

The term “**Index Delta**” shall have the meaning set forth in Section 7.5.5.

The term “**Indexed GA**” shall mean the annual amount set forth on Exhibit “R-1.”

The term “**Indexed SA**” means Twenty-Six Million Dollars (\$26,000,000), which amount shall increase annually by three percent (3%), commencing as of the same Fiscal Year in which the Indexed GA commences to increase as set forth on Exhibit "R-1".

The term “**Initial City Exchange Properties**” shall have the meaning set forth in Recital “G.”

The term “**Initial City Park Property**” shall have the meaning set forth in Recital “G.”

The term “**Initial Effective Date**” shall mean July 12, 2005, the date that the Original Development Agreement was recorded in the Official Records of Orange County, California.

The term “**Initial Heritage Fields Exchange Properties**” shall have the meaning set forth in Recital “G.”

The term “**Institutional Uses**” means the following uses: agriculture, information center, outdoor vendors, parks, public park facilities, pushcarts, public schools and clubs, wireless communications facilities, child care centers, community facilities, cemeteries, funeral homes/mortuaries, government facilities, conference/convention facilities, and utility buildings and facilities.

The term “**IRWD**” means the Irvine Ranch Water District.

The term “**IRWD Bonds**” shall mean bonds issued by IRWD secured by the ad valorem assessments against the Property.

The term “**IUSD**” shall mean Irvine Unified School District.

The term “**JAMS**” shall mean the commercial service dispute resolution service known as JAMS.

The term “**JCFA**” shall mean a Joint Community Facilities Agreement, as provided in Section 53316.2 of the CFD Act.

The term “**LIFO**” shall have the meaning set forth in Recital “G.”

The term “**List of NITM Improvements**” shall have the same meaning as provided in the NITM Ordinance.

The term “**Local Agency**” shall mean any public agency authorized to levy, create or issue any form of land secured financing over all or any part of the Project, including, but not limited to, the City, the RDA and IRWD.

The term “**Lot**” shall mean any of the parcels legally created as a result of any approved final subdivision parcel or tract map or recordation of a condominium plan

pursuant to the California Civil Code Section 1352 for the Property pursuant to the Subdivision Map Act, Government Code Sections 66410 *et seq.*

The term “**Lower Priority Disbursement**” shall have the meaning set forth in Section 7.6.4.

The term “**Master Subdivision Map**” or “**MSM**” shall mean Vesting Tentative Tract Map No. 17008 approved by the City on May 17, 2007, and as amended by the City on October 16, 2008, and as more fully described in Recital “M.”

The term “**Master SWPPP**” shall have the meaning set forth in Section 8.2.1.

The term “**Maximum Special Tax**” means the maximum Special Tax that can be levied in any Fiscal Year on any Assessor’s Parcel of Taxable Property.

The term “**MCAS El Toro**” shall have the meaning set forth in Recital “B.”

The term “**MIA**” shall have the meaning set forth in Recital “M.”

The term “**Mortgage**” shall mean a mortgage, deed of trust, sale and leaseback arrangement, or any other form of conveyance in which the Heritage Fields Property, or a portion thereof or interest therein, is pledged as security, and contracted for in good faith and for fair value.

The term “**Mortgagee**” shall mean the holder of a beneficial interest under a Mortgage, or any successor or assignee of any such Mortgagee.

The term “**Mortgagee Successor**” shall mean a Mortgagee or any third party who acquires fee title or any rights or interest in or with respect to the Property or any portion thereof through foreclosure, trustee’s sale, deed in lieu of foreclosure, lease termination, or otherwise from or through a Mortgagee. If a Mortgagee acquires fee title or any right or interest in or with respect to the Property or any portion thereof through foreclosure or trustee’s sale or by deed in lieu of foreclosure or trustee’s sale and such Mortgagee subsequently conveys fee title to such portion of the Property to a third party, then such third party shall be deemed a Mortgagee Successor.

The term “**Municipal Code**” shall refer to the City of Irvine Municipal Code, as the same existed as of July 12, 2005 or may be further amended from time to time consistent with this Amended and Restated Agreement, or as applicable, with the Original Development Agreement, including, but not limited to, any Zoning Code amendments referenced in Recital “M.”

The term “**NITM**” or “**NITM Program**” shall mean the North Irvine Transportation Mitigation program as set forth in Section 6.1, as the same may be amended from time to time.

The term “**NITM Account**” refers to the account in which all NITM Program funds will be deposited.

The term “**NITM Ordinance**” meaning the Ordinance found at Section 6-3-701 *et seq.* of the Irvine Municipal Code.

The term “**NITM Program Implementing Agreement**” shall have the meaning set forth in Section 6.2.

The term “**Non-Defaulting Party**” shall have the meaning set forth in Section 14.1.

The term “**Non-Park Property**” shall have the meaning set forth in Recital “H.”

The term “**Non-Participating Properties**” shall have the meaning set forth in Section 6.11.

The term “**Non-Residential Value Limitation**” shall have the meaning set forth in Section 7.4.

The term “**Non-Subordinate Bonds**” means CFD Bonds that are senior to the Subordinate Bonds in priority to the Special Taxes and that are used to finance the Proposed Project Facilities and Additional Backbone Infrastructure, if any.

The term “**North Irvine Adjacent Lands**” shall mean the lands included within City Planning Areas 1, 5, 6, 8, 9 and 40, and subject to the NITM Program.

The term “**OCGP Corporation**” shall mean the Orange County Great Park Corporation, a California non-profit corporation and division of the City.

The term “**Original Development Agreement**” shall have the meaning set forth in Recital “D.”

The term “**Original Non-Park Property**” shall have the meaning set forth in Recital “H.”

The term “**Overlapping Liens**” shall mean projected ad valorem property taxes and all direct and overlapping assessments, taxes, special taxes, and charges on the secured tax-roll of the County for each parcel/unit of Taxable Property at the time of CFD formation, excluding however, the Special Taxes assessed or levied pursuant to the CFD.

The term “**Overlay Plan**” shall mean the land use development entitlements for the Property as set forth in the column entitled “**Overlay Plan**” in the Original Development Agreement and depicted on the Conceptual Overlay Plan. The Overlay Plan and Existing Land Use Regulations governed development of the Heritage Fields Property from the Initial Effective Date to the Second Effective Date.

The terms “**Party**” or “**Parties**” shall have the meaning set forth in the opening paragraph of this Amended and Restated Development Agreement.

The term “**PIA**” shall mean the Property Identification Areas delineated by the various lettered or numbered areas appearing on the PIM and intended solely for identification of properties referenced in this Amended and Restated Agreement.

The term “**Police Site**” shall mean a site of approximately five and one-half (5½) acres, to be used primarily as a police facility, but which may permit additional accessory City personnel, devoted to public service functions, as generally shown on Exhibit “F.”

The term “**Project**” shall mean the development of the Heritage Fields Property pursuant to this Amended and Restated Agreement, the Existing Land Use Regulations and the ARDA Overlay Plan, as depicted on Exhibit “L.”

The term “**Property**” shall mean the City Property and the Heritage Fields Property collectively.

The term “**Property Identification Map**” or “**PIM**” shall mean the map showing PIAs (as defined above), as delineated by the various lettered or numbered areas, attached hereto as Exhibit “I.” intended to be used solely to define and describe the properties referenced in this Amended and Restated Agreement.

The term “**Property Owner’s Association**” or “**POA**” shall mean an Association formed among the owners of real estate located within the Heritage Fields Property, including but not limited to industrial, residential, commercial, educational and retail property.

The term “**Proposed Project Facilities**” or “**Backbone Infrastructure**” shall collectively mean the Group A Facilities and the Group B Facilities.

The term “**Pro Rata Share**” shall have the meaning set forth in the RMA.

The term “**Public Benefit Fee**” shall have the meaning set forth in Section 10.1.

The term “**Purchaser/User**” shall have the meaning set forth in Section 2.4.

The term “**RDA**” shall mean the Irvine Redevelopment Agency.

The term “**RDA Agreement**” shall have the meaning set forth in the opening paragraph of this Amended and Restated Development Agreement.

The term “**Residential Value Limitation**” shall have the meaning set forth in Section 7.4.

The term “**RMA**” shall refer to a Rate and Method of Apportionment for each Improvement Area, the form of which is set forth in Exhibit “S” attached hereto.

The term “**Roadway Capacity Utilization**” shall have the meaning set forth in Section 3.12.1.

The term “**School Site**” refers to approximately 13 acres of land area within Parcel 2 on Exhibit “A,” the precise location and boundaries of which shall be determined in accordance with Section 9.4.

The term “**Second Effective Date**” shall mean the date that is the later of (i) forty-five (45) days after the date on which the Parties execute this Amended and Restated Agreement, or (ii) the date upon which the Parties have entered into the Amended MIA.

The term “**Secondary Amount**” means the projected amount of Special Taxes needed in the next Fiscal Year to finance Authorized Services, to the extent not prohibited by the CFD Act or applicable federal law, in excess of the Guaranteed Amount up to an annual maximum of the Indexed SA, less any and all amounts collected by any Landscape and Lighting Maintenance District from the Heritage Field’s Property utilized to fund Authorized Services.

The term “**Special Tax(es)**” means the sum of the special taxes to be levied in each Fiscal Year on each Assessor’s Parcel of Taxable Property within each Improvement Area of the CFD to fund the Special Tax Requirement.

The term “**Special Tax Requirement**” shall have the meaning set forth in the RMA for each Improvement Area.

The term “**Sports Park Site**” shall mean that site identified as PIA 49 and 50 in Exhibit “I.”

The term “**Streetscape Guidelines**” shall have the meaning set forth in Recital “M.”

The term “**Subordinate Bonds**” shall have the meaning set forth in Section 7.8.8.

The term “**Tax Zones**” shall mean the different zones of taxation within each Improvement Area.

The term “**Taxable Property**” means all of the Assessor’s Parcels within the boundaries of the CFD which are not exempt from the Special Tax pursuant to applicable law or the RMA.

The term “**Teeter Plan**” shall mean an alternative method for the distribution of secured property taxes to local agencies as set forth in the Teeter Plan Bond Law of 1994, California Government Code Sections 54773 *et seq.*, and California Revenue & Taxation Code Sections 4701 *et seq.*

The term “**Term**” shall have the meaning set forth in Section 2.3.

The term “**Third-Party Legal Challenge**” shall have the meaning set forth in Section 2.2.2.

The term “**Traffic Generation**” shall have the meaning set forth in Section 3.12.1.

The term “**Tri-Party Agreement**” shall have the meaning set forth in Recital “O.”

The term “**Uniform Construction Codes**” shall have the meaning set forth in Section 3.8.4.

The term "**Value Limitation**" shall have the meaning set forth in Section 7.4.

The term “**Wildlife Corridor**” shall mean that site identified as PIAs 20, 40, 43 and 47 in Exhibit “I.”

The term “**Zoning Code**” shall refer to the City of Irvine Zoning Code, as the same existed as of July 12, 2005, (i) as amended by the 2006 GPA/ZC and (ii) as amended by any zone change relating to the Property approved concurrently with the approval of this Amended and Restated Agreement, and (iii) as may be further amended from time to time consistent with this Amended and Restated Agreement.

2. EFFECT OF AGREEMENTS.

2.1 Effect Of Amended And Restated Development. The Parties intend and direct that this Amended and Restated Agreement be the full understanding between the Parties as to their respective rights and obligations with respect to development of its portion of the Property, and that any interpretation of or dispute with respect to such rights and responsibilities be resolved by reference to this Amended and Restated Agreement.

2.2 Effect Of Original Development Agreement.

2.2.1 Lack of Enforceability; Reinstatement. Because the Parties may not be able to anticipate or expressly provide for every future contingency, the Parties hereby state their general intention that should this Amended and Restated Agreement not be effective or become ineffective, the Original Development Agreement shall govern the Parties’ relationship, and that this Amended and Restated Agreement shall be construed to effectuate that intention.

2.2.2 Effect of a Challenge. If a referendum or third-party action or legal action is instituted which might affect or challenge the validity or enforceability of the enacting ordinance or this Amended and Restated Agreement including its Exhibits, or any provision thereof, or any document implementing the provisions contained in this Amended and Restated Agreement including its Exhibits (“**Third-Party Legal Challenge**”), this Amended and Restated Agreement shall remain in full force and effect subject to (i) any injunction issued by a court of competent jurisdiction, and/or (ii) the legal effect of any voter initiated legislative action. If a Third-Party Legal Challenge results in a temporary or preliminary order enjoining the enforcement of or performance of all or any provision under this Amended and Restated Agreement, or an adverse final

adjudication or legislative action concerning the validity or enforceability of all or any portion of this Amended and Restated Agreement, and such portion of this Amended and Restated Agreement is not severable under Section 20.7, the Original Development Agreement shall remain in full force and effect, and nothing shall impair the rights accorded and vested by the Original Development Agreement.

2.2.3 City Release As To Actions Prior To Second Effective Date. The City forever discharges, releases and expressly waives as against Heritage Fields and its partners, members, attorneys and employees any and all claims, liens, demands, causes of action, excuses for nonperformance (including but not limited to claims and/or defenses of unenforceability, lack of consideration, and/or violation of public policy), losses, damages, and liabilities, known or unknown, suspected or unsuspected, liquidated or unliquidated, fixed or contingent, based in contract, tort, or other theories of direct and/or of agency liability (including but not limited to principles of *respondeat superior*) that it has now or has had in the past, arising out of or relating to the Original Development Agreement, the MIA, the Tri-Party Agreement and the currently existing and approved land use plans for the Property or any portion thereof.

2.2.4 Heritage Fields Release As To Actions Prior To Second Effective Date. Heritage Fields forever discharges, releases and expressly waives as against the City, the RDA, the OCGP Corporation, and their respective councils, boards, commissions, officers, attorneys and employees any and all claims, liens, demands, causes of action, excuses for nonperformance (including but not limited to claims and/or defenses of unenforceability, lack of consideration, and/or violation of public policy), losses, damages, and liabilities, known or unknown, suspected or unsuspected, liquidated or unliquidated, fixed or contingent, based in contract, tort or other theories of direct and/or of agency liability (including but not limited to principles of *respondeat superior*) that they have now or have had in the past, arising out of or relating to the Original Development Agreement, the MIA, the Tri-Party Agreement and the currently existing and approved land use plans for the Property or any portion thereof.

2.3 Term. The term of this Amended and Restated Agreement (as extended, the “**Term**”) shall commence on the Second Effective Date and, except for those provisions in this Amended and Restated Agreement or the Amended MIA that expressly survive the expiration of this Amended and Restated Agreement, shall continue thereafter for a period of twenty-five (25) years from and after the Second Effective Date, with two (2) additional optional extensions of five (5) years at the sole discretion of any Party, unless this Amended and Restated Agreement is terminated, modified or extended by circumstances set forth in this Amended and Restated Agreement or by mutual written consent of the Parties.

2.4 Termination Upon Sale Of Individual Lots To Public And Completion Of Construction. Notwithstanding Section 2.3, the provisions of this Amended and Restated Agreement shall terminate with respect to any individual Lot and such Lot shall be released from and shall no longer be subject to this Amended and Restated Agreement (without the execution or recordation of any further document or the taking of any further action) upon the satisfaction of both of the following conditions: (i) the Lot has been

finally subdivided and sold, leased (for a period longer than one (1) year as evidenced by a lease) or otherwise conveyed to a member of the public or any other ultimate purchaser or user (collectively, a “**Purchaser/User**”) which is not Heritage Fields; and (ii) a certificate of occupancy has been issued for the building or buildings on the Lot or a final inspection of the building(s) has been approved by the City authorizing occupancy. The City shall cooperate with Heritage Fields, at no cost to the City, in executing in recordable form any document that Heritage Fields (including any successor to the title of Heritage Fields in and to any of the previously-described Lots) may submit to confirm the termination of this Amended and Restated Agreement as to any such Lot.

3. DEVELOPMENT OF THE PROPERTY.

3.1 Applicable Regulations; Vested Right To Develop. Other than as expressly set forth herein in Section 3.8, during the Term of this Amended and Restated Agreement, the terms and conditions of development applicable to the Heritage Fields Property, including but not limited to the permitted uses of the Heritage Fields Property, the density and intensity of use, maximum height and size of proposed buildings and provisions for the reservation and dedication of land for public purposes, shall be those set forth in the Existing Land Use Regulations and the ARDA Overlay Plan.

3.1.1 Vested Right To Develop. Subject to the terms and conditions of this Amended and Restated Agreement, Heritage Fields shall have the vested right to carry out and develop the Heritage Fields Property in accordance with the Existing Land Use Regulations and the ARDA Overlay Plan. In furtherance of the foregoing, Heritage Fields retains the right to apportion the uses, intensities and densities, and ADT between itself and any subsequent owners, upon the sale, transfer, or assignment of any portion of the Heritage Fields Property, so long as such apportionment is consistent with the ARDA Overlay Plan and the Existing Land Use Regulations, and so long as the City is provided with written notice of such apportionment within ninety (90) days following any such apportionment.

3.1.2 Right To Future Approvals. Subject to the City’s exercise of its police power authority as specified in Section 3.8.5, Heritage Fields shall have a vested right: (i) to receive from the City all future development approvals for the Heritage Fields Property that are consistent with, and implement, the Existing Land Use Regulations, the ARDA Overlay Plan and this Amended and Restated Agreement; (ii) not to have such approvals be conditioned or delayed for reasons which are inconsistent with the Existing Land Use Regulations, the ARDA Overlay Plan or this Amended and Restated Agreement; and (iii) to develop the Heritage Fields Property in a manner consistent with such approvals in accordance with the Existing Land Use Regulations, the ARDA Overlay Plan and this Amended and Restated Agreement.

3.1.3 Vesting of Future Approvals. Subject to Section 3.6 below, any future development approvals for the Heritage Fields Property, including without limitation general plan amendments, zone changes, or parcel maps or tract maps (except vesting maps), shall upon approval by the City be vested in the same manner as provided

in this Amended and Restated Agreement for the Existing Land Use Regulations and the ARDA Overlay Plan.

3.1.4 Relationship of Vested Rights to Traffic Estimates. The development of the Property is estimated to create 148,910 ADT, of which 117,020 ADT is controlled by the Heritage Fields Property (including 812 ADT for the School Site). The vested rights to develop the Heritage Fields Property for the uses, densities and intensities set forth in the Overlay Plan are estimated to generate 117,020 ADT or fewer overall trips. The vested rights to develop the Heritage Fields Property for the uses, densities and intensities set forth in the ARDA Overlay Plan are also estimated to generate 117,020 ADT or fewer overall trips. The transfer or other conveyance of the Police Site, the ARDA Transfer Site or other real property conveyed or transferred to the City pursuant to this Amended and Restated Agreement shall not include the conveyance of any ADT to the City, or the re-allocation of ADT between the Heritage Fields Property and the City Property. In the event Heritage Fields proposes any significant discretionary changes that would increase the uses, densities or intensities in the ARDA Overlay Plan, Heritage Fields shall provide (i) a study demonstrating that, evaluating the proposed changes under the traffic model and appropriate trip generation, capture and reduction calculations and proposed mitigation, the proposed changes will not result in overall traffic generation exceeding 117,020 ADT, or (ii) an application for a zone change to accommodate any increased traffic above 117,020 ADT.

3.2 Tentative Subdivision Maps. With respect to applications by Heritage Fields for tentative subdivision maps for all or portions of Heritage Fields Property, the City agrees that Heritage Fields may file and process vesting tentative maps in accordance with Chapter 4.5 (commencing with Section 66498.1) of Division 2 of Title 7 of the California Government Code and the applicable provisions of the City's subdivision ordinance, as the same may be amended from time to time. The term of such tentative map(s) and the tentative maps which Heritage Fields has previously filed shall be extended automatically for the Term of this Amended and Restated Agreement.

3.3 Financing And Conveyance Maps. Heritage Fields may file one or more tentative tract maps or tentative parcel maps dividing the Heritage Fields Property into separate legal lots or parcels for financing and conveyance purposes only ("**Financing and Conveyance Map**"). A Financing and Conveyance Map shall not authorize any development, and shall not be subject to any condition, exactions, or restrictions other than monument and other conditions which the City commonly imposes on financing and conveyance maps.

3.4 Processing Of Applications And Permits. Upon satisfactory completion by Heritage Fields of all required preliminary actions and payment of appropriate processing fees, if any, the City shall promptly proceed to process, check, and make a determination on all applications for development and building approvals within the times set forth in the Permit Streamlining Act (Chapter 4.5 (Section 65920) of Division 1 of Title 7 of the California Government Code), the Subdivision Map Act (Division 2 (commencing with Section 66410) of Title 7 of the California Government Code) and other applicable provisions of law, as the same may be amended from time to time.

3.5 Other Governmental Permits. Provided that Heritage Fields pays the reasonable cost of such cooperation, the City shall cooperate with Heritage Fields in its efforts to obtain such additional permits and approvals as may be required by any other governmental or quasi-governmental agencies having jurisdiction over the applicable portion of the Property for which such permit or approval is sought, provided that such permits and approvals are consistent with the Existing Land Use Regulations, the ARDA Overlay Plan and other City approvals for development of the Property; and provided further that such approvals are consistent with applicable regulatory requirements. The City does not warrant or represent that any other governmental or quasi-governmental permits or approvals will be granted.

3.6 Subsequent General Plan Amendments And Zone Changes. Given Heritage Fields' vesting of its right to the development of the Heritage Fields Property in accordance with the Existing Land Use Regulations and the ARDA Overlay Plan, any General Plan amendments or zone changes or any other regulatory approvals (including the MAHP) with respect to development of the Property will not become effective as to the Heritage Fields Property unless consented to in writing by Heritage Fields or its successors-in-interest as to their respective portions of the Heritage Fields Property. By this paragraph the City does not represent that it will accept, process or approve any General Plan, zone change or other regulatory action; provided, however, that the City shall, subject to and consistent with its police power authority, accept, process and approve all regulatory actions required in order to effectuate the vested rights and benefits to Heritage Fields contained herein.

3.7 Assurances To Heritage Fields. The Parties acknowledge that the substantial public benefits to be provided by Heritage Fields to the City pursuant to this Amended and Restated Agreement are in consideration for and reliance upon assurances that the City will permit development of the Heritage Fields Property in accordance with the terms of this Amended and Restated Agreement. Accordingly, the City agrees that it will not attempt to restrict or limit the development of the Heritage Fields Property in conflict with the provisions of this Amended and Restated Agreement. The City acknowledges that Heritage Fields cannot at this time predict the timing or rate at which the Heritage Fields Property will be developed. The timing and rate of development depend on numerous factors such as market demand, interest rates, absorption, completion schedules and other factors which are not within the control of Heritage Fields or the City. In *Pardee Construction Co. v. City of Camarillo* (1984) 37 Cal. 3d 465, the California Supreme Court held that a construction company was not exempt from a city's growth control ordinance notwithstanding that the construction company and the city had entered into a consent judgment (tantamount to a contract under California law) establishing the company's vested rights to develop its property in accordance with the zoning. The California Supreme Court reached this result on the basis that the consent judgment failed to address the timing of development. It is the intent of the Parties to avoid the result of the *Pardee* case by acknowledging and providing in this Amended and Restated Agreement that Heritage Fields shall have the vested right to develop the Heritage Fields Property in such order and at such rate and at such time as Heritage Fields deems appropriate within the exercise of Heritage Fields' sole subjective business judgment, notwithstanding the adoption of an initiative after the

Second Effective Date by the City's electorate to the contrary. In addition to and not in limitation of the foregoing, but except as set forth in the following sentence, it is the intent of the Parties that no City moratorium or other similar limitation relating to the rate or timing of the development of the Heritage Fields Property or any portion thereof, whether adopted by initiative, referendum or otherwise, shall apply to the Heritage Fields Property to the extent that such moratorium, referendum or other similar limitation is in conflict with the express provisions of this Amended and Restated Agreement. Notwithstanding the foregoing, Heritage Fields acknowledges and agrees that nothing herein is intended or shall be construed as (i) overriding any provision set forth in this Amended and Restated Agreement and/or the Amended MIA relating to the phasing of development of the Proposed Project Facilities; (ii) overriding any provision of the Existing Land Use Regulations or the ARDA Overlay Plan relating to the phasing of development of the Project; or (iii) restricting the City from exercising the powers described in Section 3.8 of this Amended and Restated Agreement to regulate development of the Heritage Fields Property. Nothing in this Section 3.7 is intended to excuse or release Heritage Fields from any obligation set forth in this Amended and Restated Agreement and/or the Amended MIA which is required to be performed on or before a specified calendar date or event without regard to whether or not Heritage Fields proceeds with the Project.

3.8 Reservations Of Authority. Notwithstanding any provision set forth in this Amended and Restated Agreement to the contrary, the laws, rules, regulations, official policies and conditions of approval set forth in this Section 3.8 shall apply to and govern development of the Heritage Fields Property:

3.8.1 Consistent Future City Regulations. City ordinances, resolutions, regulations and official policies adopted or approved after July 12, 2005 pursuant to procedures provided by law which do not conflict with the Existing Land Use Regulations, the ARDA Overlay Plan, and this Amended and Restated Agreement shall apply to and govern development of the Property. Without limitation, any future City regulations, whether adopted by voter initiative or City Council action or otherwise, which materially increase the cost of development (except future fees adopted on a city-wide basis as referenced in Section 5.1 below), reduce the density or intensity of the Project below that permitted by the Existing Land Use Regulations and the ARDA Overlay Plan or materially limit the rate, timing or sequencing of development of the Heritage Fields Property, or otherwise materially restrict any of the permitted uses, density, improvements, and construction shall be deemed inconsistent with this Amended and Restated Agreement and shall not be applicable to the development of the Heritage Fields Property, unless Heritage Fields expressly so consents. The parties understand and agree that this Section 3.8.1 applies to the City's future adoption of ordinances, resolutions, regulations and official policies, but not to the imposition of conditions on future subdivision maps, conditional use permits, master plans, or similar discretionary approvals. The extent to which the City may impose conditions in connection with the evaluation of such subordinate discretionary applications is governed by the standards set forth in Section 3.8.5, below.

3.8.2 Overriding State And Federal Laws And Regulations. State and federal laws and regulations which override Heritage Fields' vested rights set forth in this Amended and Restated Agreement shall apply to the Property, together with any City ordinances, resolutions, regulations and official policies which are necessary to enable the City to comply with such overriding State and federal laws and regulations; provided, however, that (i) Heritage Fields does not waive its right to challenge or contest the validity of any such State, federal or local laws, regulations or official policies; and (ii) in the event that any such State or federal law or regulation (or City ordinance, resolution, regulation or official policy undertaken pursuant thereto) prevents or precludes compliance with one or more provisions of this Amended and Restated Agreement, the Parties agree to consider in good faith amending or suspending such provisions of this Amended and Restated Agreement as may be necessary to comply with such State or federal laws, provided that no Party shall be bound to approve any amendment to this Amended and Restated Agreement unless this Amended and Restated Agreement is amended in accordance with the procedures applicable to the adoption and amendment of development agreements as set forth in the Development Agreement Statute and each Party retains full discretion with respect thereto.

3.8.3 Public Health And Safety. Any City ordinance, resolution, regulation, or official policy, which is necessary to protect persons on the Heritage Fields Property in the immediate community, or both, from conditions dangerous to their health, safety, or both, shall apply to the Property notwithstanding that the application of such ordinance, resolution, regulation, or official policy or other similar limitation would result in the impairment of Heritage Fields' vested rights under this Amended and Restated Agreement. To the extent possible, any such regulations shall be applied and construed consistent with this Amended and Restated Agreement so as to provide Heritage Fields with the rights and assurances provided under this Amended and Restated Agreement.

3.8.4 Uniform Construction Codes. Provisions of the building standards set forth in the Uniform Construction Codes shall apply to the Heritage Fields Property. As used herein, the term "**Uniform Construction Codes**" collectively refers to the 2007 California Building Codes, the 2007 California Electric Code, the 2007 California Plumbing Code, the 2007 California Mechanical Code, the 2006 Uniform Solar Energy Code, the 2006 Uniform Swimming Pool, Spa and Hot Tub Code, the 1997 Uniform Housing Code, the Uniform Administrative Code and the 2007 California Fire Code (including amendments thereto by the Orange County Fire Authority), as modified and amended by official action of the City, and any modifications or amendments to any such Code adopted in the future by the City.

3.8.5 Police Power. In all respects not provided for in this Amended and Restated Agreement, the City shall retain full rights to exercise its police power to regulate the development of the Property, and any uses or developments requiring a site plan, tentative tract map, master plan, or other discretionary permit or approval as required pursuant to the Existing Land Use Regulations shall require a permit or approval pursuant to this Amended and Restated Agreement, provided, however, that the City's discretion with respect to such actions shall be exercised consistent with Heritage Fields' vested rights under this Amended and Restated Agreement as set forth in Section 3.1, and

the City acknowledges pursuant to Government Code Section 65865.2 that the conditions, terms, restrictions, and requirements for subsequent discretionary actions or permits shall not prevent development of the Heritage Fields Property for the uses and to the density or intensity of development set forth in this Amended and Restated Agreement. Nothing in this provision shall preclude the City from attaching usual and customary conditions to such discretionary approvals provided such conditions (i) are applied in the same or substantially equivalent form to other similar approvals throughout the City; (ii) do not affect the use, density, or intensity of development previously approved for the Project; (iii) are not materially inconsistent with this Amended and Restated Agreement or the MSM; and (iv) do not require Heritage Fields to intensify or build or cause to be intensified or built additional joint Backbone Infrastructure.

3.9 Uses of City Property.

3.9.1 PIAs 2, 3, 4, 6, 14, 19, 24, 25, 37 and 44. The Parties understand and acknowledge that the land in PIAs 2, 3, 4, 6, 24 and 25, and approximately 100 acres of PIA 14 (collectively, the “**County Parcels**”) will be conveyed by the City to the County pursuant to the County Agreement. As long as the City owns the County Parcels, City may use the County Parcels only for Great Park uses and uses ancillary to park uses (e.g., ancillary food uses), provided that the foregoing is not intended to modify the provisions of Section 7.9 below. The City may use the land in PIAs 19, 37 and 44 in any manner it deems appropriate and consistent with the General Plan and Zoning Code, as those documents may be amended from time to time in the City’s sole and absolute discretion, subject to the rights granted to Heritage Fields in Section 3.9.7 below.

3.9.1.1 The City agrees to cooperate and coordinate in good faith with Heritage Fields in the design of any uses on PIA 19, PIA 37 and/or PIA 44, so as to ensure consistency and compatibility with the design of the Heritage Fields Property that is adjacent to those PIAs.

3.9.2 ARDA Transfer Site. If, when, and to the extent the City develops a use or uses on the ARDA Transfer Site, the City shall, for a period of seven (7) years from and following the Second Effective Date (the “**7-Year Period**”), limit such use or uses to Great Park uses and uses ancillary to Great Park uses (e.g. ancillary food uses), public primary, intermediate and secondary school uses. Following the expiration of the 7-Year Period, the City shall, if, when, and to the extent the City develops a use or uses on the ARDA Transfer Site, limit such uses to Great Park uses and uses ancillary to Great Park uses (e.g. ancillary food uses), which, for this purpose, also includes the following ancillary uses the City may elect, in its sole and absolute discretion, to undertake: no more than one (1) hotel (provided that there are no other hotels on any portion of the Great Park Property, the parties acknowledging and agreeing that there shall be no more than one hotel, collectively, on the ARDA Transfer Site and the remaining portion of the Great Park Property), restaurants that are of the type and nature one would find in a metropolitan park (such as Balboa Park in San Diego, California), small scale retail that is of the type and nature one would find in a metropolitan park (such as Balboa Park in San Diego, California), Institutional Uses, and cemetery/mortuary/funeral homes uses. Notwithstanding the foregoing, this Section 3.9.2 is not intended to affirmatively grant

the right to the ancillary uses described herein (the City acknowledging that the City must first comply with applicable legal processes, if any, and requirements in order to entitle or otherwise implement such uses). In addition, following the expiration of the 7-Year Period, City may also use the ARDA Transfer Site for a maximum of 250 residential units, which units may, in the City's sole and absolute discretion, be all or partially affordable and shall be no more than three (3) stories in height, but this provision is not intended to affirmatively grant the right to the foregoing use (the City acknowledging that the City must first comply with applicable legal processes and requirements, if any, in order to entitle or otherwise implement such use). Affordable units, if any, constructed on the ARDA Transfer Site shall be credited toward the City's and/or the RDA's fulfillment of its affordable housing requirements under the State Redevelopment Law, but shall not count toward Heritage Fields' obligations under the (i) City's Affordable Housing Ordinance (Section 2-3 of the Zoning Code) as amended from time to time, (ii) the affordable housing plan for the Heritage Fields Property, and/or (iii) any agreement entered into between the City and Heritage Fields pursuant to Section 2-3 of the Zoning Code. Nor shall the construction of such affordable housing units, if any, on the ARDA Transfer Site contribute to or constitute a basis for granting any right to construct additional market rate units pursuant to Government Code Section 65915 *et seq.* and/or Section 2-3 of the Zoning Code. The City agrees to cooperate and coordinate in good faith with Heritage Fields in the design of any uses on ARDA Transfer Site, so as to ensure consistency and compatibility with the design of the development the "Park District" portion and the northern part of the Lifelong Learning District of the Heritage Fields Property.

3.9.3 Remaining Great Park Property. If, when, and to the extent the City develops a use or uses on that portion of the Great Park Property that does not include the ARDA Transfer Site, the City shall limit such use or uses to Great Park uses and uses ancillary to Great Park uses (e.g. ancillary food uses), which, for this purpose, also includes the following ancillary uses the City may elect, in its sole and absolute discretion, to undertake: no more than one (1) hotel (provided that there are no other hotels on any portion of the ARDA Transfer Site, the Parties acknowledging and agreeing that there shall be no more than one hotel, collectively, on the ARDA Transfer Site and the remaining portion of the Great Park Property), restaurants that are of the type and nature one would find in a metropolitan park (such as Balboa Park in San Diego, California), small scale retail that is of the type and nature one would find in a metropolitan park (such as Balboa Park in San Diego, California), and Institutional Uses; provided, however, that the City shall not allow any private educational uses (other than public primary, intermediate and/or secondary school uses) or community facilities for non-park-like uses on the Great Park Property for a period of four (4) years following the Second Effective Date (the Parties acknowledging that educational uses, other than public primary, intermediate and secondary school uses, are not permitted on the ARDA Transfer Site until after the expiration of the 7-Year Period). Notwithstanding the foregoing, this Section 3.9.3 is not intended to affirmatively grant the right to the ancillary uses described herein (the City acknowledging that the city must first comply with applicable legal processes and requirements, if any, in order to entitle or otherwise implement such uses).

3.9.4 Construction of a Park. The City acknowledges and agrees that it will construct a park on the Great Park Property substantially in compliance with the Great Park Master Plan, as it may be amended from time to time.

3.9.5 Police Site. The City agrees to restrict the use of the Police Site as specified in Section 9.1. The City agrees to cooperate and coordinate in good faith with Heritage Fields in the design of the Police Site so as to ensure consistency and compatibility with the design of the Heritage Fields Property that is adjacent to the Police Site.

3.9.6 Construction of Specific Park Features. The City shall construct all or some portion of the Sports Park Site and the Bosque Site, and make all or some portion of the Sports Park Site and Bosque Site available to the public, prior to making any other feature on the Great Park Property available to the public. Except for those portions of the Wildlife Corridor and Agua Chinon that are described as Backbone Infrastructure on Exhibits E-1 and E-2 for which Heritage Fields is responsible to construction pursuant to Section 7 below, the City shall further construct the Wildlife Corridor and the Agua Chinon features substantially as depicted on the Great Park Master Plan, in a manner that does not materially interfere with and is calculated to meet the joint infrastructure needs inherent in those features, and City shall continue to retain the land comprising the Wildlife Corridor and Agua Chinon for such uses and purposes during the Term of this Amended and Restated Agreement. The City agrees to continue to meet and confer with Heritage Fields regarding the design of the Wildlife Corridor (including the timing, duration and amount of storm water flows designed to be diverted into the Wildlife Corridor). Nothing in this paragraph is intended to (i) limit the City's ability to build or utilize City funds for the construction of non-Backbone Infrastructure within or around the City Property or any portion thereof; or (ii) release Heritage Fields from any Backbone Infrastructure funding and/or construction obligations it may have under Section 7. Further, the Parties agree to meet and confer in good faith on applicable setbacks or other development limitations from the edge of the Wildlife Corridor prior to the imposition of any such setbacks or other development limitations, provided that such setbacks or limitations shall not in any case prevent Heritage Fields from developing to the density and intensity of use described in the ARDA Overlay Plan.

3.9.7 Right of First Negotiation for Uses on City Property. Until such time as Heritage Fields has completed development and/or sale of all of the Heritage Fields Property, if and when the City intends to sell or enter into a long term ground lease for a use or uses on the City Property other than (a) Great Park uses, (b) uses ancillary to Great Park uses (the Parties acknowledging that uses ancillary to Great Park uses would not, for example, include industrial, office, medical office, large-scale retail, hotel, educational uses except as described in clause (c) below, research and development, and/or residential developments whether for rent or for sale, and hence all such uses would be subject to the right of first negotiation granted in this Section 3.9.7), and/or (c) primary, intermediate, or secondary public school uses, then the City shall (i) present the material terms of the proposed real estate transaction to Heritage Fields, (ii) provide Heritage Fields a reasonable period of time to respond to the proposed material terms, and (iii) if Heritage Fields promptly accepts the proposed material terms, the City will

continue in a negotiation with Heritage Fields until such time as those negotiations are successful, are no longer being diligently and actively pursued by Heritage Fields, or are affirmatively abandoned by Heritage Fields. If Heritage Fields does not accept the proposed material terms or if Heritage Fields affirmatively abandons or ceases to diligently and actively pursue negotiations, the City thereafter may elect to pursue said sale or long term ground lease to conclusion, through direct negotiations with any other potential purchaser(s) or user(s) of the portion of the City Property at issue or a through a public, competitive bidding process for the portion of the City Property at issue, without having to commit and/or continue to negotiate exclusively with Heritage Fields with respect to the City Property at issue; provided, however, that if the transaction is not the subject of a public competitive bidding process and the terms negotiated with a potential purchaser or user materially change from those proposed to Heritage Fields, City shall provide Heritage Fields an additional opportunity to promptly accept or refuse the negotiated terms proposed to such other purchaser or user. In the case of a public competitive bidding process (i.e., where Heritage Fields did not accept the initially proposed material terms or where Heritage Fields affirmatively abandoned or ceased to diligently and actively pursue negotiations with respect to the initially proposed material terms), (i) Heritage Fields shall be permitted to participate as a bidding party, and (ii) the City shall utilize substantially the same terms as were presented to Heritage Fields, but need not include those terms in the public competitive bidding process that are not normally and customarily included in a competitive bidding process (e.g., price). Nothing in this Section 3.9.7 is intended to limit or waive the restrictions on the ARDA Transfer Site as specified in Section 3.9.2 and/or on that portion of the Great Park Property that does not include the ARDA Transfer Site as specified in Section 3.9.3.

3.9.7.1 Limitations on Assignability. The right of first negotiation created by Section 3.9.7 (i) is assignable under this Amended and Restated Agreement only to a successor to Heritage Fields that acts as master developer of the Heritage Fields Property, and (ii) cannot be assigned by the City to more than one entity at any one time.

3.9.8 Development of City Property. City acknowledges that if pursuant to this Section 3.9, or any other means, the City or its successor in interest propose to develop (i) the Great Park Property for any uses, densities, or intensities beyond that contemplated, studied, and approved in the Great Park Master Plan and/or (ii) the remaining City Property for any uses, densities, or intensities beyond those contemplated and studied in the EIR, the City or its successor in interest shall be responsible for the additional mitigation, if any, or increment of such mitigation, if any, required by such increased development, City shall not impose such additional mitigation, on Heritage Fields, either as project mitigation or as part of the Backbone Infrastructure for which Heritage Fields is obligated to pay pursuant to Section 7 of this Amended and Restated Agreement, nor shall City deny or delay approval of any Heritage Field project application for failure to provide such additional mitigation or increment of mitigation. Notwithstanding the foregoing, if the City pays for the additional incremental cost of increasing the size of Backbone Infrastructure facilities necessary to meet its mitigation obligations pursuant to this paragraph, Heritage Fields shall construct that modified/enlarged infrastructure in the time and manner specified in the Amended MIA.

3.10 Homeless Assistance Provider Accommodations. In order to facilitate a cooperative project between Heritage Fields and the providers of lower income and transitional housing (ETHIC), the City agrees to act expeditiously and in good faith to initiate and process for City Council consideration any amendments to the General Plan and to the Zoning Code, if necessary, to expressly authorize up to 166 residential dwelling units on an appropriate location within the Heritage Fields Property. Upon approval, such amendment to the General Plan or the Zoning Code shall be deemed vested by this Amended and Restated Agreement.

3.11 Density Bonus.

3.11.1 Vested Bonus Calculation. The City agrees that because Heritage Fields has committed that 15% (544) of the total of 3,625 residential units in the ARDA Overlay Plan will be affordable housing and that 11% (399) of the total of 3,625 residential units will be classified as Very Low Income and that Heritage Fields will otherwise comply with the provisions of 2-3-10 of the Zoning Code as it existed as of April 10, 2007, Heritage Fields is and shall be, unless otherwise determined by a court of competent jurisdiction, entitled to a density bonus calculated pursuant to state law as it existed as of April 10, 2007, which calculation yields a density bonus of 1,269 market rate units (35%) (“**Density Bonus Units**”).

3.11.2 Location and Mitigation. It is understood that the location of any Density Bonus Units generally described in the MAHP will be determined during the subdivision process for any tentative map that is proposed to include the Density Bonus Units. The Density Bonus Units shall be treated as a change in the intensity of development in the relevant Future Development Areas (as defined in the NITM Ordinance) pursuant to Section 6-3-706(A) of the NITM Ordinance and may result in a change in fee allocations between the parties to the NITM Agreement. To the extent the Density Bonus Units require traffic improvements not contemplated in NITM, such mitigation improvements shall be project features. Further, at such time as a location is specified for any of the Density Bonus Units in connection with a future discretionary action, an environmental analysis that fully complies with the requirements of the California Environmental Quality Act shall be conducted, and mitigation (if any) shall be imposed in a manner consistent with the requirements and limitations of the State Density Bonus Law, California Government Code Section 65915 *et seq.*

3.11.3 Affordable Housing Obligations Under the Redevelopment Law. The City understands that, because Heritage Fields is entering into this Amended and Restated Agreement on the expectation that it will have the benefit of the Density Bonus Units as market-rate units, the City agrees it will grant Heritage Fields the full density bonus as provided in Section 3.11.1 as market rate units and that any obligations to construct additional affordable units as a result will be fulfilled by the City or the RDA.

3.12 Traffic.

3.12.1 Incorporation of Project Traffic Generation in City Traffic Model and Traffic Study. The Parties acknowledge that this Amended and Restated Agreement

contains a detailed traffic study (“**ARDA Traffic Study**”), which analyzes the future traffic that will be generated by the Project other than the Density Bonus Units (“**Traffic Generation**”), and which describes the extent to which such future Traffic Generation will utilize the capacity of existing and planned future roads, freeways/tollway mainlines, freeway/tollway ramps, and intersections in the City and the surrounding area (“**Roadway Capacity Utilization**”). The City agrees that it will incorporate this Traffic Generation based on the trip generation rates utilized in ARDA Traffic Study and Roadway Capacity Utilization by the ARDA Overlay Plan as part of the City’s current ITAM traffic model and future ITAM updates, and the City will include these same items in future traffic studies which it may prepare regarding future development or roadway planning projects. At such time as the Density Bonus Units (or portions thereof) are located by Heritage Fields and an environmental analysis conducted and mitigation (if any) imposed as set forth in Section 3.11.2 above, the traffic generated from such Density Bonus Units shall be deemed to be part of the "Traffic Generation" and "Roadway Capacity Utilization" for all purposes under this Amended and Restated Agreement.

3.12.2 Reservation of Roadway Capacity Utilization by the City. The City agrees that it shall, in the manner specified in this Section 3.12, reserve the Roadway Capacity Utilization for the implementation of the ARDA Overlay Plan except as set forth in the following sentence. After construction and occupancy of each housing unit on the Heritage Fields Property, the City may reduce the Traffic Generation attributable to such unit if the City determines that actual trip generation from such unit is less than the projected trip generation used in the ARDA Traffic Study. The City agrees that Heritage Fields has, through the ownership of existing roadways in the City it acquired and the construction of improvements specified in the project design features and mitigation measures adopted as part of the ARDA Overlay Plan, fully mitigated for the impacts of the Traffic Generation of the ARDA Overlay Plan, except as specifically noted in the ARDA Traffic Study and any findings adopted by the City therewith. The City also agrees that as part of the approval of future tentative subdivision maps or subsequent discretionary actions and permits for the ARDA Overlay Plan that it will not require Heritage Fields to provide, construct, fully fund or fair-share fund additional roadway right-of-way, capacity, or improvements, except as expressly provided in Section 3.12.5 below. In addition, Heritage Fields will not be required to lower the Traffic Generation of the ARDA Overlay Plan, based upon the trip-generation rates included in the ARDA Traffic Study, in order to reduce impacts on the surrounding roadway system.

3.12.3 Future Unanticipated Changes in Traffic Generation Rates. The ARDA Traffic Study utilized the best available information to estimate the traffic generation rate and the amount of traffic that will be generated by each residential dwelling unit of and the non-residential building entitlement for the Project. The Parties acknowledge that the City may determine that a subsequent discretionary action or permit required for the Project will require additional or supplemental environmental analysis under CEQA and such analysis may determine that the City must use different traffic generation rates to accurately reflect the Project’s traffic impact to comply with CEQA. Such analysis shall not result in any reduction or increase in the Project’s traffic mitigation requirements. Notwithstanding the above, nothing in this section shall require

the City to grant any subsequent discretionary action or permit, or make any determination under CEQA, that would result in conditions dangerous to health or safety as defined in Section 3.8.3 of this Amended and Restated Agreement.

3.12.4 Future Unanticipated Traffic from Additional Development and Unanticipated Changes in Roadways; Trip Obligations. The ARDA Traffic Study includes all of the anticipated traffic from existing and anticipated future development, including development which is authorized by the general plans and zoning codes adopted by the City and other jurisdictions. The Parties acknowledge that in the future it is possible that unanticipated new projects and changes in approved development could generate new traffic not included in the ARDA Traffic Study, which could result in an unanticipated significant adverse impact caused by those projects. Mitigation for such unanticipated traffic or traffic congestion is the responsibility of those other projects, and not the responsibility of Heritage Fields as part of the implementation and construction of the ARDA Overlay Plan. The Parties also acknowledge that as a result, in this situation the Project would not be contributing to any cumulative significant adverse impact as defined under CEQA, because the Project's contribution has already been fully mitigated, and such new adverse traffic impacts would be completely caused by such unanticipated traffic, and there would be no relationship or nexus between the ARDA Overlay Plan and any other further traffic mitigation or traffic improvements beyond those provided for in Project, the ARDA Overlay Plan, or the EIR. To the extent either Heritage Fields, the City or any other entity seeks approvals for any portion of the Property that involve a volume or distribution of traffic on the Property that (i) are not contemplated in, and exceed, those contemplated in the ARDA Traffic Study; or (ii) would modify traffic mitigation measures approved for the Property, such a modification of mitigation or change in use by one Party shall not increase the mitigation or affect the uses allocated and available to the other Party. Accordingly, if Heritage Fields or the City (or other user) were to apply for a use that would generate more traffic than is currently allocated or credited to the particular property (as initially allocated pursuant to Section 3.1.4 above and as allocated further in accordance with Section 3.1.1), it would be required to provide appropriate additional mitigation over and above the Project traffic mitigations to allow for such additional trips, notwithstanding the fact that total Project traffic trips allocated to some other source (*e.g.*, Heritage Fields) have not yet been utilized.

3.12.5 Additional Mitigation Measures. The Parties agree that if there is future unanticipated traffic from additional unanticipated development, unanticipated changes in roadways, and/or future unanticipated changes in traffic generation rates or other changed conditions, the City must approve the Subsequent Discretionary Approvals under the ARDA Overlay Plan for the Property without imposing any additional mitigation measures, conditions, or requirements relating to traffic circulation, unless future litigation determines that portions of the Amended and Restated Agreement are invalid. The Parties intend and determine that NITM, as more particularly set forth in Section 6 below, is full mitigation for transportation and traffic impacts of Heritage Fields' planned development of the Project, reserving to the City only the right to require in-tract, *i.e.*, on the Heritage Fields Property, traffic improvements at the time of submittal of future tentative subdivision maps or subsequent discretionary actions. However, if, despite the Parties' agreement under NITM and their vigorous mutual

defense of any Third-Party Challenge, a final, non-appealable determination is made by a court of competent jurisdiction that the City can and must impose additional off-site traffic mitigation before approving future tentative subdivision maps or subsequent discretionary actions for the Project, and the City in good faith and pursuit of due diligence cannot obtain other funding for such additional mitigation, Heritage Fields and the City each agree to pay one-half of the remaining unfunded cost of such additional mitigation as and when the same becomes due and payable.

3.12.6 Allocation of Cumulative Mitigation for Traffic. The Parties recognize that additional traffic may cause cumulative impacts on Project traffic mitigation which go beyond those resulting from a particular use or increase in density. For example, one Party may increase traffic at a particular intersection from .87 to .89, and then a second Party will propose an increase from .89 to .91. The second Party may be subject to increased mitigation, in addition to the .02 increase from its proposal, because the combined traffic pushes the intersection into a new level of service. The Parties agree that to the extent such additional mitigation is caused by the cumulative effects of several Parties' traffic impacts, the Parties will share such additional mitigation costs in a proportionate manner.

3.13 RDA Obligations. To the extent relevant, now or in the future, the obligations of the RDA with respect to Heritage Fields' vested rights, regulation of the Property, transfers of property, designation of uses and all other provisions of this Amended and Restated Agreement shall be the same as the City. The RDA acknowledges and agrees that the obligations set forth under this Amended and Restated Agreement are consistent with the RDA's adopted Redevelopment Plan.

3.14 Cooperation in Land Use Planning For Edge Conditions. The Parties agree to meet and confer with each other from time to time to ensure consistency in their respective land use planning efforts, particularly with respect to those areas where the City Property and the Heritage Fields Property share common boundaries.

4. ARDA Overlay Plan.

4.1 ARDA Overlay Plan. Land use and development on the Heritage Fields Property shall be governed by the "**ARDA Overlay Plan**", attached hereto as Exhibit "L" and adopted as part of the approval of this Amended and Restated Agreement. The ARDA Overlay Plan supersedes the Conceptual Overlay Plan and the Overlay Plan (Table A-5) in the Original Development Agreement. Notwithstanding any other provision of this Amended and Restated Agreement, Heritage Fields shall have the right but not the obligation to build the uses specified in the ARDA Overlay Plan at the locations specified in the ARDA Overlay Plan.

4.2 Priority Of ARDA Overlay Plan. The City has determined that the ARDA Overlay Plan is consistent with the General Plan and Zoning Code. As such, the ARDA Overlay Plan shall be the primary document governing the use and development of the Heritage Fields Property. In the event of any conflict or inconsistency between the

ARDA Overlay Plan and the compliance activities required by the Agency Permits, the Agency Permits shall control.

4.3 Changes in Land Use, Circulation Access and Mitigation Requirements. The City and Heritage Fields may agree on changes to the mitigation requirements or project design features in writing without amending this Amended and Restated Agreement.

5. FEES.

5.1 Development Fees. During the Term of this Amended and Restated Agreement, the City shall not levy or require with respect to development of the Heritage Fields Property any site-specific Development Fees that are not of general application and are imposed, expressly or effectively, only on the Heritage Fields Property, except those set forth in this Amended and Restated Agreement (including but not limited to the NITM Program fees described in Section 6 and the Public Benefit Fee described in Section 10) and those in effect on July 12, 2005. It is understood that the preceding limitation on the City's imposition of Development Fees shall not limit the City from levying against the Heritage Fields Property additional Development Fees to the extent such development fees are imposed by the City on a city-wide basis and are actually applicable to and paid by a significant portion of other properties in the City.

5.2 Other Fees And Charges. Except as specifically set forth in Section 5.1, nothing set forth in this Amended and Restated Agreement is intended or shall be construed to limit or restrict the City's authority to impose new processing fees or charges, assessments, or taxes for development of the Heritage Fields Property or to increase any existing processing fees or charges which may apply to the Property, assessments or taxes, and nothing set forth herein is intended or shall be construed to limit or restrict whatever rights Heritage Fields might otherwise have to challenge any processing fee or charge either not set forth in this Amended and Restated Agreement or not in effect as of the Second Effective Date. In connection therewith, Heritage Fields agrees that it must comply with and is subject to the payment of school impact fees in accordance with Government Code §§ 65995, *et seq.* In furtherance of the foregoing, the City shall not, subsequent to the Effective Date of this Amended and Restated Agreement, impose any new fee or requirement upon the Project for the purpose of raising revenue for the provision of affordable housing not otherwise set forth in the Affordable Housing Ordinance as vested in this Agreement.

6. NORTH IRVINE TRANSPORTATION INFRASTRUCTURE.

6.1 NITM Ordinance. On or about June 10, 2003, the City adopted the NITM Ordinance establishing a fee program to be paid on all construction within the northern portion of the City (including the Property and the North Irvine Adjacent Lands) for the coordinated and phased installation of required traffic and transportation improvements (the "NITM Program"). The NITM Program is incorporated by reference and shall be considered part of this Amended and Restated Agreement. The NITM Ordinance and NITM Program as adopted by the City are included in the Existing Land Use Regulations

under the terms of this Amended and Restated Agreement. The City and Heritage Fields shall implement the NITM Program.

6.2 Concurrent Agreement(s) With North Irvine Adjacent Lands Owner. On or about June 10, 2003, the City adopted its Ordinance No. 03-20, approving the “**NITM Program Implementing Agreement**” by and between (i) the City and (ii) The Irvine Company and The Irvine Community Development Company LLC. The NITM Program Implementing Agreement is an agreement governed by the Development Agreement Statute, and provides that the owners and developers of the North Irvine Adjacent Lands will participate in the NITM Program.

6.3 Waiver Of Objections Due To Allocation And Apportionment Of NITM Fees. Heritage Fields acknowledges that the Property is subject to the terms and conditions of the NITM Program and that Heritage Fields shall participate in the NITM Program and perform the obligations required of it thereunder. Heritage Fields acknowledges that no NITM Program fees or costs are assessed or imposed upon (i) PIA 19, (ii) PIA 37, (iii) PIA 44, and (iv) the Great Park Property, excepting that portion of the Great Park Property that is the ARDA Transfer Site. Heritage Fields further acknowledges and agrees that the fees associated with each of these areas under the NITM Program will be paid by Heritage Fields in connection with the Parcel (as defined in the NITM Ordinance) in which the exempted area is located. Such fees have been reallocated to the various allowable uses on the Parcels, and shall be payable at such time as the fees for development of the various uses on the Parcels are otherwise due under the NITM Program, and Heritage Fields shall have the right to pay the fees imposed by the NITM Program under any of the alternative payment procedures set forth in the NITM Program. By the execution of this Amended and Restated Agreement, Heritage Fields waives any objection to, and covenants not to sue the City with respect to, any issue in any way relating to the adopted allocation of costs, expenses and fees contained in the NITM Program as of the Second Effective Date, by and among the various areas, including any and all portions of the Property. Heritage Fields does not waive any objection or make any covenant not to sue as to any subsequent allocations by the City that are inconsistent with the NITM Program.

6.4 Limitation On Heritage Fields’ Obligation To Pay NITM Fees For City Property. Notwithstanding any other provision of this Amended and Restated Agreement, Heritage Fields’ obligation to pay NITM fees for that portion of the City Property described in Section 6.3 is limited to the amount of NITM fees that would be payable for those portions of the City Property, had those portions of the City Property been developed in accordance with the assumptions in the 2003 Project Approvals. If, and to the extent, the amount of fees attributable to those portions of the City Property exceeds the fees that would have been payable for those portions of the City Property had those portions of the City Property been developed in accordance with the assumptions in the 2003 Project Approvals, the City shall be responsible for the resulting additional NITM fee increment at the time the same is due under the NITM Ordinance. The City agrees that it will process all NITM traffic studies and fee allocation plans required under NITM.

6.5 Commitment Regarding Payment Of NITM Fee Established For Each Future Development Area. Heritage Fields agrees that, except as set forth in Section 6.3 and Section 6.4, it shall pay the NITM fees as provided in the NITM Ordinance, including without limitation the fees required to be paid for each Future Development Area within the property owned by Heritage Fields under the terms and conditions of the NITM Ordinance. Pursuant to the NITM Ordinance, the Parties agree that Heritage Fields shall be regarded by the City as having remaining “developable land” within its Future Development Area so long as there is vacant land remaining (for which no building permit has been applied for and issued to Heritage Fields) which has been subdivided or which is reasonably likely to be subdivided and used for the construction of new buildings under the provisions of the Existing Land Use Regulations, and the ARDA Overlay Plan, regardless of whether or not Heritage Fields has applied for or the City has permitted such development.

6.6 Notice Of NITM Program To Heritage Fields And Purchasers Of The Property. Heritage Fields shall include notice of the NITM Program obligations pursuant to this Amended and Restated Agreement in each instrument conveying any portion of the Heritage Fields Property to a developer, merchant builder or corporate or institutional purchaser of a portion of the Heritage Fields Property.

6.7 Commitment Regarding Sale Price For Right-Of-Way Land Owned By Heritage Fields Specified In NITM Program. The NITM Program, as adopted by the City, specifies and refers to certain real property which is contemplated to be acquired by the City to construct the specified NITM traffic improvements. The City has indicated to Heritage Fields that if the City cannot acquire such real property through a voluntary sale from Heritage Fields at a price acceptable to the City, the City’s management would recommend to the City Council the adoption of a resolution of necessity for the acquisition of such real property by eminent domain, and pursuit of an action in eminent domain. Under this threat of condemnation by the City, Heritage Fields agrees to sell this specified land to the City upon reasonable terms and conditions at a sale price specified in the NITM Program, with the 5% escalation factor in the sale price as defined in the NITM Program.

6.8 NITM Account. The City shall maintain a separate account (the “**NITM Account**”) under its custody and control to hold all fees collected in trust for the benefit of the participants in the NITM Program. All fees collected under the NITM Program, all fees collected as conditions of approval or other fair share fees from Non-Participating Properties under Section 6.11 below, and all fair share fees collected from landowners and developers in the North Irvine Adjacent Lands under Section 6.10 below, shall be deposited in the NITM Account. All interest or other income earned by the funds in the NITM Account shall accrue and be deposited in such account. As set forth in the NITM Program, the City shall be reimbursed its reasonable costs for administering and maintaining this NITM Account.

6.9 Independent Nature Of Obligations. The obligations of Heritage Fields, the City, and the developers and landowners in the North Irvine Adjacent Lands are independent.

6.10 City Covenant To Obtain NITM Or Fair Share Fees From North Irvine Adjacent Lands. As of the date of this Amended and Restated Agreement, the City has already entered into the NITM Program Implementing Agreement referenced in Section 6.2 with The Irvine Company and the Irvine Community Development Company LLC to obtain from them the fees and improvements contemplated in the NITM Program. The failure of the City to obtain, enforce or otherwise implement such agreement shall not invalidate this Amended and Restated Agreement or the NITM Program, which shall remain in effect, and such failure shall not operate to increase or decrease the obligations of Heritage Fields under the NITM Program or under this Amended and Restated Agreement. The City covenants that, to the extent permitted by law, it shall make a good faith effort to approve and implement such NITM Program Implementing Agreement. Should such NITM Program Implementing Agreement not be implemented in whole or in part for the North Irvine Adjacent Lands, to the extent permitted by law, the City shall require the landowners and developers of the North Irvine Adjacent Lands to pay fees representing the fair share of such North Irvine Adjacent Lands for the traffic improvements that will be utilized by uses in the North Irvine Adjacent Lands, including any of the List of NITM Improvements that will be constructed or fully or partially financed under the NITM Program, and as specified by the NITM Ordinance, including without limitation the fees established by the NITM Ordinance for such property. The City further covenants that any fees collected from the North Irvine Adjacent Lands for NITM Program traffic improvements will be deposited in the NITM Account.

6.11 City Covenant To Obtain NITM Or Fair Share Fees From All Property Owners In The North Irvine Adjacent Lands. Certain properties in the North Irvine Adjacent Lands are not included in the NITM Program Implementing Agreement (“**Non-Participating Properties**”). Should any of these Non-Participating Properties seek to develop in a manner which will increase traffic from those properties, the City covenants that it shall, to the extent permitted by law, require the payment of fees representing such Non-Participating Properties’ fair share of the traffic improvements which will be used by this traffic, including any NITM Program traffic improvements. The City further covenants that any fees collected from Non-Participating Properties for NITM Program traffic improvements shall be deposited in the NITM Account.

6.12 City Covenant To Use NITM Fees And NITM Account For NITM Program. The City shall use the funds in the NITM Account, and all fees collected under the NITM Program, solely for the purposes authorized in the NITM Program. As set forth in the NITM Program, no funds may be used by the City for traffic improvements or other purposes which are not NITM Program traffic improvements, without the consent of Heritage Fields and the owner(s) of the North Irvine Adjacent Lands.

6.13 Certificate of NITM Compliance. Upon written request from Heritage Fields with respect to an identified legal parcel or lot, or parcels or lots, the City shall deliver within twenty (20) days a certificate confirming that this Amended and Restated Agreement is in full force and effect and whether or not NITM fees have been paid, or if there are any outstanding or future NITM fee obligations with respect to such parcel or parcels.

6.14 Satisfaction Of Mitigation Obligations Or Other Traffic Conditions. The City has adopted certain mitigation measures and conditions of approval for the transportation and traffic impacts of the development of the Property pursuant to the Existing Land Use Regulations and the ARDA Overlay Plan. The City has determined based upon a nexus fee study that the costs of the NITM Program are fairly apportioned to the Property included within the NITM Program as set forth in the NITM Ordinance, based upon calculations of average daily trips in a manner which has a nexus to, and is proportional to, the traffic which will be generated by all of the development contemplated in the ARDA Overlay Plan. The City hereby agrees that this Amended and Restated Agreement and the obligations to participate in the NITM Program contained in this Amended and Restated Agreement fully satisfy each and every existing mitigation and condition of approval set forth in the Master Subdivision Map. For future mitigation measures and conditions of approval for transportation and traffic impacts of Heritage Fields' planned development of the Project, the City has determined that the NITM Program will fully satisfy such obligations. The City intends to utilize the following mitigation measure and condition of approval for all development within the Property, including any future discretionary approvals adopted for the Property which the City intends to be applicable to the Property under this Amended and Restated Agreement: "Applicant (or property owner or developer) shall mitigate its traffic and transportation impacts by participation in the NITM Program established by Ordinance No. 03-20 and the Amended and Restated Development Agreement recorded on 12/27/2010, against the Property." Notwithstanding any other provision of the Amended and Restated Agreement, the Parties agree that in addition to this mitigation measure and condition of approval, the City may also add conditions to the approval of a subdivision tentative tract map for development of the Heritage Fields Property for site specific in-tract, i.e., on the Heritage Fields Property, traffic improvements that provide Project access drives, internal streets and traffic control measures within the area to be subdivided. Heritage Fields acknowledges that the City retains the discretion to judge the adequacy of traffic improvements and mitigation in the future, and that the City may exercise that discretion to update the NITM Program through future "Comprehensive Traffic Studies" as defined in and pursuant to the NITM Ordinance.

6.15 Independence Of Obligations. Heritage Fields shall be responsible for traffic mitigation, including payment of NITM fees, in connection with the development of the City Property, so long as development of that property remains within the overall traffic mitigation and ADT allocation assigned to the City. If, however, the City exceeds its mitigation measures (e.g., by substituting a use with higher peak hour generation) or its overall trip allocation, Heritage Fields will not be responsible for the additional increment of mitigation (if any) caused thereby, nor will it be responsible for the additional increment of NITM fees (if any) resulting therefrom.

7. CONSTRUCTION AND MAINTENANCE OF PUBLIC IMPROVEMENTS;
FINANCING OF SAME

7.1 Heritage Fields' Obligations to Construct and Fund Construction. Heritage Fields has the obligation to construct or cause to be constructed, and to pay for the construction of, the Proposed Project Facilities, which shall not be conditioned upon

(i) the formation of the CFD, or (ii) issuance of Non-Subordinate Bonds; provided, however, (a) the obligation to construct and/or pay for the Proposed Project Facilities shall not commence to accrue until the Second Effective Date, unless a Third Party Legal Challenge has been brought before that date, in which case such obligations shall commence to accrue ten (10) days after a final adjudication or legislative action rejecting such Third-Party Legal Challenge; and (b) the status of the issuance of Non-Subordinate Bonds shall continue to be part of the Quarterly Infrastructure Meeting Items (as defined in the Amended MIA) discussed and considered as part of the meet and confer process pursuant to Section 4.2 of the Amended MIA. Construction of the Proposed Project Facilities shall be completed in accordance with the phasing and timing requirements and processes set forth in the Amended MIA. The Proposed Project Facilities shall be financed by the levy of Special Taxes, the issuance of Non-Subordinate Bonds, payments by the County to the City under Section 2.2.5 of the County Agreement toward infrastructure components that are part of the Proposed Project Facilities, contributions by Heritage Fields, as described in Sections 7.5, 7.6, 7.7, and 7.8, and possibly other sources or contributions the Parties may obtain to pay for the design and construction of the Proposed Project Facilities (for example, but without limitation, federal, state or local grants); provided, however, that, Heritage Fields shall be responsible for any costs of the Proposed Project Facilities not financed by the Special Taxes, by the Non-Subordinate Bonds, by payments from the County to the City under Section 2.2.5 of the County Agreement toward infrastructure components that are part of the Proposed Project Facilities, or by such other sources or contributions.

7.1.1 Delegation of Construction. The City acknowledges that Heritage Fields intends to delegate its duties to construct the Proposed Project Facilities to its affiliate that holds a California contractors' license ("**Construction Manager**"), and/or to delegate to IRWD, Southern California Edison ("**SCE**") or the County (or contractors engaged by, through or for IRWD, SCE or the County) construction of those portions of the Proposed Project Facilities that may be conveyed, maintained or ultimately constructed by IRWD, SCE or the County, and the City approves such delegation of duties, as more particularly described in the Amended MIA.

7.1.2 Quality Of Construction of Proposed Project Facilities. Heritage Fields agrees that it shall construct or cause the construction of the Proposed Project Facilities and the Additional Backbone Infrastructure (if any) at a level of quality, as reasonably determined by the City, that is at least equivalent to the quality of construction on similar sized master-planned projects that have been approved and/or built within the City since 2001. Such Proposed Project Facilities and Additional Backbone Infrastructure (if any) shall also be constructed in a manner consistent with the Streetscape Guidelines approved by the City's Planning Commission, and which include "green streets" standards as set forth in the Streetscape Guidelines.

7.1.3 Potential Construction of Backbone Infrastructure Initially Funded By City In Event of Third Party Legal Challenge. By mutual agreement, the Parties may elect to proceed with the construction of Backbone Infrastructure during the pendency of a Third Party Legal Challenge; provided, however, that nothing in this Section 7.1.3 shall require that Heritage Fields initially fund such Backbone Infrastructure prior to final

adjudication or legislative action rejecting such Third Party Legal Challenge; the Parties understanding that funding for such Backbone Infrastructure would not be provided by Heritage Fields and/or through Special Taxes assessed or levied through a CFD until such time as the Third Party Legal Challenge is resolved.

7.2 Authorized Services. On an annual basis, the City shall establish a budget, in its sole discretion, for the Authorized Services for the applicable Fiscal Year. The entirety of or portions of the Authorized Services, up to but not to exceed the Indexed GA, shall be paid by Heritage Fields until such time as the CFD is formed. After the formation of the CFD, the entirety of or portions of the Authorized Services shall be paid solely from the Special Taxes in accordance with the provisions of Section 7.6 below. Accordingly, after the CFD is formed, Heritage Fields shall have no obligation to pay the Indexed GA for Authorized Services separately under this Amended and Restated Agreement and rather only through its payment of Special Taxes as a landowner pursuant to the CFD. The Authorized Services shall be funded, in part, by the Indexed GA and the Secondary Amount. The City shall make available to Heritage Fields the annual budget for the Authorized Services. Prior to approval of the budget by the City, at Heritage Fields' request, the City and Heritage Fields shall meet and review the proposed budget. Until such time that the CFD is formed, the Guaranteed Amount shall be paid in two equal installments for each Fiscal Year on or before the date on which real property taxes would otherwise be delinquent (i.e., December 10 and April 10 of each Fiscal Year). The obligation of Heritage Fields to pay the Indexed GA for Authorized Services shall commence to accrue as of the Second Effective Date, unless a Third Party Legal Challenge has been brought before that date, in which case the obligation to pay shall commence to accrue ten (10) days after a final adjudication or legislative action rejecting such Third-Party Legal Challenge (as applicable, the "**Payment Commencement Date**"); provided, however, that if the City elects in its sole and absolute discretion to incur Authorized Services costs during the period between the Second Effective Date and the Payment Commencement Date ("Advanced Authorized Services"), once there has been final adjudication or legislative action rejecting any Third Party Legal Challenge, then the City may demand, and Heritage Fields shall pay to the City the amount of the Advanced Authorized Services up to the Indexed GA due, which payment shall be due on the later of (i) the Payment Commencement Date or (ii) 30 days after the delivery of such demand to Heritage Fields. The obligation of Heritage Fields to pay the Guaranteed Amount for Authorized Services for the Fiscal Year in which the CFD is formed shall be apportioned between the payment obligation under this Amended and Restated Agreement and the payment obligation from the Special Taxes such that there is no overpayment for that particular Fiscal Year.

7.3 Additional Backbone Infrastructure. If the Parties, after a good faith meet and confer process, mutually determine in writing to fund the construction of all or any part of Additional Backbone Infrastructure through the proceeds of Non-Subordinate Bonds and Special Taxes, then Heritage Fields shall have the obligation to construct or cause to be constructed such Additional Backbone Infrastructure.

7.4 Value Limitation. For each Improvement Area, the amount of the Maximum Special Taxes for the portion of the Heritage Fields Property intended to be

developed with residential units shall be established at the time of formation of the CFD in amounts determined by the City, but the amount of the Maximum Special Taxes plus the Overlapping Liens plus the Assumed IRWD Assessment shall collectively not exceed two percent (2%) of the expected base sales price (i.e. the base sale price without any optional upgrades included) of the lowest priced residential unit within each residential Land Use Class (as defined in Table 1 of the RMA) in such Improvement Area at the time of formation of the CFD, as projected in a market study prepared by a third party consultant selected by the City that assumes completion of the residential units (the “**Residential Value Limitation**”). For each Improvement Area, the amount of the Maximum Special Taxes for the portion of the Heritage Fields Property intended to be developed with non-residential improvements shall be the amount set forth in the RMA (the “**Non-Residential Value Limitation**”). The Residential Value Limitation and the Non-Residential Value Limitation are hereinafter collectively referred to as the “**Value Limitation**.” Both the Residential Value Limitation and the Non-Residential Value Limitation shall be recalculated at the time and in the manner set forth in the RMA for each Improvement Area, and, if necessary, the Maximum Special Taxes in the RMA shall be reduced so that such amounts do not exceed the respective Residential Value Limitation and Non-Residential Value Limitation, in the manner specified in the RMA.

7.5 Capacity Allocation on the Project. The Parties hereto agree and recognize that the ability to fund various capital facilities, fees, and/or the GA and the Indexed SA, through the CFD is limited by, among other things, the Value Limitation. In terms of allocating and prioritizing the leverage and/or payment of Special Taxes upon Taxable Property, the overall debt capacity of the Project up to the Value Limitation shall be allocated during the Term in the following order of priority:

7.5.1 Priority 1. Overlapping Liens at the time that the CFD is established;

7.5.2 Priority 2. A sufficient amount to pay the tax supporting IRWD Bonds based upon an assumed amount equal to 10% of the Value Limitation for the Improvement Area (“**Assumed IRWD Assessment**”).

7.5.3 Priority 3. Special Tax levy sufficient to provide the maximum annual amounts set forth on Exhibit "R-2" attached hereto.

7.5.4 Priority 4. Special Tax levy sufficient to pay debt service on one or more series of current and future Non-Subordinate Bonds and Administrative Expenses, the proceeds of which will be used to finance the Proposed Project Facilities and Additional Backbone Infrastructure, if any.

7.5.5 Priority 5. The difference between the (i) the Indexed GA set forth in Exhibit "R-1" and (ii) Guaranteed Amount set forth in Exhibit "R-2" (the difference being the “**Index Delta**”).

7.5.6 Priority 6. Special Tax levy sufficient to pay, or to reimburse amounts previously paid by Heritage Fields, for the construction of Proposed Project Facilities and Additional Backbone Infrastructure, if any.

7.5.7 Priority 7. Special Tax levy sufficient to pay the Authorized Services in excess of the Indexed GA up to a maximum of the Secondary Amount per year.

7.5.8 Priority 8. Any remaining Special Tax revenues which have not been allocated to one or more of the activities, services, or categories described above (the “**Excess Special Tax Capacity**”), shall be divided so that Heritage Fields possesses the ability to designate and/or leverage two-thirds (2/3) of said Excess Special Tax Capacity upon any and all Authorized Facilities and the City shall possess the ability to use and/or leverage one-third (1/3) of the Excess Special Tax Capacity upon any and all Authorized Facilities and all services within the CFD Area and/or those areas adjacent to the CFD Area that are part of the Property otherwise authorized under applicable law to be funded from Special Tax revenues.

7.6 Application of Special Taxes. The Parties hereto agree and recognize that all Special Taxes collected in any Fiscal Year in an Improvement Area (by payment or foreclosure), and any penalties and interest on delinquent amounts collected by foreclosure or otherwise, in any Fiscal Year, not owed to or held by the County, shall be pledged to the payment of (A) debt service on all outstanding Non-Subordinate Bonds issued for such Improvement Area due on (i) any payment dates prior to the date of collection of such Special Taxes and (ii) the next payment dates, in the calendar year commencing in such Fiscal Year, and (B) Bond Costs associated with any outstanding bonds issued for another Improvement Area of the CFD, but only if the Special Taxes were pledged to pay the Bond Costs associated with bonds issued in another Improvement Area of the CFD pursuant to the Indenture, and only in the manner, to the extent, and for the duration set forth in the Indenture, in each case only to the extent that there are insufficient funds on deposit under the Indenture to pay such debt service. After satisfying the payment of debt service on the Non-Subordinate Bonds for which the Special Taxes in such Improvement Area were pledged as set forth in (A) and (B) above in the foregoing manner, the remaining Special Taxes may be applied to finance the Authorized Facilities and Authorized Services, including Subordinate Bonds, in the priority set forth below (with all items of a higher priority being satisfied before application to items of lower priority):

7.6.1 To restore or establish any Non-Subordinate Bond reserve fund for which Special Taxes were levied.

7.6.2 To pay outstanding Administrative Expenses and to fund an account to pay for any Administrative Expenses for Non-Subordinate Bonds in the next Fiscal Year in the amount calculated as part of the Special Tax Requirement.

7.6.3 To pay the Guaranteed Amount for such Improvement Areas. The Guaranteed Amount may be used to finance the Authorized Services and debt service and related expenses on the Subordinate Bonds.

7.6.4 Subject to the City's priority of use of Special Taxes following the City's exercise of its self-help rights under Article XIII of the Amended MIA, and so long as Heritage Fields is not in material breach of this Amended and Restated Agreement or the Amended MIA beyond applicable notice and cure periods, to fund and pay for the Proposed Project Facilities in accordance with Section 7.1 either directly or in reimbursement of costs advanced by Heritage Fields, it being understood that Special Taxes may accumulate in the appropriate fund or account created for each Improvement Area (hereinafter, the "pay-as-you-go fund") to pay such Proposed Project Facilities that have not yet been constructed until actual costs of all Proposed Project Facilities are paid in full. Any shortfalls, current or past, in the payment of the Guaranteed Amount and replenishments of any bond reserve fund under any Indenture relating to the applicable Improvement Area shall be paid from the pay-as-you-go fund upon the deposit of sufficient monies. At such time that (i) the balance in the pay-as-you-go fund for all Improvement Areas, when combined with the remaining net proceeds of any bonds issued by the CFD for the financing of Proposed Project Facilities and any mutually agreed upon Additional Backbone Infrastructure, is at least as much as the projected costs of the Proposed Project Facilities and any mutually agreed upon Additional Backbone Infrastructure that have not yet been constructed (as such projected costs are determined by an independent engineer mutually selected by Heritage Fields and the City, which estimate shall include a twenty-five percent (25%) contingency), and (ii) such projected costs are equal to or less than Twenty Million Dollars (\$20,000,000), then in such Fiscal Year, the City may direct that the amount of Special Taxes collected by the City in such Improvement Area in such Fiscal Year that are not needed to be reserved to cover the projected costs be allocated, in an amount and for items specified by the City, to the lower priority set forth in Section 7.6.5 and 7.6.6 below. Because the pay-as-you-go fund in an Improvement Area may be utilized to make up delinquencies in the payment of the Guaranteed Amount or for any deficiencies in the reserve fund for such Improvement Area, the calculation in the preceding sentence shall be conducted annually, and in each subsequent year, to the extent that there is a shortfall in the amounts available to pay the Proposed Project Facilities and any mutually agreed upon Additional Backbone Infrastructure, the Special Taxes shall be deposited in the pay-as-you-go fund before allocating any Special Taxes pursuant to Section 7.6.5 and 7.6.6. below. The City shall pay amounts from the pay-as-you-go fund for Proposed Project Facilities or any mutually agreed upon Additional Backbone Infrastructure upon request by Heritage Fields, in accordance with the payment requisition procedures set forth in the Amended MIA. If the City directs that Special Taxes be allocated to a lower priority level in accordance with the preceding sentence (a "**Lower Priority Disbursement**") and if Heritage Fields is not reimbursed in full for the reimbursable costs of Proposed Project Facilities and any mutually agreed upon Additional Backbone Infrastructure in the time required under the Amended MIA, City shall remit to Heritage Fields within sixty (60) days of written demand the amount of funds disbursed for a Lower Priority Disbursement that were not paid to or for the benefit of Heritage Fields pursuant to Section 7.6.6 below, in accordance with the payment requisition procedures set forth in the Amended MIA, from

Special Taxes allocated pursuant to Section 7.6.3, Section 7.6.5, and the City's portion of Special Taxes allocated pursuant to Section 7.6.6, or other funds.

7.6.5 To City to pay the Secondary Amount.

7.6.6 For Authorized Facilities and Authorized Services as provided pursuant to Section 7.5.8.

7.7 Formation of the CFD. Subject to the provisions of this Section 7, the Authorized Facilities and Authorized Services shall be funded through the City's formation of a single CFD. Within the CFD, the City and Heritage Fields shall agree on the designation of multiple improvement areas ("**Improvement Areas**"), which may include two or more Tax Zones within each Improvement Area. The RMA for each Improvement Area shall be in the form of the RMA attached hereto as Exhibit "S", except that the following information, at a minimum, in an RMA for an Improvement Area shall be altered (by mutual written agreement of the City and Heritage Fields) to reflect Improvement Area specific information: (a) the identity of the Improvement Area; (b) the Maximum Special Taxes identified in Section C of the RMA; (c) the data identified in Table 2; (d) the amount of exempt acreage in Sections F and I of the RMA; (e) the Prepayment Portion of the Special Tax for both Residential Property and Non-Residential Property set forth in Section I of the RMA; (f) the percentages set forth in Section I; and (g) the percentages in Section J of the RMA. In addition, the City and Heritage Fields may, at any time prior to formation of the CFD, alter any terms of the RMA by mutual written agreement. Nothing in this Section 7.7 shall prevent an amendment of any RMA for an Improvement Area pursuant to the Change Proceedings, as set forth in Section 7.7.7. The City shall not form a CFD for the Property that has an RMA in form or substance different from the RMA attached hereto as Exhibit "S" (as amended in each case as set forth above).

7.7.1 Heritage Fields shall execute and deliver to the City a petition as described in Section 53318(c) of the California Government Code (the "**CFD Petition**") within ninety (90) days after the Second Effective Date, unless a Third Party Legal Challenge has been brought before that date, in which case Heritage Fields shall execute and deliver the CFD Petition to the City within ten (10) days after a final adjudication or legislative action rejecting such Third-Party Legal Challenge. Upon the delivery of the CFD Petition, the City shall conduct the required proceedings as set forth in Government Code Section 53311 *et seq.*, including but not limited to, the City adopting a Resolution of Intention to establish the CFD within ninety (90) days from the submission of the CFD Petition and the payment of any applicable deposit, and then the City holding a public hearing on the establishment of the CFD within thirty (30) days to sixty (60) days after the adoption of the Resolution of Intention.

7.7.2 Subject to the limitations set forth in this Amended and Restated Agreement (including, without limitation, Sections 7.4 and 7.5), Heritage Fields agrees to cooperate with the City and take all reasonable actions to accomplish the formation of the CFD, the designation of the Improvement Areas, the imposition of Special Taxes within each Improvement Area, and the authorization of bonded indebtedness within each

Improvement Area necessary in conjunction with the bonded indebtedness authorized in all other Improvement Areas to finance the Authorized Facilities and Authorized Services, including without limitation, if required by the City as to the CFD and each and every Improvement Area, the submission of a ballot to the City in favor of the formation of the CFD, the designation of Improvement Areas, the levying of such Special Taxes, and the authorization of bonded indebtedness within each Improvement Area necessary in conjunction with the bonded indebtedness authorized in all other Improvement Areas to finance the Authorized Facilities and Authorized Services, and to require any purchaser, other than a Purchaser/User, of Heritage Fields Property to vote accordingly. While it is acknowledged that this Amended and Restated Agreement cannot require the City or the City Council to form the CFD, the City represents that it can, and does hereby, agree that it shall not refuse Heritage Fields' requests to form the CFD, except for good and reasonable cause. Good and reasonable cause includes, without limitation, an adopted City-wide policy, enacted after reasonable notice to Heritage Fields, that does not allow for or discourages the formation of a CFD.

7.7.3 Each Improvement Area shall be authorized to finance any or all of the Authorized Facilities, irrespective of the geographical location of the Authorized Facilities or the phase in which the Authorized Facilities are constructed. Each Improvement Area shall be authorized to finance any or all of the Authorized Services irrespective of the geographic location of the Authorized Services.

7.7.4 The Special Taxes set forth in an RMA shall be secured by recordation in the Official Records of the County of Orange of continuing liens against all or portions of the property included within the boundaries of the respective Improvement Area.

7.7.5 The Maximum Special Tax for each Improvement Area on all users of the Taxable Property within the CFD shall escalate as set forth in the RMA. Subject to sound municipal financing practices, market conditions, and findings of compliance with applicable law, the debt service on the CFD Bonds in such Improvement Area shall also escalate by the same percentage as the Special Taxes.

7.7.6 The City may approve one or more JCFA's with other political entities to allow the CFD or any Improvement Area to finance facilities owned and/or maintained by Local Agencies other than the City.

7.7.7 At the request of Heritage Fields, but subject to the limitations contained in this Amended and Restated Agreement, the City agrees that it shall conduct Change Proceedings pursuant to the CFD Act to (i) make any changes to an RMA for an Improvement Area, including amending the rates (either increase or decrease) and method of apportionment of special taxes, (ii) increase or decrease the authorized bonded indebtedness within an Improvement Area, (iii) annex or remove property from an Improvement Area, or (iv) to take such other actions as authorized by the CFD Act ("Change Proceedings"), provided, however, the City makes no commitment as to the outcome of said Change Proceedings.

7.7.8 No bonds, notes, certificates of participation or other evidence of bonded indebtedness (other than the IRWD Bonds) shall be issued by any Local Agency, other than the City, at the request of Heritage Fields, or with its affirmative vote and/or consent, secured, in whole or part, by Taxable Property, and/or taxes or other assessments thereupon, without the advance written consent of the City, except in the event the City elects not to form the CFD and issue CFD Bonds in accordance with the terms of this Amended and Restated Agreement.

7.7.9 Upon formation of the CFD, or shortly thereafter, the City and Heritage Fields shall enter a "Protocol Agreement" whereby the City Council, as the legislative body of the CFD, agrees that the requirements of Sections 7.4 through 7.8 shall bind the CFD for the Term of the Agreement.

7.7.10 The City Property shall neither be subject to the levy of the Special Taxes nor be included in the capacity analyses set forth in Section 7.5 except in the event any portion of the ARDA Transfer Site is sold or leased pursuant to a long term lease to a private third-party (other than the City, RDA, OCGP Corporation, or any public entity) for a use that is neither a Great Park use nor a use ancillary to a Great Park use (as such ancillary uses are specified further in Section 3.9.7 above), in which case such portions of the ARDA Transfer Site shall be subject to the levy of the Special Taxes as identified in the RMA and included in the capacity analyses.

7.8 Issuance of Non-Subordinate Bonds. While it is acknowledged that this Amended and Restated Agreement cannot require the City or the City Council to issue and sell Non-Subordinate Bonds, the City represents that it can, and does hereby, agree that it shall not refuse Heritage Fields' requests to issue and sell Non-Subordinate Bonds from time to time in each Improvement Area consistent with the priorities set forth in Section 7.5 above, except for good and reasonable cause. Good and reasonable cause includes, without limitation, an adopted City-wide policy, enacted after reasonable notice to Heritage Fields, that does not allow for or discourages the formation of a CFD. The issuance of the Non-Subordinate Bonds shall, in general, be subject to the following parameters:

7.8.1 Unless the City determines otherwise, for fixed rate bonds, the amount of the reserve fund for each federal tax-exempt Non-Subordinate Bond issue shall equal the lesser of (i) 10% of the bond amount, (ii) the maximum annual debt service on such bonds, or (iii) 125% of the average annual debt service on such bonds. The City may authorize that a surety bond, letter of credit, or other credit facility may be used in lieu of all or a part of a reserve fund funded by bond proceeds.

7.8.2 The minimum appraised value-to-lien ratio required for each Non-Subordinate Bond issue shall be 3:1, unless otherwise required by the CFD Act.

7.8.3 Non-Subordinate Bonds may be issued as fixed or variable rate bonds. If Heritage Fields requests that variable rate bonds be issued, Heritage Fields shall obtain appropriate credit enhancement at its sole expense.

7.8.4 The term of the Non-Subordinate Bonds for each Improvement Area shall be determined by the City.

7.8.5 Non-Subordinate Bonds for each Improvement Area shall be issued and administered pursuant to a bond indenture, fiscal agent agreement, resolution of issuance, Charter City Resolution, or similar document relating to the pledge of Special Taxes for that Improvement Area (the “**Indenture**”).

7.8.6 All statements and material related to the sale of Non-Subordinate Bonds shall state that neither the faith, credit, nor the taxing power of the City is pledged to the repayment of the Non-Subordinate Bonds, nor that there is an obligation of the City to replenish the reserve fund from revenue sources other than Special Taxes or proceeds from foreclosure proceedings. The City shall have no monetary liability, contingent or otherwise, for the debt services related to any Non-Subordinate Bonds.

7.8.7 The Special Taxes shall continue to be levied and collected in accordance with the RMA and utilized to fund Authorized Facilities and Authorized Services as determined by the City, except that upon final payment of all Non-Subordinate Bonds and the financing of all Proposed Project Facilities and any mutually agreed upon Additional Backbone Infrastructure, the City Council may, in its sole discretion determine to reduce or discontinue the collection of the Special Taxes.

7.8.8 Subject to Section 7.5, the City shall neither issue any CFD Bonds, nor any other bonds, certificates or other forms of indebtedness, secured by the Special Taxes to finance any Authorized Facilities or Authorized Services other than the Proposed Project Facilities and any Additional Backbone Infrastructure, except on a subordinated basis (the “**Subordinated Bonds**”) to any CFD Bonds issued or which may be issued in the future to fund Authorized Services or Authorized Facilities provided, however; that (i) Subordinate Bonds shall not be included in the calculation of the minimum value to lien ratio for the purpose of issuing Non-Subordinate Bonds; (ii) The Special Taxes that secure the Subordinate Bonds are subordinate to the pledge or use of the Special Taxes for any of the purposes of higher priority set forth in Section 7.6; (iii) That until all Proposed Project Facilities and any Additional Backbone Infrastructure have been financed by the CFD, the City shall be limited to pledging, on a subordinated basis, the Special Taxes not in excess of the Indexed GA for such Improvement Area, unless a supplemental levy is required as a result of Special Tax delinquencies, as denoted in Section E.2. of the RMA; (iv) Special Taxes used to pay debt service or other costs associated with the Subordinate Bonds will be derived from the Indexed GA payable to the City to the effect that amounts expended on debt service and other costs for the Subordinate Bonds when combined with amounts received will not exceed the Pro Rata Share of the Indexed GA for such Improvement Areas; (v) At Heritage Fields’ request the City and Heritage Fields shall meet and review any Subordinated Bond issue prior to public dissemination of disclosure documents, provided however, that Heritage Fields’ shall not possess a right of consent in relation to the issuance of Subordinated Bonds; and (vi) the documentation for the Subordinated Bonds explicitly allows for the issuance of Non-Subordinate Bonds in any number of series and amounts that will be secured by the Special Taxes on a basis senior to that of Subordinate Bonds.

7.9 Apportionment; Application to County Property. The City covenants to request in writing that the County honor its obligations pursuant to Section 2.2.5 of the County Agreement, and to actively pursue enforcement of that provision, which provides as follows:

"The parties acknowledge that the City seeks to create a funding mechanism whereby all Base users pay their fair share of the costs of developing the necessary infrastructure and related improvements. The County agrees to participate in such a funding mechanism and pay its fair share of the costs that are limited to infrastructure improvements directly related to servicing the properties County is to receive referenced in 2.2.3 above. Infrastructure improvements shall refer to utilities, roadways, sewer lines and other types of infrastructure needs that are necessary to service each County parcel, if any. The County will not be required to contribute, through assessments or other funding or financing methods, to the development or maintenance costs or expenses for any park or open space that will be developed and maintained on the Base under the Irvine 'Great Park Plan'. Furthermore, to the extent they qualify, County shall have the option to pay any portion of its share of infrastructure costs and expenses with Road Funds or other non-General Fund revenues."

In this regard, the City agrees to meet and confer in good faith with Heritage Fields concerning the City's efforts to secure compliance with Section 2.2.5 of the County Agreement. The City shall not enter into any agreement with the County (or other parties, including OCTA) or a modification to the terms of the County Agreement that creates a material and adverse impact on the cost of the Backbone Infrastructure and/or a material and adverse impact on the timing of construction of the Backbone Infrastructure, as that timing is specified in the Master Phasing Plan and Schedule provided as Exhibit B to the MIA, as that schedule may be modified from time to time in accordance with the MIA. Nothing in this Section 7.9 requires that the City commence any litigation action against the County to enforce the terms of the County Agreement, provided that nothing contained herein shall be deemed to be a waiver by Heritage Fields of any rights Heritage Fields may have as against the County with respect to the County Agreement.

7.10 Waiver of Challenge to Special Tax Requirement. (A) Heritage Fields hereby waives and forever relinquishes any ability it may possess to challenge, judicially, administratively, or otherwise, the imposition of the Special Tax, or any portion thereof, the levy of the Special Tax, or any portion thereof, and/or the collection of the Special Tax, or any portion thereof, on any property which it/they own and/or control. The foregoing covenant shall not prevent Heritage Fields from bringing any challenge, judicially, administratively, or otherwise to specifically enforce the obligations of the City or the CFD under the Indenture, the RMA, Amended MIA, the Protocol Agreement, this Amended and Restated Agreement or any other agreement between the City and

Heritage Fields which reasonably relates to the Special Taxes. In addition, and without limitation, Heritage Fields hereby agrees not to file, and forebears and relinquishes the right to file, a petition, of any sort, whether by way of ballot proposition, initiative, referendum, or similar device, to amend, modify, reduce or otherwise negatively affect the collection of Special Taxes or any portion thereof, contemplated by this Amended and Restated Agreement and/or the RMA, except that this covenant shall not be construed to prohibit Heritage Fields from petitioning the City or the CFD to process, or participate in, any Change Proceedings in accordance with Section 7.7.7 above. Heritage Fields shall protect and indemnify the City from any loss of Special Tax revenue based upon its breach of one or more of the covenants set forth in this Section 7.7.10 or Section 7.7.2. (B) No person or entity, other than Heritage Fields and/or a Purchaser/User, shall claim any right, entitlement, or any other benefit under this Amended and Restated Agreement unless and until it has executed a document, approved as to form and content by the City Attorney, accepting and agreeing to the waivers, releases, and covenants set forth in Subsection 7.10(A) above.

8. PROPERTY-WIDE ACTIVITIES.

8.1 Master Subdivision Map. Heritage Fields shall not record any final subdivision map for all or any portion of the Heritage Fields Property (a “Subsequent Map”) unless and until it has filed a final Master Subdivision Map for that portion of the Property that is subject to the Subsequent Map, and has complied with all Master Subdivision Map conditions specified by the City to be applicable to that final Master Subdivision Map.

8.2 Property-Wide Permits.

8.2.1 Agency Permits. The development of the Property will require various permits and entitlements from state and federal agencies including without limitation a Section 404 Permit from the U.S. Army Corps of Engineers, a Section 401 Water Quality Certification from the California Regional Water Quality Control Board, a Fish and Game Section 1602 Permit from the California Department of Fish and Game, an Irvine Ranch Water District Subarea Master Plan, and a National Pollution Discharge Elimination System Permit (the “**Agency Permits**”). Heritage Fields shall process such Agency Permits in consultation and coordination with the City. Heritage Fields has obtained the following Agency Permits in connection with development of the Property, under which each of Heritage Fields, the City and OCGP Corporation are co-permittees: (i) Clean Water Act Section 404 Permit No. SPL-2006-1452-CJF, effective date April 30, 2007, issued by the United States Army Corps of Engineers (the “**404 Permit**”); (ii) California Fish and Game Code Section 1602 Streambed Alteration Agreement No. 1600-2006-0258-R5, effective date February 28, 2007 issued by the California Department of Fish and Game (the “**1602 Agreement**”); (iii) Section 401 Water Quality Standards Certification for the Heritage Fields and the Great Park Improvement Projects, the City of Irvine (ACOE Reference No. 200601452-CJF), effective date February 21, 2007, issued by the Santa Ana Regional Water Quality Control Board (the “**401 Certification**”). In addition, Heritage Fields has in place a Master Storm Water Pollution Prevention Plan, dated [March 2007] (the “**Master SWPPP**”) required by the 401

Certification. The City and OCGP Corporation are not co-permittees for purposes of the Master SWPPP. Instead, the City and OCGP Corporation are required to maintain separate storm water pollution prevention plans in compliance with the 401 Certification to cover any construction activity the City or OCGP Corporation undertake on the Property, and shall be separately responsible and liable for performance for their respective SWPPP.

8.2.2 Responsibility for Implementation. If either the City or Heritage Fields fails to implement its obligations under any of the Agency Permits and does not cure such failure pursuant to Section 14 of this Amended and Restated Agreement (“**Defaulting Party**”), and such failure would prevent the other Party from proceeding with its development of its property (“**Affected Party**”), the Affected Party may obtain an order for specific performance from a court providing that if such implementation is not timely commenced and diligently pursued by the Defaulting Party, the Affected Party may take responsibility for implementation of such obligations. The order may provide that the Defaulting Party shall grant the Affected Party all rights of access, construction easements, and other permits or licenses necessary to perform such work. The Affected Party shall have the right to recover the costs of performing such work from the Defaulting Party.

8.2.3 Indemnification. Each Party agrees to indemnify and defend any other Party for any violations of the Agency Permits a Party may cause, whether on that Party’s property or the other Party’s property.

8.3 City Cooperation. The City will cooperate with Heritage Fields, and assist Heritage Fields, as requested by Heritage Fields, in its efforts to obtain additional Agency Permits or to amend previously obtained Agency Permits. The City shall use reasonable efforts to provide to Heritage Fields, as soon as reasonably possible after a request for such additional information and materials reasonably needed by Heritage Fields to file sufficient applications or amendments for all applicable Agency Permits.

9. DEDICATIONS AND CONVEYANCES OF PROPERTY INTERESTS.

9.1 Police Site. Following the Second Effective Date and the City’s determination of its final detailed site plan that shows its proposed improvements and sets the precise boundaries upon which a metes and bounds legal description can be prepared, Heritage Fields shall execute, acknowledge, and deliver to City a grant deed in the form substantially the same as the form attached hereto as Exhibit P, conveying to City, for no additional consideration, fee title to the Police Site in consideration of the City’s performance of its obligations set forth in this Amended and Restated Agreement, unless a Third-Party Legal Challenge has been brought before that date, in which case the conveyance shall occur no earlier than ninety (90) days after a final adjudication or legislative action rejecting such Third-Party Legal Challenge. The City shall not be required to pay any fee or purchase price for the Police Site. The Police Site shall be used primarily as a public police facility, which may permit additional accessory City personnel, but not including any jail or other detention facilities except for temporary holding facilities. The City shall be responsible for any traffic mitigation, NITM fees or

other traffic fees related to such use, including any cumulative traffic obligation as provided in Section 3.12.1. The conveyance of the Police Site shall not affect Heritage Fields' approved character, density or intensity of uses of its property or of the traffic mitigation required for such uses. The conveyance shall be subject to deed restrictions, effective for a twenty (20) year period, limiting the use of the Police Site to its defined uses. Conveyance of the Police Site shall be subject to Section 9.9 with respect to LIFOCs.

9.1.1 Boundary Adjustments To Police Site. The Parties agree and understand that if any boundary adjustments that reduce the size of the Police Site are necessary under Section 9.6, Heritage Fields shall convey to the City, at no cost, such additional land adjacent to the Police Site as is necessary to fully offset said reduction.

9.1.2 Condition of Title; Title Insurance Policy. Heritage Fields shall cause the Police Site to be conveyed free and clear of all recorded and unrecorded monetary liens and all recorded and unrecorded non-monetary liens, encumbrances, easements, leases, covenants, conditions, restrictions, and other exceptions to or defects in title, excepting only the exceptions listed on Exhibit T. Heritage Fields shall pay all costs required to place title in the condition described in this Section 9.2. A condition to City's acceptance of the Police Site shall be the irrevocable commitment of the Title Company to deliver to, at City's direction, City upon the transfer of title to the Police Site, an ALTA standard or, at City's election, an extended coverage owner's policy of title insurance showing title vested in City in the condition described in this Section 9.2 with insurance coverage in the amount of the fair market value of the Police Site as determined by City, and with such title insurance to be paid by the City.

9.2 ARDA Transfer Site and Exchange Properties.

9.2.1 Conveyance of ARDA Transfer Site. Heritage Fields shall, within ninety (90) days of the Second Effective Date, convey to the City the ARDA Transfer Site and deliver to City a grant deed in the form substantially the same as the form attached hereto as Exhibit Q, unless a Third-Party Legal Challenge has been brought before that date, in which case the conveyance shall occur within ninety (90) days after a final adjudication or legislative action rejecting such Third-Party Legal Challenge. The City shall not be required to pay any fee or purchase price for the ARDA Transfer Site. Notwithstanding the 90-day time periods referenced above, the timing of the conveyance of the ARDA Transfer Site shall be subject to Section 9.9 with respect to LIFOCs, the final determination of the location of "Q" Street and the preparation of a metes and bounds legal description that correspondingly shows the precise boundaries of the ARDA Transfer Site.

9.2.1.1 Condition of Title of ARDA Transfer Site. Subject to Section 9.9, Heritage Fields shall cause the ARDA Transfer Site to be conveyed free and clear of all recorded and unrecorded monetary liens and all recorded and unrecorded non-monetary liens, encumbrances, easements, leases (other than the existing FAA lease), covenants, conditions, restrictions, and other exceptions to or defects in title, excepting only the exceptions listed on Exhibit U. Heritage Fields shall pay all costs required to

place title in the condition described in this Section 9.2. A condition to City's acceptance of the ARDA Transfer Site shall be the irrevocable commitment of the Title Company to deliver to, at City's direction, City upon the transfer of title to the ARDA Transfer Site an ALTA standard or, at City's election, an extended coverage owner's policy of title insurance showing title vested in City in the condition described in this Section 9.2 with insurance coverage in the amount of the fair market value of the ARDA Transfer Site as determined by City.

9.2.1.2 Adjustments to ARDA Transfer Site. Heritage Fields and the City may mutually agree in writing to modify or adjust the precise location and/or area or the land that comprises the ARDA Transfer Site so long as the replacement land is approximately the same acreage as that portion of the original ARDA Transfer Site as generally depicted on Exhibit "G," and more fully described as PIAs 28 and 30 on Exhibit "I."

9.2.2 Traffic Mitigation For ARDA Transfer Site. Conveyance of the ARDA Transfer Site shall not affect the character, density or intensity of uses approved for the Heritage Fields Property or the traffic mitigation required for such uses. The City shall be responsible for all maintenance of the ARDA Transfer Site and for any traffic mitigation, NITM payments or other traffic fees related to use of the ARDA Transfer Site.

9.2.3 Exchange of Exchange Properties. Subject to Section 9.9, the Parties shall, within ninety (90) days following the Second Effective Date or such later date as the Parties may mutually agree to, enter into a "land swap agreement" pursuant to which they shall convey the Exchange Properties to one another as follows: (i) Heritage Fields shall convey to City the Initial City Exchange Properties, and (ii) City shall convey to Heritage Fields the Initial Heritage Fields Exchange Properties. The failure to consummate the transaction contemplated by the land swap agreement shall not limit the effectiveness of this Amended and Restated Agreement, nor render it void or unenforceable.

9.3 Park Dedications.

9.3.1 Dedication Of Neighborhood Parks. Heritage Fields shall improve and offer to dedicate to the City on the subdivision maps for the Heritage Fields Property neighborhood parks, based on the rate of 3 acres/1,000 residential population of market rate housing units, and 2 acres/1,000 residential population of affordable housing units, which shall fully satisfy Heritage Fields' obligations to the City with respect to neighborhood parks.

9.3.2 Satisfaction Of Community Park Obligations. Heritage Fields' conveyance of the Great Park Property to the City shall be deemed to satisfy any requirement imposed upon Heritage Fields for the dedication or development of community parks pursuant to the City's General Plan and Municipal Code in connection with the development of the Heritage Fields Property consistent with the ARDA Overlay Plan or any development density which the City may approve for the Heritage Fields

Property in the future calculated at 2 acres/1,000 residential population or such other community parks requirement ratio the City may impose in the future.

9.4 Dedication Of School Site To IUSD. Heritage Fields acknowledges that it will be required to dedicate to IUSD fee title to the School Site at no cost to IUSD. The precise location and boundaries of the School Site shall be as determined by IUSD. From and after the Second Effective Date, Heritage Fields shall cooperate with IUSD in an effort to determine the terms for the timing and conveyance of the School Site to IUSD.

9.5 Dedication Of Streets To City. Heritage Fields acknowledges that it has offered to dedicate to the City on the Master Subdivision Map, and may offer to dedicate on subsequent subdivision maps for portions of the Heritage Fields Property, all arterials and major thoroughfares, and other secondary, collector and local roads. The City agrees that if such offers to dedicate are not accepted, the cost of maintaining such streets through a POA shall be an assessment or fee which shall be included in the calculation of the 2% Value Limitation, notwithstanding Section 7.

9.6 Modifications To Property Boundaries. The Parties acknowledge that it may be necessary to adjust the boundaries of the City Property and the Heritage Fields Property to accommodate roadway design standards, traffic mitigation requirements, and/or refinements in engineering data as it becomes available. The City and Heritage Fields shall cooperate with each other, and promptly perform such acts and execute such documents as necessary to effectuate such adjustments. The Parties agree that such adjustments may result in an uncompensated reduction of a Party's gross acreage.

9.7 Administrative Changes To Reflect Property Ownership Changes. If and to the extent the parties agree in the future to adjust the ownership of any portion of their respective properties, the Director of Community Development, with the concurrence of an authorized representative from Heritage Fields, shall have the authority to make such administrative changes to the exhibits to this Amended and Restated Agreement as may be necessary to accurately reflect the updated property ownership configuration. Nothing in this Section is intended to, nor shall it, create any amendment to the Existing Land Use Regulations and/or the ARDA Overlay Plan.

9.8 Rights of Way Reservation. With respect to any parcels conveyed by Heritage Fields to the City and including those which may be subsequently conveyed by the City to third parties (including the County), the City shall, to the extent consistent with the City's existing legal obligations, reserve all rights-of-way and easements shown on Exhibit "O."

9.9 Assignment Of LIFOCs. Notwithstanding any provision of this Amended and Restated Agreement to the contrary, with respect to those portions of the City Property which were or are to be transferred by Heritage Fields pursuant to any provision in this Amended and Restated Agreement (including, without limitation, the Police Site, and the ARDA Transfer Site and the Initial City Exchange Properties) that are covered in whole or in part by one or more LIFOCs, the Parties recognize that Heritage Fields cannot convey title to such property until the LIFOC property is transferred from the

DON. Heritage Fields shall execute and deliver to the City a proposed assignment and/or sublease of such LIFOCs in the form attached hereto as Exhibit "M" covering each LIFOC affecting the City Property within each Parcel. The City understands that such proposed assignment cannot be effective without the consent of the DON and that Heritage Fields does not and cannot guarantee such consent or its timing. In such event, Heritage Fields and the City shall mutually approve (in each Party's reasonable discretion) the form of, and shall each execute and deliver, a proposed sublease of such LIFOC.

9.10 Recordation of Restrictive Covenant. The Agency Permits require in perpetuity, protection of mitigation property as described in certain Agency Permits. The Parties will work with the appropriate federal and state agencies to finalize a restrictive covenant for the mitigation property as specified in the Agency Permits. The City shall execute and record the final restrictive covenant over such mitigation property as required under the 404 Permit and the 1602 Agreement.

10. PUBLIC BENEFIT FEE.

10.1 Public Benefit Fee. Heritage Fields shall pay to City a monthly public benefit fee ("**Public Benefit Fee**") as follows: (i) Twenty-Five Thousand Dollars (\$25,000.00) per month, commencing the month in which the Second Effective Date occurs to the month in which the third anniversary of the Second Effective Date occurs; (ii) One Hundred Thousand Dollars (\$100,000.00) per month, commencing the month in which the third anniversary of the Second Effective Date occurs to the month in which the sixth anniversary of the Second Effective Date occurs; and (iii) One Hundred Twenty-Five Thousand Dollars (\$125,000.00) per month, commencing the month in which the sixth anniversary of the Second Effective Date occurs to the month in which the ninth anniversary of the Second Effective Date occurs. The monthly Public Benefit Fee shall terminate and no longer be due or payable as of the ninth anniversary of the Second Effective Date. The City shall have the discretion as to the precise manner in which the Public Benefit Fees shall be used and allocated for such public benefit purposes.

10.2 Waivers Regarding Public Benefit Fee. Heritage Fields hereby consents to and waives any right of protest with regard to the establishment and enforcement of the fee described above. Heritage Fields further agrees that the Public Benefit Fee established by City pursuant to this Amended and Restated Agreement does not constitute a tax subject to the voter approval requirements of Article XIII A of the California Constitution, Article XIII C of the California Constitution or California Government Code Section 53720, *et seq.*, and, in addition, that the Public Benefit Fee is not a fee imposed "as an incident of property ownership" within the meaning of Article XIII D of the California Constitution.

11. UTILITIES.

11.1 Utility Easements. The Parties acknowledge that the existing utility system for the Property is rudimentary. Heritage Fields and the City shall work

cooperatively, including if necessary granting reciprocal non-exclusive easements along reasonable alignments over each Party's lands for the benefit of the other, to ensure that each Party may feasibly access all utilities needed to serve such Party's lands.

11.2 Water Rights. The City shall use the water rights that accrue to or from the Property for, in order of priority, (i) a source of water supply for the City Property, and (ii) provided the parties negotiate in good faith and agree upon acceptable terms and conditions for such use, a source of water supply for the Heritage Fields Property.

12. CC&Rs.

The Parties agree that the Declaration of Covenants, Conditions and Restrictions ("CC&Rs") recorded on the Property on July 12, 2005 as Instrument No. 2005-0538145 shall be of no force and effect on the Property and the Parties shall concurrently with the Second Effective Date take actions as are necessary to remove them.

13. RUNWAY HARDSCAPE.

Heritage Fields shall complete the demolition and facilitate the recycling of the runway hardscape on the Property in the manner, and to the extent, specified in the Amended MIA.

14. DEFAULT, REMEDIES, AND TERMINATION.

14.1 Notice And Opportunity To Cure. Before this Amended and Restated Agreement may be terminated or action may be taken to obtain relief in a manner consistent with this Amended and Restated Agreement, the Party seeking relief ("**Non-Defaulting Party**") shall comply with the notice and cure provisions of this Section 14.1. A Non-Defaulting Party in its discretion may elect to declare a default under this Amended and Restated Agreement in accordance with the procedures hereinafter set forth for any failure or breach of any other Party ("**Defaulting Party**") to perform any material duty or obligation of said Defaulting Party in accordance with the terms of this Amended and Restated Agreement. However, the Non-Defaulting Party must provide written notice ("**Default Notice**") to the Defaulting Party setting forth the nature of the breach or failure and the actions, if any, required by the Non-Defaulting Party to cure such breach or failure. The Defaulting Party shall be deemed in "default" of its obligations set forth in this Amended and Restated Agreement if the Defaulting Party has failed to take action and cured the default within ten (10) days after the date of such Default Notice (for monetary defaults), within thirty (30) days after the date of such Default Notice (for non-monetary defaults), or within such lesser time as may be specifically provided in this Amended and Restated Agreement. If, however, a non-monetary default cannot be cured within such thirty (30) day period, as long as the Defaulting Party does each of the following, then the Defaulting Party shall not be deemed in breach of this Amended and Restated Agreement:

- (i) within ten (10) days of the Default Notice, notifies the Non-Defaulting Party in writing with a reasonable explanation as to the reasons the asserted default is not curable within the thirty (30) day period;

(ii) within ten (10) days of the Default Notice, notifies the Non-Defaulting Party of the Defaulting Party's proposed course of action to cure the default;

(iii) promptly commences to cure the default within the thirty (30) day period;

(iv) makes periodic reports to the Non-Defaulting Party as to the progress of the program of cure; and

(v) diligently prosecutes such cure to completion,

14.2 Default Remedies.

14.2.1 Default Procedures. Subject to Section 14.3 and Section 14.4, in the event of a default, the Non-Defaulting Party, at its option, may institute an action pursuant to Section 14.6 to cure, correct, or remedy such default, enjoin any threatened or attempted violation, enforce the terms of this Amended and Restated Agreement by specific performance (including injunctive relief), or pursue any other remedy otherwise permissible under this Amended and Restated Agreement. Furthermore, the City, in addition to or as an alternative to exercising the remedies set forth in this Section 14.2, in the event of a material default by Heritage Fields, may (i) give notice of its intent to terminate or modify this Amended and Restated Agreement, and may carry through on that notice and intent to terminate, pursuant to the City Development Agreement Regulations and/or the Development Agreement Statute, in which event the matter shall be scheduled for consideration and review by the City Council in the manner set forth in the City Development Agreement Regulations and/or the Development Agreement Statute, and/or (ii) give notice of its intent to terminate any and all restrictions on the use of City Property specified in Section 3.9 of this Amended and Restated Agreement, and to carry through on that termination.

14.3 Limitations on Defaults. Notwithstanding any provision in this Amended and Restated Agreement to the contrary, a default by Heritage Fields (or any other fee title owner of another Lot within the Project) shall not constitute a default by a Purchaser/User. Likewise, a default by a Purchaser/User with respect to a Lot (or group of Lots) it owns or leases shall not constitute a default by Heritage Fields (or any other fee title owner of another Lot within the Heritage Fields Property). Therefore, if Heritage Fields has conveyed a Lot (or group of Lots) to a Purchaser/User and this Amended and Restated Agreement has not yet been terminated as to any Lot (or group of Lots) in accordance with the provisions of Section 2.4 above, (i) no Purchaser/User shall have any liability to the City (or otherwise) for or with respect to any default of Heritage Fields or any default of any other Purchaser/User, (ii) Heritage Fields shall have no liability to the City (or otherwise) for or with respect to any default by any Purchaser/User, and (iii) the City's election to terminate this Amended and Restated Agreement as a result of a default by Heritage Fields or any such Purchaser/User shall not effect a termination of this Amended and Restated Agreement with respect to those Lots owned or leased by a Non-

Defaulting Party until such time that this Amended and Restated Agreement would otherwise terminate in accordance with its terms.

14.4 Parties' Exclusive Remedies.

14.4.1 Limitation on Remedies. The Parties acknowledge that they would not have entered into this Amended and Restated Agreement if either Party were to be liable in damages under or with respect to this Amended and Restated Agreement, the Existing Land Use Regulations, or the application thereof, or any permit or approval sought by City or Heritage Fields in accordance with the Existing Land Use Regulations, except as provided in this section. Accordingly, Heritage Fields covenants on behalf of itself and its successors and assigns, not to sue the City, and the City on behalf of itself and its successors and assigns, not to sue Heritage Fields, for damages or monetary relief for any breach of this Amended and Restated Agreement or arising out of or connected with any dispute, controversy or issue regarding the application, interpretation or effect of this Amended and Restated Agreement, the Existing Land Use Regulations, or any land use permit or approval sought in connection with the development or use of the Heritage Fields Property or any portion thereof, the Parties agreeing that declaratory and injunctive relief, mandate, and specific performance shall be their sole and exclusive judicial remedies, except as provided in Section 14.4.2 below.

14.4.2 Recovery of Out-of-Pocket Losses and Damages. Notwithstanding Section 14.4.1 above, the Parties may pursue and obtain the additional remedies set forth below:

(i) Enforcement of Monetary Obligations. In the case of a breach of an obligation to pay money or to allocate funding in the manner specified in Section 7.6, or to indemnify and defend a Party as provided in Section 8.2.3, a Party may sue to compel monetary relief to the extent such relief involves enforcement of the other Party's obligations under this Amended and Restated Agreement and not damages or other monetary penalty over and above such obligations. For example, and without limitation, a Party may seek and recover the following monetary damages: (1) the amount of any overpayments to, or improper fees levied by, the City in excess of those fees established and permitted under the NITM Program or this Amended and Restated Agreement; (2) the amount of any NITM funds which the City may apply to other uses beyond those authorized by the NITM Program; (3) the amount of interest on NITM funds not credited by the City to NITM Program accounts as provided for in the NITM Program; and (4) the amount of funds owed by Heritage Fields toward the construction of the Proposed Project Facilities in accordance with Article XIII of the Amended MIA.

(ii) Additional Costs and Measures. In the event additional mitigation measures, conditions, requirements, or affordable housing obligations are imposed on Heritage Fields or the Heritage Fields Property by the City (i.e., in addition to those provided for in the MAHP and the ARDA Overlay Plan) in

violation of this Amended and Restated Agreement (“Objectionable Conditions”), the matter shall be submitted directly to binding arbitration pursuant to Section 14.7 for resolution as a non-monetary default (the Parties acknowledging and agreeing that any disputes arising under this sub-paragraph need not comply with the requirements of Section 14.6).

(iii) Restitution of Improper Development Fees. In the event any Development Fees or taxes are imposed on Development of the Property other than those authorized pursuant to this Amended and Restated Agreement, Heritage Fields shall be entitled to recover from City restitution of all such improperly assessed fees or taxes, together with interest thereon at the rate of specified in Article XV, Section 1 of the California Constitution from the date such sums were paid to City to the date of restitution.

(iv) Restitution Arising from Other Agreements. Heritage Fields may seek and recover monetary damages arising from agreements and/or approvals granted or entered into by the City and any third parties that materially and adversely affect the rights or obligations of Heritage Fields under this Amended and Restated Agreement (“Objectionable Agreements”) subject to the following qualifications and limitations: Heritage Fields shall have no right to recover any amounts under this sub-paragraph unless and until (a) the matter shall be submitted directly to binding arbitration pursuant to Section 14.7 (the Parties acknowledging and agreeing that any disputes arising under this sub-paragraph need not comply with the requirements of Section 14.6), and (b) if the award is adverse to the City, the City fails or refuses to refrain from entering into or rescind, as the case may be, the Objectionable Agreement (the Parties acknowledging and agreeing that if the City refrains from entering into or rescinds the Objectionable Agreement, it shall not be required to pay any monetary damages under this Amended and Restated Agreement).

14.5 Force Majeure/Supervening Events. The obligations by any Party hereunder shall not be deemed to be in default, and the Term of this Amended and Restated Agreement shall not be deemed to run, where delays or failures to perform are due to any cause without the fault and beyond the reasonable control of such Party, including to the extent applicable, the following: war; insurrection; strikes; walk-outs; the unavailability or shortage of labor, material, or equipment; riots; floods; earthquakes; the discovery and resolution of hazardous waste or significant geologic, hydrologic, archaeological, paleontological, or endangered species problems on the Property; fires; casualties; acts of God; governmental restrictions imposed or mandated by other governmental entities; with regard to delays of Heritage Fields’ performance, delays caused by the City’s failure to act or timely perform its obligations set forth herein; with regard to delays of the City’s performance, delays caused by Heritage Fields’ failure to act or timely perform its obligations set forth herein; inability to obtain necessary permits or approvals from City, County, RDA, or other governmental entities; enactment of conflicting state or federal statutes or regulations; judicial decisions; or litigation not commenced by such Party (collectively, “**Force Majeure**”). Notwithstanding the

foregoing, any delay caused by the failure of the City or any agency, division, or office of the City to timely issue a license, permit, or approval required pursuant to this Amended and Restated Agreement shall not constitute an event of Force Majeure extending the time for the City's performance hereunder. If written notice of such delay or impossibility of performance is provided to the other Parties within a reasonable time after the commencement of such delay or condition of impossibility, an extension of time for such cause will be granted in writing for the period of the enforced delay, or longer as may be mutually agreed upon by the Parties in writing, or the performance rendered impossible may be excused in writing by the Party so notified. In no event shall adverse market or financial conditions constitute an event of Force Majeure extending the time for such Party's performance hereunder.

14.6 Dispute Resolution. EXCEPT AS OTHERWISE SPECIFICALLY PROVIDED HEREIN, IF ANY CLAIM OR CONTROVERSY THAT ARISES OUT OF OR RELATES TO, DIRECTLY OR INDIRECTLY, THIS AMENDED AND RESTATED AGREEMENT OR ANY DEALINGS BETWEEN THE PARTIES CANNOT BE SETTLED BY THE PARTIES WITHIN THIRTY (30) DAYS AFTER EITHER PARTY IS FIRST PROVIDED WRITTEN NOTICE OF THE CLAIM OR CONTROVERSY BY THE OTHER, THE MATTER SHALL BE DETERMINED BY JUDICIAL REFERENCE PURSUANT TO THE PROVISIONS OF CALIFORNIA CODE OF CIVIL PROCEDURE SECTIONS 638 THROUGH 645.1, EXCEPT AS OTHERWISE MODIFIED HEREIN. THE PARTIES SHALL COOPERATE IN GOOD FAITH TO ENSURE THAT ALL NECESSARY AND APPROPRIATE PARTIES ARE INCLUDED IN THE JUDICIAL REFERENCE PROCEEDING. IN THE EVENT THAT A LEGAL PROCEEDING IS INITIATED BASED ON ANY SUCH DISPUTE, THE FOLLOWING SHALL APPLY: 1) THE PROCEEDING SHALL BE BROUGHT AND HELD IN THE COUNTY IN WHICH THE PROPERTY IS LOCATED UNLESS THE PARTIES AGREE TO A DIFFERENT VENUE; 2) THE PARTIES SHALL USE THE PROCEDURES ADOPTED BY JAMS FOR JUDICIAL REFERENCE AND SELECTION OF A REFEREE (OR ANY OTHER ENTITY OFFERING JUDICIAL REFERENCE DISPUTE RESOLUTION PROCEDURES AS MAY BE MUTUALLY ACCEPTABLE TO THE PARTIES); 3) THE REFEREE MUST BE A RETIRED JUDGE OR LICENSED ATTORNEY WITH SUBSTANTIAL EXPERIENCE IN RELEVANT REAL ESTATE MATTERS; 4) THE PARTIES TO THE JUDICIAL REFERENCE PROCEDURE SHALL AGREE UPON A SINGLE REFEREE WHO SHALL HAVE THE POWER TO TRY AND DECIDE ANY AND ALL OF THE ISSUES RAISED, WHETHER OF FACT OR OF LAW, WHICH MAY BE PERTINENT TO THE MATTERS IN DISPUTE, AND TO ISSUE A STATEMENT OF DECISION THEREON. ANY DISPUTE REGARDING THE SELECTION OF THE REFEREE SHALL BE RESOLVED BY JAMS OR THE ENTITY PROVIDING THE REFERENCE SERVICES, OR, IF NO ENTITY IS INVOLVED, BY THE COURT IN ACCORDANCE WITH CALIFORNIA CODE OF CIVIL PROCEDURE SECTIONS 638 AND 640; 5) THE REFEREE SHALL BE AUTHORIZED TO PROVIDE ALL REMEDIES AVAILABLE IN LAW OR EQUITY APPROPRIATE UNDER THE CIRCUMSTANCES OF THE CONTROVERSY; 6) THE REFEREE MAY REQUIRE ONE OR MORE PRE-HEARING CONFERENCES; 7) THE PARTIES SHALL BE ENTITLED TO DISCOVERY, AND THE REFEREE SHALL OVERSEE

DISCOVERY AND MAY ENFORCE ALL DISCOVERY ORDERS IN THE SAME MANNER AS ANY TRIAL COURT JUDGE; 8) A STENOGRAPHIC RECORD OF THE REFERENCE PROCEEDINGS SHALL BE MADE; 9) THE REFEREE'S STATEMENT OF DECISION SHALL CONTAIN FINDINGS OF FACT AND CONCLUSIONS OF LAW TO THE EXTENT APPLICABLE; 10) THE REFEREE SHALL HAVE THE AUTHORITY TO RULE ON ALL POST-HEARING MOTIONS IN THE SAME MANNER AS A TRIAL JUDGE; 11) THE PARTIES SHALL PROMPTLY AND DILIGENTLY COOPERATE WITH EACH OTHER AND THE REFEREE AND PERFORM SUCH ACTS AS MAY BE NECESSARY FOR AN EXPEDITIOUS RESOLUTION OF THE DISPUTE; 12) SUBJECT TO SECTION 20.3, EACH PARTY TO THE JUDICIAL REFERENCE PROCEEDING SHALL BEAR ITS OWN ATTORNEYS' FEES AND COSTS IN CONNECTION WITH SUCH PROCEEDING; AND 13) THE STATEMENT OF DECISION OF THE REFEREE UPON ALL OF THE ISSUES CONSIDERED BY THE REFEREE SHALL BE BINDING UPON THE PARTIES, AND UPON FILING OF THE STATEMENT OF DECISION WITH THE CLERK OF THE COURT, OR WITH THE JUDGE WHERE THERE IS NO CLERK, JUDGMENT MAY BE ENTERED THEREON. THE DECISION OF THE REFEREE SHALL BE APPEALABLE AS IF RENDERED BY THE COURT. THIS PROVISION SHALL IN NO WAY BE CONSTRUED TO LIMIT ANY VALID CAUSE OF ACTION, WHICH MAY BE BROUGHT BY ANY OF THE PARTIES. THE PARTIES ACKNOWLEDGE AND ACCEPT THAT BY EMPLOYING THIS JUDICIAL REFERENCE PROCEDURE THEY ARE WAIVING THEIR RIGHT TO A JURY TRIAL.

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14.7 Arbitration of Disputes. RECOGNIZING THAT TIMELY AND EFFECTIVE ENFORCEMENT OF THIS AGREEMENT IS CRITICAL TO THE PARTIES, IF FOR ANY REASON THE JUDICIAL REFERENCE PROCEDURES IN SECTION 14.6 ARE LEGALLY UNAVAILABLE AT THE TIME A DISPUTE WOULD OTHERWISE BE REFERRED TO JUDICIAL REFERENCE (OR DO NOT APPLY BY THE EXPRESS TERMS OF THIS AGREEMENT), THEN, UPON THE WRITTEN DEMAND OF EITHER PARTY, THE DISPUTE SHALL BE RESOLVED BY BINDING ARBITRATION IN ACCORDANCE WITH THE AMERICAN ARBITRATION ASSOCIATION'S COMMERCIAL ARBITRATION RULES, EXCEPT AS FOLLOWS. THE ARBITRATION SHALL BE CONDUCTED BY ONE ARBITRATOR WHO IS A RETIRED SUPERIOR, APPELLATE OR FEDERAL COURT JUDGE OR AN ATTORNEY WITH NOT LESS THAN FIFTEEN (15) YEARS EXPERIENCE IN REAL ESTATE MATTERS; A LIST OF POTENTIAL ARBITRATORS WHO CAN ENSURE THAT ANY DISPUTE CONCERNING A NON-MONETARY DEFAULT CAN BE HEARD AND DETERMINED WITHIN

NINETY (90) DAYS OF NOTICE OF ARBITRATION SHALL BE APPROVED BY THE PARTIES AS OF THE SECOND EFFECTIVE DATE. TO THE EXTENT THE RELIEF REQUESTED IN THE ARBITRATION SEEKS TO COMPEL THE PERFORMANCE OF A LEGISLATIVE ACT AND/OR THE ISSUANCE OF A WRIT OF MANDATE NOT PROPERLY THE SUBJECT OF AN ARBITRATION AWARD, THE PARTY SEEKING SUCH RELIEF MAY PROCEED BY JUDICIAL ACTION. THE ARBITRATION AWARD SHALL BE FINAL AND BINDING UPON THE PARTIES (EXCEPT IN CASE OF FRAUD OR UNDISCLOSED CONFLICT OF INTEREST ON THE PART OF THE ARBITRATOR) AND MAY BE ENTERED IN ANY COURT HAVING JURISDICTION THEREOF. THE ARBITRATOR SHALL BE EMPOWERED HEREBY TO ENTER SPECIFIC PERFORMANCE ORDERS AS SHALL, IN ITS DISCRETION, BE NECESSARY TO ENSURE THE TIMELY PERFORMANCE OF THE OBLIGATIONS OF THIS AGREEMENT BY EITHER OR BOTH OF THE PARTIES, SO AS TO AVOID THE DELAYS ASSOCIATED WITH OBTAINING SUCH RELIEF PURSUANT TO COURT ACTION. THE ARBITRATOR MAY ALLOCATE THE FEES AND COSTS OF ARBITRATION BETWEEN THE PARTIES AND MAY AWARD COSTS, INCLUDING REASONABLE ATTORNEYS' FEES, TO THE PREVAILING PARTY IN ACCORDANCE WITH SECTION 20.3. IN THE ABSENCE OF A DETERMINATION BY THE ARBITRATOR, EACH PARTY SHALL BEAR ITS PROPORTIONATE SHARE OF THE COSTS OF THE ARBITRATION AND THE ARBITRATOR AND ALL OF ITS OWN COSTS. NOTHING CONTAINED IN THIS SECTION SHALL RESTRICT ANY PARTY FROM SEEKING PRELIMINARY EQUITABLE RELIEF FROM THE COURT SYSTEM PENDING RESOLUTION OF THE ARBITRATION.

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15. ANNUAL REVIEW.

15.1 Timing Of Annual Review. During the Term of this Amended and Restated Agreement, at least once during every twelve (12) month period from the Second Effective Date, the City shall review the good faith compliance of Heritage Fields with the terms of this Amended and Restated Agreement ("**Annual Review**"). The Annual Review shall be conducted by the City Council or its designee in accordance with the City Development Agreement Regulations.

15.2 Standards For Annual Review. During the Annual Review, Heritage Fields shall be required to demonstrate good faith compliance with the terms of this Amended and Restated Agreement. If the City or its designee finds and determines that Heritage Fields has not complied with any of the terms or conditions of this Amended

and Restated Agreement, then the City may declare a default by Heritage Fields in accordance with Section 14 herein. The City may exercise its rights and remedies relating to any such event of default only after the period for curing a default as set forth in Section 14 has expired without cure of the default. The costs incurred by the City in connection with the Annual Review process shall be paid by Heritage Fields. Nothing in this paragraph shall be construed to prohibit the City from declaring a default in accordance with Section 14 herein, without first proceeding through an Annual Review.

15.3 Certificate Of Compliance. With respect to each year in which the City approves Heritage Fields' compliance with this Amended and Restated Agreement, the City shall, upon written request by Heritage Fields, provide Heritage Fields with a written certificate of good faith compliance within thirty (30) days of the City's receipt of Heritage Fields' request for same.

16. MORTGAGEE RIGHTS.

16.1 Encumbrances On The Property. The Parties hereto agree that this Amended and Restated Agreement shall not prevent or limit Heritage Fields, in any manner, from encumbering the Property or any portion thereof or any improvements thereon with any Mortgage securing financing with respect to the construction, development, use, or operation of the Heritage Fields Property.

16.2 Mortgagee Protection. This Amended and Restated Agreement shall be superior and senior to the lien of any Mortgage. Notwithstanding the foregoing, no breach of this Amended and Restated Agreement shall defeat, render invalid, diminish, or impair the lien of any Mortgage made in good faith and for value, and a Mortgagee Successor shall have the rights, benefits and remedies of Heritage Fields under this Amended and Restated Agreement and shall be subject to all of the terms and conditions of this Amended and Restated Agreement.

16.3 Mortgagee Not Obligated. Notwithstanding the provisions of this Section 16, a Mortgagee and a Mortgagee Successor will not have any obligation or duty pursuant to the terms set forth in this Amended and Restated Agreement to perform the obligations of Heritage Fields or other affirmative covenants of Heritage Fields hereunder, or to guarantee such performance, except that (i) the Mortgagee or Mortgagee Successor shall have the right to develop the Property under the Existing Land Use Regulations and/or the ARDA Overlay Plan provided that the Mortgagee or Mortgagee successor complies with the terms of this Amended and Restated Agreement and (ii) to the extent that any covenant to be performed by Heritage Fields is a condition to the performance of a covenant by the City, the performance thereof shall continue to be a condition precedent to the City's performance hereunder. If a Mortgagee or Mortgagee Successor obtains ownership of less than the entirety of the Heritage Fields Property, said Mortgagee or Mortgagee Successor may request, and the City shall not unreasonably refuse, an apportionment of obligations under this Amended and Restated Agreement that assigns to said Mortgagee or Mortgagee Successor (i) all of the obligations of Heritage Fields that are applicable solely to that portion of the Heritage Fields Property obtained by the Mortgagee or Mortgagee Successor plus (ii) a pro-rata share of those obligations

of Heritage Fields under this Amended and Restated Agreement that are not assigned to a specific portion of the Heritage Fields Property.

16.4 Notice Of Default To Mortgagee; Right Of Mortgagee To Cure. Each Mortgagee shall, upon written request to the City, be entitled to receive written notice from the City of the results of the Annual Review and of any default by Heritage Fields of its obligations set forth in this Amended and Restated Agreement. Each Mortgagee shall have a further right, but not an obligation, to cure such default within ten (10) days after receipt of such notice (for monetary defaults), within thirty (30) days after receipt of such notice (for non-monetary defaults) or, if such default can only be remedied or cured by such Mortgagee upon obtaining possession of the Property, such Mortgagee shall have the right to seek to obtain possession with diligence and continuity through a receiver or otherwise, and to remedy or cure such default within thirty (30) days after obtaining possession, and, except in case of emergency or to protect the public health or safety, the City may not exercise any of its judicial remedies set forth in this Amended and Restated Agreement until expiration of such thirty (30) day period; provided, however, that in the case of a default which cannot with diligence be remedied or cured within such thirty (30) day period, the Mortgagee shall have such additional time as is reasonably necessary to remedy or cure such default provided Mortgagee promptly commences to cure the default within the thirty (30) day period and diligently prosecutes such cure to completion.

17. ASSIGNMENT.

17.1 Right To Assign. Subject to the City's consent pursuant to Section 17.3, Heritage Fields shall have the right to assign its rights and obligations under this Amended and Restated Agreement in connection with a transfer of all or any portion of Heritage Fields' interest in the Heritage Fields Property. In the event of any such assignment, the assignee shall be liable for the performance of the designated obligations of Heritage Fields after the date of the assignment solely with respect to the portion of the Heritage Fields Property so transferred.

17.2 Assignee Subject To Terms Of Agreement. Following an assignment or transfer of any of the rights and interests of Heritage Fields set forth in this Amended and Restated Agreement in accordance with Section 17.3, the assignee's exercise, use, and enjoyment of that portion of the Heritage Fields Property so transferred shall be subject to the terms of this Amended and Restated Agreement to the same extent as if the assignee or transferee were Heritage Fields, subject to the limitations set forth in Section 14.2 above.

17.3 Release Upon Transfer. Upon the written consent of the City to the partial or complete assignment of this Amended and Restated Agreement (which consent shall not be unreasonably withheld) and the express written assumption in a form approved by the City of such assigned obligations of Heritage Fields under this Amended and Restated Agreement by the assignee, Heritage Fields shall be relieved of its legal duty to perform the assigned obligations set forth in this Amended and Restated Agreement, except to the extent Heritage Fields is in default hereunder with respect to the particular assigned

obligations prior to said transfer. In connection with its exercise of reasonable approval rights over proposed assignments, the City may consider, among other things, the extent of remaining Backbone Infrastructure construction obligations under the Amended MIA and the ability of Heritage Fields to perform said construction obligations, taking into account the remaining portion of the Heritage Fields Property owned by Heritage Fields and all funding sources for the remaining Backbone Infrastructure (including, without limitation, Special Tax revenues, CFD Bonds, and Heritage Fields' equity and debt sources).

18. INSURANCE AND INDEMNITY.

18.1 Insurance. Heritage Fields shall procure and maintain, commencing as of the Second Effective Date and thereafter at all times during the Term of this Amended and Restated Agreement when actual work on the Project is being performed by Heritage Fields, the following policies of insurance:

(i) Comprehensive General Liability Insurance. A policy of comprehensive general liability insurance written on a per occurrence basis in an amount not less than \$5,000,000 combined single limits.

(ii) Automobile Insurance. A policy of comprehensive automobile liability insurance written on a per occurrence basis in an amount not less than either (A) bodily insurance liability limits of \$2,000,000 per person and \$2,000,000 per occurrence and property damage liability limits of Five Hundred Thousand Dollars \$500,000 per occurrence and \$500,000 in the aggregate or (B) combined single limit liability of \$2,000,000. Said policy shall include coverage for owned, non-owned, leased, and hired cars.

(iii) Workers' Compensation Insurance. A policy of workers' compensation insurance in such amount as will fully comply with the laws of the State of California.

The policies of insurance required by this Amended and Restated Agreement shall be satisfactory only if issued by companies qualified to do business in California and rated "A: VII" or better in the most recent edition of Best's Insurance Guide. All of the aforescribed policies of insurance shall be primary insurance and shall name the City, City's Designee(s), and each of their respective officers, officials and employees as additional insureds. The insurer shall waive all rights of subrogation and contribution it may have against the City, the City's Designee, and their respective insurers. All of said policies of insurance shall provide that said insurance may not be amended or cancelled without providing thirty (30) days' prior written notice to the City. In the event any of said policies of insurance are cancelled, Heritage Fields shall, prior to the cancellation date, submit new evidence of insurance in conformance with this Section 18.1. No work to be performed by Heritage Fields pursuant to this Amended and Restated Agreement shall commence until Heritage Fields has provided the City with certificates of insurance or appropriate insurance binders evidencing the above insurance coverage and said certificates or binders are approved by the City.

18.2 Indemnity By Heritage Fields. Heritage Fields agrees to indemnify, defend, and hold harmless the City, the City's Designee, and their respective elected and appointed councils, boards, commissions, officers, agents, contractors and employees from and against any and all actions, suits, claims, liabilities, losses, damages, penalties, obligations, and expenses (including but not limited to attorneys' fees and costs) which may arise, directly or indirectly, from the acts, omissions, or operations of Heritage Fields or Heritage Fields' agents, contractors, subcontractors, or employees pursuant to this Amended and Restated Agreement, but excluding any loss resulting from the intentional or active negligence of the City, the City's Designee, or each of their respective elected and appointed councils, boards, commissions, officers, agents, contractors and employees. Notwithstanding the foregoing, City shall have the right to select and retain counsel to defend any such action or actions and Heritage Fields shall pay the cost thereof. The indemnity provisions set forth in this Amended and Restated Agreement shall survive termination of this Amended and Restated Agreement.

18.3 Indemnity By City. The City agrees to indemnify, defend, and hold harmless Heritage Fields, and its respective partners, members, agents, contractors and employees from and against any and all actions, suits, claims, liabilities, losses, damages, penalties, obligations, and expenses (including but not limited to attorneys' fees and costs) which may arise, directly or indirectly, from the acts, omissions, or operations of the City or the City's Designee, or either of their respective officers, officials, agents, contractors, subcontractors or employees pursuant to this Amended and Restated Agreement, but excluding any loss resulting from the intentional or active negligence of Heritage Fields, its agents, contractors or employees. Notwithstanding the foregoing, Heritage Fields shall have the right to select and retain counsel to defend any such action or actions and City shall pay the cost thereof. The indemnity provisions set forth in this Amended and Restated Agreement shall survive termination of this Amended and Restated Agreement.

19. THIRD-PARTY LEGAL CHALLENGE.

In the event of any Third Party Legal Challenge, City shall have the right but not the obligation to defend such Third Party Legal Challenge and Heritage Fields shall be responsible for the legal expenses incurred by City in connection therewith. Heritage Fields also shall have the right but not the obligation to defend any Third Party Legal Challenge. If Heritage Fields defends any such Third Party Legal Challenge, so long as Heritage Fields is not in default hereunder, City shall not allow any default or judgment to be taken against it or compromise the defense of the action without Heritage Field's prior written approval. The Parties shall act jointly in filing motions, briefs, trial statements, and other appropriate court documents, and in approving settlement of such action. Nothing herein shall obligate a Party to settle such Third Party Legal Challenge on terms that would constitute an amendment or modification of this Amended and Restated Agreement, the Existing Land Use Regulations, the ARDA Overlay Plan, or which would materially impact the beneficial uses of that Party's property.

In the event City elects to defend the Third Party Legal Challenge, Heritage Fields shall indemnify and hold harmless City and its officials and employees from and against

any claims, losses, or liabilities, including any award of attorneys' fees against the City, assessed or awarded against City by way of judgment, settlement, or stipulation. If Heritage Fields defends any such Third Party Legal Challenge, Heritage Fields shall indemnify and hold harmless City and its officials and employees from and against any claims, losses, or liabilities assessed or awarded, including any award of attorneys' fees, against City by way of judgment, settlement, or stipulation

20. MISCELLANEOUS.

20.1 Covenants. The provisions of this Amended and Restated Agreement shall constitute covenants and restrictions which shall run with the land comprising the Property for the benefit thereof, and the burdens and benefits hereof shall bind and inure to the benefit of each of the Parties hereto and all successors in interest to the Parties hereto.

20.2 Entire Agreement, Waivers And Amendments. This Amended and Restated Agreement, together with the other documents and agreements attached hereto, constitutes the entire understanding and agreement of the Parties and supersedes all previous negotiations, discussions, and agreements among the Parties with respect to all or part of the subject matter hereof. No parole evidence of any prior or other agreement shall be permitted to contradict or vary the terms of this Amended and Restated Agreement. Failure by a Party to insist upon the strict performance of any of the provisions of this Amended and Restated Agreement by any other Party, or the failure by a Party to exercise its rights upon the default of the other Party, shall not constitute a waiver of such Party's right to insist and demand strict compliance by the other Parties with the terms of this Amended and Restated Agreement thereafter. Any amendments or modifications to this Amended and Restated Agreement must be in writing, signed by duly authorized representatives of each of the Parties hereto, and recorded in the Official Records of Orange County, California.

20.3 Legal Expenses. In any judicial proceeding, arbitration, or mediation between the City and Heritage Fields seeking enforcement of any of the terms and provisions of this Amended and Restated Agreement (collectively, "**Action**"), the prevailing Party in such Action shall recover all of its actual and reasonable costs and expenses (whether or not the same would be recoverable pursuant to Code of Civil Procedure Section 1033.5 or Civil Code Section 1717 in the absence of this Amended and Restated Agreement), including expert witness fees, attorney's fees, and costs of investigation and preparation prior to the commencement of the Action. However, such recovery shall not exceed the dollar amount of the actual costs and expenses of the Party from whom such recovery is sought for such same Action ("Non-Prevailing Party's Expenses"), and such prevailing Party shall not recover any costs and expenses in excess of the Non-Prevailing Party's Expenses. The right to recover such costs and expenses shall accrue upon commencement of the Action, regardless of whether the Action is prosecuted to a final judgment or decision.

20.4 Constructive Notice And Acceptance. Every person who now or hereafter owns or acquires any right, title, or interest in or to any portion of the Project or the

Property is and shall be conclusively deemed to have consented and agreed to every provision contained herein, whether or not any reference to this Amended and Restated Agreement is contained in the instrument by which such person acquired an interest in the Project or the Property.

20.5 No Third-Party Beneficiaries. This Amended and Restated Agreement and all of its terms, conditions, and provisions are entered into only for the benefit of the Parties executing this Amended and Restated Agreement (and any successors in interest), and not for the benefit of any other individual or entity.

20.6 Relationship Of Parties. The City and Heritage Fields hereby renounce the existence of any form of joint venture or partnership between them and agree that nothing contained herein or in any document executed in connection herewith shall be construed as making the City and Heritage Fields joint venturers or partners.

20.7 Severability. If any term, provision, covenant, or condition of this Amended and Restated Agreement is invalidated by a timely referendum, determined by a court of competent jurisdiction to be invalid, void, or unenforceable, the remaining provisions of this Amended and Restated Agreement shall continue in full force and effect, unless and to the extent the rights and obligations or the benefits of the bargain of any Party have been materially altered or abridged by such holding or action, as determined by the Party who would have benefited, in which case, in accordance with the provisions of Section 2.2, the Original Development Agreement shall govern.

20.8 Further Actions And Instruments. Each of the Parties shall cooperate with and provide reasonable assistance to the other Parties to the extent necessary to implement this Amended and Restated Agreement. Upon the request of a Party at any time, the other Parties shall promptly execute, with acknowledgement or affidavit if reasonably required, and file or record such required instruments and writings and take any actions as may be reasonably necessary to implement this Amended and Restated Agreement or to evidence or consummate the transactions contemplated by this Amended and Restated Agreement.

20.9 Estoppel Certificate. Any Party hereunder may, at any time, deliver written notice to any other Party requesting such Party to certify in writing that, to the best knowledge of the certifying Party (i) this Amended and Restated Agreement is in full force and effect and a binding obligation of the Party; (ii) this Amended and Restated Agreement has not been amended or modified either orally or in writing, or if so amended, identifying the amendments; and (iii) the requesting Party is not in default in the performance of its obligations set forth in this Amended and Restated Agreement or, if in default, to describe therein the nature and amount of any such defaults. A Party receiving a request hereunder shall execute and return such certificate within thirty (30) days following the receipt thereof. Any third-party including a Mortgagee shall be entitled to rely on the certificate.

20.10 Applicable Law; Venue. This Amended and Restated Agreement shall be construed and enforced in accordance with the internal laws of the State of California.

Any action at law or in equity arising under this Amended and Restated Agreement or brought by any Party hereto for the purpose of enforcing, construing or determining the validity of any provision of this Amended and Restated Agreement shall be filed and tried in the Superior Court of the County of Orange, State of California or the United States District Court for the Central District of California, Santa Ana Division, and the Parties hereto waive all provisions of law providing for the removal or change of venue to any other court.

20.11 Non-Liability Of Officers, Employees and Other Parties. Notwithstanding anything in this Amended and Restated Agreement to the contrary, (1) no official, officer, or employee of the City shall be personally liable to Heritage Fields or its respective predecessors, successors and assigns for any loss arising out of or connected with this Amended and Restated Agreement or the Existing Land Use Regulations, and (2) no partner, member or affiliate of Heritage Fields, nor any such partner's, member's or affiliate's separate property shall be personally liable for any claim arising out of or related to this Amended and Restated Agreement. Further, the liability of Heritage Fields under this Amended and Restated Agreement shall be limited solely to the interest of Heritage Fields in the Heritage Fields Property.

20.12 Notices. Any notice or communication required hereunder between the City and a Heritage Fields Party must be in writing and may be given either personally, by registered or certified mail, return receipt requested, or by facsimile transmission. If given by registered or certified mail, the same shall be deemed to have been given and received on the date of actual receipt by the addressee designated herein below as the Party to whom the notice is sent. If personally delivered, a notice shall be deemed to have been given when delivered to the Party to whom it is addressed. Notices delivered by facsimile transmission shall be deemed to have been given on the first business day following the date of transmission to the facsimile number. A Party hereto may at any time, by giving ten (10) days' written notice to the other Parties hereto, designate any other address in substitution of the address to which such notice or communication shall be given. Such notices or communications shall be given to the Parties at their addresses set forth below:

If to City:

City of Irvine
City Hall
One Civic Center Plaza
Irvine, CA 92623-9575
Attn: Director of Community Development
Telephone: (949) 724-6451
Telecopy: (949) 724-6440

With a copy to: Rutan & Tucker, LLP
611 Anton Blvd., Suite 1400
Costa Mesa, CA 92626
Attn: Irvine City Attorney
Telephone: (714) 641-3422
Telecopy: (714) 546-9035

If to Heritage Fields: Heritage Fields El Toro LLC
7130 Trabuco Road
Irvine, CA 92618
Attn: Lynn Jochim, Division President
Telephone: (949) 784-4229
Telecopy: (949) 784-4270

With a copy to: c/o Lennar Homes of California, Inc.
25 Enterprise
Aliso Viejo, CA 92646
Attn: Legal Notices
Telephone: (949) 349-8000
Telecopy: (949) 349-0782

With a copy to: Robert I. McMurry, Esq.
Paul, Hastings, Janofsky & Walker LLP
515 South Flower Street, 25th Floor
Los Angeles, CA 90071
Telephone: (213) 683-6255
Telecopy: (213) 627-0705

20.13 Representation As To Ownership. Subject to the provision in this Amended and Restated Agreement concerning LIFOs and the Initial Heritage Fields Exchange Properties, Heritage Fields represents and warrants to the City that it is the owner in fee of the Heritage Fields Property.

20.14 Authority To Execute. Heritage Fields warrants and represents that (i) it is duly organized and existing, (ii) it is duly authorized to execute and deliver this Amended and Restated Agreement, (iii) by so executing this Amended and Restated Agreement, Heritage Fields is formally bound to the provisions of this Amended and Restated Agreement, (iv) Heritage Fields' entering into and performance of its obligations set forth in this Amended and Restated Agreement does not violate any provision of any other agreement to which Heritage Fields is bound, and (v) there is no existing or threatened litigation or legal proceeding of which Heritage Fields is aware which could prevent Heritage Fields from entering into or performing its obligations set forth in this Amended and Restated Agreement.

20.15 Execution Of Agreement; Counterparts. This Amended and Restated Agreement may be executed by the Parties in counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute

one and the same agreement. This Amended and Restated Agreement shall constitute a valid and enforceable agreement between the City and Heritage Fields.

20.16 Exhibits. This Amended and Restated Agreement contains exhibits, attached hereto and made a part hereof by this reference. Said exhibits are identified as follows:

- A The Property
- B Initial City Park Property
- C Exchange Properties
- D Original Non-Park Property
- E-1 Group A Facilities
- E-2 Group B Facilities
- E-3 Narrative Description of Group A and Group B Facilities
- F Police Site
- G ARDA Transfer Site
- H Heritage Fields Property
- H-1 Heritage Fields Property
- H-2 Heritage Fields Property
- I Property Identification Map
- J [RESERVED]
- K [RESERVED]
- L ARDA Overlay Plan
- M Form LIFO Conveyance
- N Map of LIFO Properties
- O Rights-of-way and Easements
- P Deed for Police Site
- Q Deed for ARDA Transfer Site
- R Index for Guaranteed Amount
- S Rate and Method of Apportionment
- T Police Site Title Exceptions
- U ARDA Transfer Site Title Exceptions

[SIGNATURES APPEAR ON THE FOLLOWING PAGE]


CITY:

CITY OF IRVINE
a municipal corporation

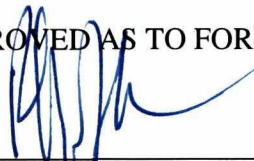
By: 
Mayor Sukhee Kang

Dated: 12/27, 2010

ATTEST:


Deputy City Clerk

APPROVED AS TO FORM


Philip D. Kohn
City Attorney


HERITAGE FIELDS:

HERITAGE FIELDS EL TORO, LLC,
a Delaware limited liability company

By: Heritage Fields LLC,
a Delaware limited liability company

By: Lennar-LNR Heritage Fields, LLC,
a Delaware limited liability company

By: Lennar Homes Of California, Inc.,
a California corporation

By: 
Name:

| |
|-----------------|
| Erik R. Higgins |
| Vice President |

Title: _____

Dated: _____, 2010

APPROVED AS TO FORM

PAUL, HASTINGS, JANOFSKY & WALKER LLP

By: _____
Robert I. McMurry, Esq.

Dated: _____, 2010

HERITAGE FIELDS:

HERITAGE FIELDS EL TORO, LLC,
a Delaware limited liability company

By: Heritage Fields LLC,
a Delaware limited liability company

By: Lennar-LNR Heritage Fields, LLC,
a Delaware limited liability company

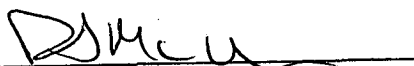
By: Lennar Homes Of California, Inc.,
a California corporation

By: _____
Name: _____
Title: _____

Dated: _____, 2010

APPROVED AS TO FORM

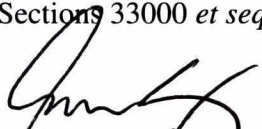
PAUL, HASTINGS, JANOFSKY & WALKER LLP

By: 
Robert I. McMurry, Esq.


Dated: Dec 26, 2010

RDA:

IRVINE REDEVELOPMENT AGENCY,
a redevelopment agency formed pursuant to Health
and Safety Code Sections 33000 *et seq.*

By: 
Name: Sukhee Khand
Title: Chair, Redevelopment Agency
Dated: 12/27, 2010

ATTEST:


Deputy Secretary of the Irvine
Redevelopment Agency

APPROVED AS TO FORM


Redevelopment Agency Counsel

STATE OF CALIFORNIA)
) ss
COUNTY OF ORANGE)

On DECEMBER 27, 2010, before me JERILYN BAGWELL, personally appeared ERIK R. HIGGINS, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/~~she~~-executed the same in his/~~her~~ authorized capacity, and that by his/~~her~~ signature on the instrument, the person or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Jerylyn Bagwell

Signature of Notary Public



(SEAL)

STATE OF CALIFORNIA)
) ss
COUNTY OF Orange)

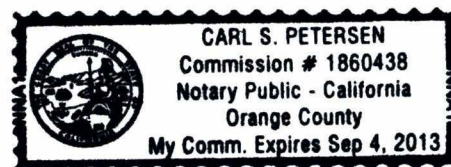
On December 27, 2010, before me Carl S. Petersen, Notary Public, personally appeared Sukhee Kang, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/~~she~~-executed the same in his/~~her~~ authorized capacity, and that by his/~~her~~ signature on the instrument, the person or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Carl S. Petersen

Signature of Notary Public



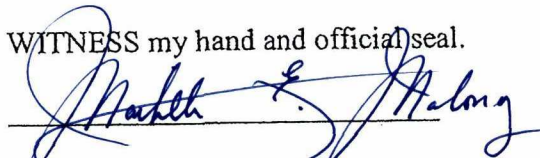
(SEAL)

STATE OF CALIFORNIA)
) ss
COUNTY OF Los Angeles)

On December 23, 2010, before me Marichelle E. Maloney Notary Public
personally appeared Robert I. McHurry, who proved to me on the basis
of satisfactory evidence to be the person whose name is subscribed to the within
instrument and acknowledged to me that he/she executed the same in his/her authorized
capacity, and that by his/her signature on the instrument, the person or the entity upon
behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California
that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.


Signature of Notary Public



(SEAL)

CONSENT OF LIENHOLDER AND SUBORDINATION OF LIEN

EL TORO LLC, a Delaware limited liability company (individually and as lead arranger and administrative agent for itself and certain co-lenders), as beneficiary or assignee of certain property, rights, interests, and estates granted by Owner, as more specifically described in the following instruments: (a) That certain Deed of Trust with Absolute Assignment of Leases and Rents, Security Agreement and Fixture Financing Statement, dated December 21, 2005 and recorded in the Official Records for Orange County, California, on December 22, 2005 as Instrument No. 2005001023684; (b) That certain Substitution of Trustee and Deed of Partial Reconveyance, dated February 9, 2006, and recorded in the Official Records for Orange County, California, on March 2, 2006 as Instrument No. 2006000141834; (c) That certain Substitution of Trustee and Deed of Partial Reconveyance, dated February 9, 2006, and recorded in the Official Records for Orange County, California, on August 24, 2006 as Instrument No. 2006000565634; (d) That certain First Amendment to Deed of Trust, dated August 10, 2006, and recorded in the Official Records for Orange County, California, on August 24, 2006 as Instrument No. 2006000565861; (e) That certain Second Amendment to Deed of Trust, dated June 26, 2007, and recorded in the Official Records for Orange County, California, on June 26, 2007 as Instrument No. 2007000405167; (f) That certain Third Amendment to Deed of Trust, dated July 15, 2008, and recorded in the Official Records for Orange County, California, on July 15, 2008 as Instrument No. 2008000338318; (g) That certain Absolute Assignment of Leases and Rents, dated December 21, 2005, and recorded in the Official Records for Orange County, California, on December 22, 2005 as Instrument No. 2005001023685; (h) That certain Amendment to Absolute Assignment of Leases and Rents, dated June 26, 2007, and recorded in the Official Records for Orange County, California, on June 26, 2007 as Instrument No. 2007000405168; (i) That certain Second Amendment to Absolute Assignment of Leases and Rents, dated July 15, 2008, and recorded in the Official Records for Orange County, California, on July 15, 2008 as Instrument No. 2008000338317; and (j) that certain Fourth Amendment to Deed of Trust, dated June 24, 2009, and recorded November 3, 2009 as Instrument No. 2009000596966 (collectively (a)-(j) above are herein referred to as the "Lienholder Deeds of Trust and Assignments"), hereby consents to the foregoing Amended and Restated Development Agreement by and between the City of Irvine and Heritage Fields El Toro, LLC (and further between Heritage Fields El Toro, LLC and the Irvine Redevelopment Agency) to which this Consent of Lienholder and Subordination of Lien is attached (the "Amended and Restated Agreement") and hereby subordinates the lien and charge of the Lienholder Deeds of Trust and Assignments to the Amended and Restated Agreement and agrees further that said Amended and Restated Agreement shall, upon its recordation in the Official Records for Orange County, California, constitute a lien on the real property affected thereby and be prior and superior to the liens imposed by the Lienholder Deeds of Trust and Assignments on said real property.

[signature follows on next page]

SIGNATURE PAGE TO

**CONSENT OF LIENHOLDER AND
SUBORDINATION OF LIEN**

Dated: _____

EL TORO LLC,
a Delaware limited liability company

By: 
Name: Nicholas V. Colonna

Its: Authorized Signatory

By: 
Name: _____

Its: William R. Lindsay
Authorized Signatory

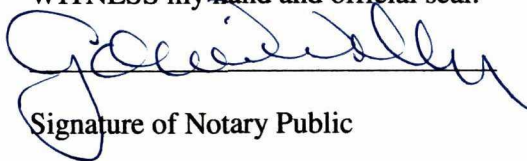
Its: _____

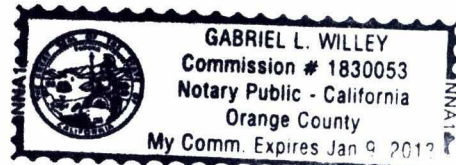
STATE OF CALIFORNIA)
) ss.
COUNTY OF LOS ANGELES)

On NOVEMBER 1, 2010, before me, GABRIEL L. WILLEY, personally appeared NICHOLAS V. COLONNA, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument, the person or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.


Signature of Notary Public



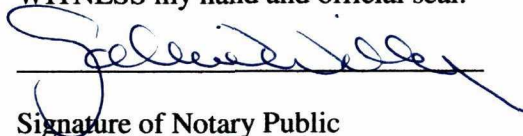
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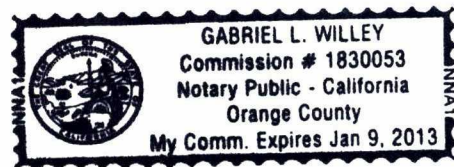
STATE OF CALIFORNIA)
) ss.
COUNTY OF LOS ANGELES)

On NOVEMBER 1, 2010, before me, GABRIEL L. WILLEY, personally appeared WILLIAM R. LINDSAY, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument, the person or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.


Signature of Notary Public



(SEAL)

EXHIBIT 'A'

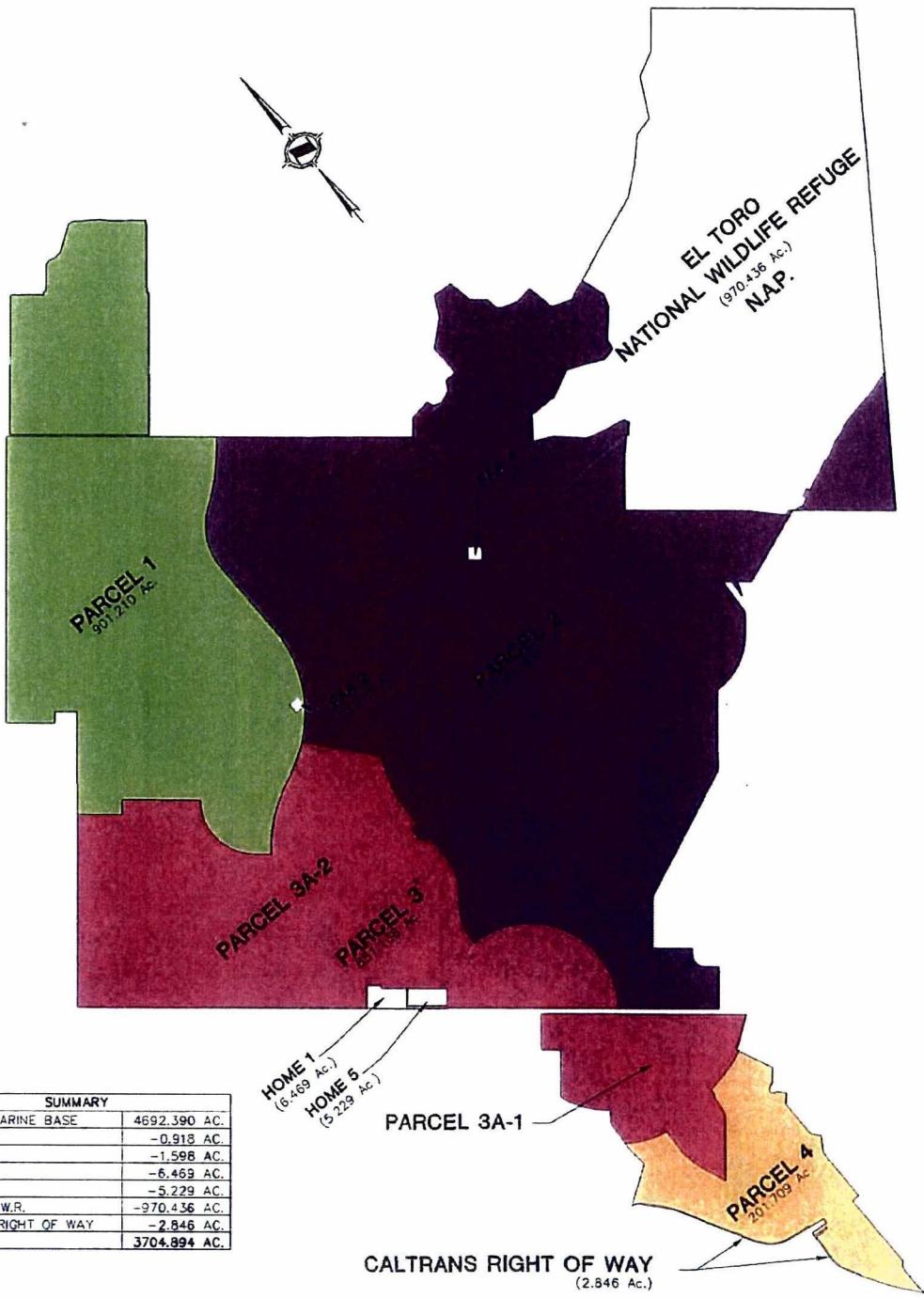
ACREAGE SUMMARY
 TOTAL ACREAGE TO BE SOLD: 3,704.894 Ac.
 TOTAL ACREAGE TO BE OWNED BY USA, CALTRANS, FAA, AND WILDLIFE
 REFUGE AND HOMELESS ASSISTANCE PROVIDERS: 987.496 Ac.
 TOTAL ACREAGE: 4,692.390 Ac.

EXHIBIT EXPLANATION:
 THE ACREAGES SHOWN HEREON ARE BASED ON PARCELS 1, 2, 3A-1, 3A-2, AND 4 DESCRIBED IN THE QUITCLAIM DEEDS FROM THE USA TO HERITAGE FIELDS IGNORING THE EFFECTS OF LIFO, AS DEPICTED IN THE BID DOCUMENTS. THESE BID PARCELS HAD EXCEPTIONS NETTING OUT THE ACREAGES OF FAA AND HOME SITE PARCELS SHOWN HEREON.

LEGEND

- PARCEL 1
- PARCEL 2
- PARCEL 3*
- PARCEL 4

NOTE:
 ALL ACREAGES LISTED HEREON ARE THE TOTAL ACREAGES FOR THE PARCELS AS DEPICTED BY SEPARATE COLORS. ACREAGES IN PARENTHESES () INDICATE ACREAGE OF THE PARCEL INDICATED SHOWN FOR INFORMATIONAL PURPOSES ONLY.



| SUMMARY | |
|-----------------------|---------------------|
| EL TORO MARINE BASE | 4692.390 AC. |
| FAA 2 | -0.918 AC. |
| FAA 4 | -1.598 AC. |
| HOME 1 | -6.469 AC. |
| HOME 5 | -5.229 AC. |
| EL TORO N.W.R. | -970.436 AC. |
| CALTRANS RIGHT OF WAY | -2.846 AC. |
| TOTAL | 3704.894 AC. |

* PARCEL 3 IS COMPRISED OF PARCEL 3A-1 AND PARCEL 3A-2

| | | |
|--|--|---------------------|
| <p>HUNSAKER & ASSOCIATES IRVINE, INC. PLANNING • ENGINEERING • SURVEYING Three Highways • Irvine, CA 92618 • P: (949) 583-7070 • F: (949) 583-4799</p> | FORMER EL TORO MCAS PROPERTY | |
| | IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA | |
| DATE: 9-19-07 | REV. DATE: 3-06-09 | DWG. BY: R. WHEELER |
| | OK'D BY: R. WILLIAMS | SCALE: 1"=2000' |
| | | W.O. 1855-80X |
| I:\HeritageFields\Exhibits\DA\0903-revised\EXH-A.dwg | | |

PSOMAS

LEGAL DESCRIPTION

Exhibit "A"

Parcel 1

In the City of Irvine, County of Orange, State of California, being those portions of Lots 359 and 370 of Block 120, Lots 360 and 369 of Block 142, Lots 241 and 242 of Block 121, Lots 271, 272, 277 and 278 of Block 141, and Lots 279 and 280 of Block 140, of Irvine's Subdivision, as shown on the map filed in Book 1, Page 88, of Miscellaneous Maps, lying within the U.S. M.C.A.S.-El Toro property, and as shown on Record of Survey 97-1038 filed in Book 171, Pages 1 through 49 inclusive, all of the above documents and maps on file in the Recorders Office of said County, lying northerly, northwesterly, and westerly of the following described line:

Commencing at the southwest quarter corner of said Block 142; thence along the northeasterly line of said Lot 271, said line being also the former centerline of Irvine Boulevard as shown on said Record of Survey, North $49^{\circ}21'16''$ West 49.00 feet to the centerline of Lambert Road as shown on said Record of Survey; thence continuing North $49^{\circ}21'16''$ West 17.14 feet along said former centerline of Irvine Boulevard to the **True Point of Beginning**; thence leaving said centerline South $40^{\circ}12'23''$ West 208.48 feet to the beginning of a curve concave northwesterly having a radius of 3776.61 feet; thence southwesterly along said curve 1107.25 feet through a central angle of $16^{\circ}47'54''$ to the beginning of a reverse curve concave southeasterly having a radius of 1200.00 feet, a radial line to the beginning of said curve bears South $32^{\circ}59'43''$ East; thence southwesterly along said curve 1193.90 feet through a central angle of $57^{\circ}00'17''$; thence South $00^{\circ}00'00''$ West 1456.34 feet to the beginning of a curve concave northwesterly having a radius of 2400.00 feet; thence southwesterly along said curve 2768.42 feet through a central angle of $66^{\circ}05'28''$; thence South $66^{\circ}05'28''$ West 353.80 feet to the beginning of a curve concave southeasterly having a radius of 2500.00 feet; thence southwesterly along said curve 1038.99 feet through a central angle $23^{\circ}48'43''$; thence South $42^{\circ}16'45''$ West 235.22 feet; thence North $49^{\circ}51'20''$ West 281.26 feet to the beginning of a curve concave easterly having a radius of 1000.00 feet; thence northwesterly,

PSOMAS

1 northerly and northeasterly along said curve 1574.20 feet through a central angle of
2 90°11'43"; thence North 49°14'49" West 1446.32 feet; thence South 41°14'17" West
3 275.57 feet; thence North 49°21'34" West 817.62 feet to a point on the northwesterly line
4 of said Lot 279, said point lying distant thereon South 40°39'31" West 1675.66 feet from
5 the most northerly corner of said Lot 279.

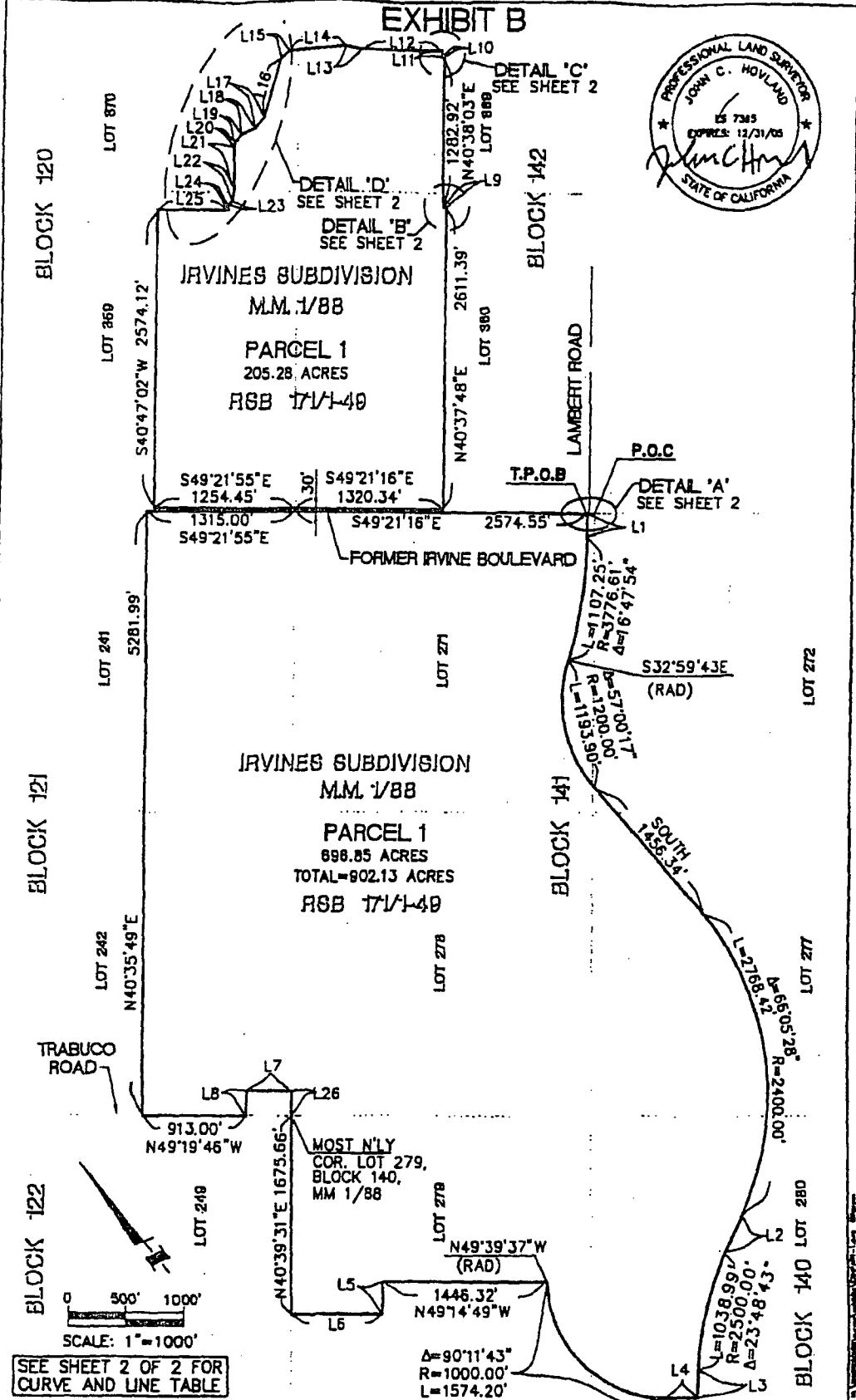
6
7 Excepting therefrom that 30.00 foot wide strip of land known as former Irvine Boulevard
8 as shown on said Record of Survey.

9
10 Containing 902.13 acres, more or less.

11
12 Subject to covenants, conditions, restrictions, rights-of-way and easements of record, if
13 any.

14
15 As shown on Exhibit "B" attached hereto and made a part hereof.
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EXHIBIT B

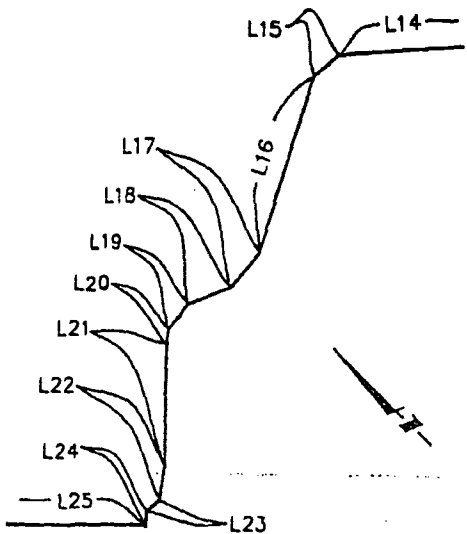


SEE SHEET 2 OF 2 FOR CURVE AND LINE TABLE

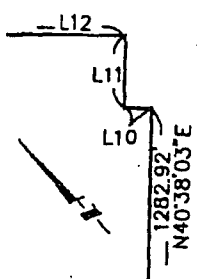
| | | |
|---|--|--|
| <p>DESCRIPTION: Those portions of Lots 359 and 370 of Block 120, Lots 320 and 349 of Block 142, Lots 241 and 242 of Block 121, Lots 271, 272, 277 and 278 of Block 141, Lots 279 and 280 of Block 140, in the unincorporated territory of the County of Orange, State of California, shown on the Irvines Subdivision Map in Book 1, Page 88, in the Office of said County.</p> <p>MCAS-EL TORO</p> | <p>PSOMAS</p> <p>287 1st St Tustin, CA 92680 (714) 771-3333 Fax (714) 940-6282</p> | <p>SCALE 1" = 1000'</p> <p>DRAFTED CH</p> <p>CHECKED JCH</p> <p>DATE APRIL 2003</p> <p>JCS</p> <p>NUMBER 240R030100 13</p> |
| | <p>SHEET 1 OF 2</p> | |
| | <p>SCALE 1" = 1000'</p> | |
| | <p>DRAFTED CH</p> | |
| | <p>CHECKED JCH</p> | |

EXHIBIT A-I

EXHIBIT B

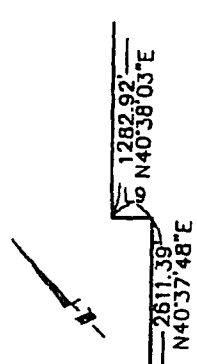


DETAIL 'D'
SCALE 1"=400'

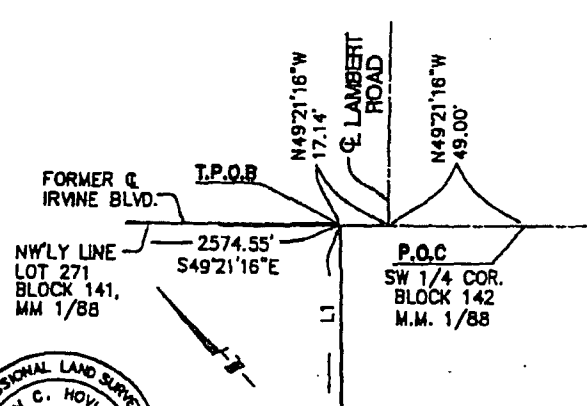


DETAIL 'C'
SCALE 1"=100'

| LINE TABLE | | |
|------------|--------|-------------|
| NO. | LENGTH | BEARING |
| L1 | 208.48 | S40°12'23"W |
| L2 | 353.80 | S66°05'28"W |
| L3 | 235.22 | S42°16'45"W |
| L4 | 281.26 | N49°51'20"W |
| L5 | 275.57 | S41°14'17"W |
| L6 | 817.62 | N49°21'34"W |
| L7 | 400.00 | N49°19'46"W |
| L8 | 217.80 | S40°36'53"W |
| L9 | 30.00 | N49°20'54"W |
| L10 | 20.01 | N49°13'29"W |
| L11 | 53.18 | N40°37'45"E |
| L12 | 690.50 | N49°30'48"W |
| L13 | 151.34 | N40°59'05"W |
| L14 | 512.76 | N53°35'30"W |
| L15 | 95.00 | N86°29'26"W |
| L16 | 525.89 | S56°43'54"W |
| L17 | 127.13 | S80°10'23"W |
| L18 | 134.50 | N71°34'21"W |
| L19 | 91.30 | S78°06'29"W |
| L20 | 45.20 | S47°19'54"W |
| L21 | 351.20 | S40°17'49"W |
| L22 | 100.00 | S50°17'49"W |
| L23 | 48.20 | S89°45'29"W |
| L24 | 41.81 | S40°38'46"W |
| L25 | 627.28 | N49°42'16"W |
| L26 | 217.80 | N40°36'53"E |



DETAIL 'B'
SCALE 1"=100'



DETAIL 'A'
SCALE 1"=50'



DESCRIPTION: These portions of Lots 359 and 370 of Block 120, Lots 390 and 399 of Block 142, Lots 244 and 242 of Block 121, Lots 271, 272, 277 and 278 of Block 141, Lots 279 and 280 of Block 140, in the unincorporated territory of the County of Orange, State of California, shown on the Irvine's Subdivision Cled in Book 1, Page 86, in the Office of said County.

MCAS-EL TORO

| | | |
|--|--------------------------|--------------|
| PSOMAS 207 1st St. Santa Ana, CA 92701 (949) 261-2277 Fax: (949) 261-2283 | SHEET 2 OF 2 | SCALE 1"=50' |
| | DATE APRIL 2003 | DRAFTED CN |
| | JOB NUMBER 2NCR060100 T3 | CHECKED JCH |
| | | |
| | | |

EXHIBIT A-I

PSOMAS

LEGAL DESCRIPTION

Exhibit "A"

Parcel 2

In the City of Irvine, County of Orange, State of California, being those portions of Lots 303 and 306 of Block 173, Lots 281 through 284 inclusive, of Block 155, Lot 280 of Block 140, Lots 271, 272 and 277 of Block 141, Lots 273 through 276 inclusive, of Block 154, Lots 299, 300 and 302 of Block 174, Lots 362, 363, 366 and 367 of Block 153, and Lot 313 of Block 175 of Irvine's Subdivision, as shown on map filed in Book 1, Page 88, of Miscellaneous Maps, lying within the U.S. M.C.A.S. El Toro property, as shown on Record of Survey 97-1038, filed in Book 171, Pages 1 through 49 inclusive, all of the above maps on file in the Recorder's Office of said County, lying easterly of the following described line:

Commencing at the southwest quarter corner of Block 142 of said Irvine's Subdivision, said quarter corner being shown on said Record of Survey; thence along the northeasterly line of said Lot 271, said line being also along the former centerline of Irvine Boulevard, as shown on said Record of Survey, North 49°21'16" West 49.00 feet to the centerline of Lambert Road as shown on said Record of Survey; thence continuing North 49°21'16" West 17.14 feet along said former centerline of Irvine Boulevard to the **True Point of Beginning**; thence leaving said centerline South 40°12'23" West 208.48 feet to the beginning of a curve concave northwesterly having a radius of 3776.61 feet; thence southwesterly along said curve 1107.25 feet through a central angle of 16°47'54" to beginning of a reverse curve concave southeasterly having a radius of 1200.00 feet, a radial line to the beginning of said curve bears North 32°59'43" West; thence southwesterly along said curve 1193.90 feet through a central angle of 57°00'17"; thence South 00°00'00" West 1456.34 feet to the beginning of a curve concave northwesterly having a radius of 2400.00 feet; thence southerly along said curve 2226.96 feet through a central angle of 53°09'53"; thence non-tangent to said curve South 39°16'19" East 1519.69 feet to the beginning of a non-tangent curve concave southeasterly having a radius of 2100.00 feet, a radial line to the beginning of said curve

PSOMAS

1 bears North 58°27'48" West; thence southerly along said curve 1155.88 feet through a
2 central angle of 31°32'12"; thence non-tangent to said curve South 00°57'09" West
3 276.56 feet; thence North 89°02'51" West 141.47 feet; thence South 00°57'09" West
4 221.51 feet to the beginning of a curve concave northeasterly having a radius of
5 120.00 feet; thence southerly, southeasterly and easterly along said curve 188.50 feet
6 through a central angle of 90°00'00"; thence South 89°02'51" East 38.00 feet; thence
7 South 00°57'09" West 396.66 feet to the beginning of a curve concave westerly having a
8 radius of 1200.00 feet; thence southerly along said curve 813.74 feet through a central
9 angle of 38°51'11"; thence South 39°48'20" West 226.79 feet to the beginning of a curve
10 concave easterly having a radius of 900.00 feet; thence southerly along said curve
11 605.19 feet through a central angle of 38°31'40"; thence South 01°16'40" West
12 129.84 feet to the beginning of a non-tangent curve concave southwesterly having a
13 radius of 1600.00 feet, a radial line to the beginning of said curve bears
14 North 01°09'46" East; thence easterly, southeasterly, southerly and southwesterly along
15 said curve 3582.01 feet through a central angle of 128°16'17" to a point on a line parallel
16 with and distant 50.00 feet northeasterly from the southwesterly line of said Block 155,
17 said point lying distant along said parallel line North 49°20'21" West 616.16 feet from
18 the southeasterly line of said Lot 283; thence along said parallel line
19 South 49°20'21" East 616.16 feet to said southeasterly line; thence along a line that is
20 parallel with and distant 50.00 feet northeasterly from the southwesterly line of said
21 Block 173, South 49°20'18" East 1220.06 feet to the terminus of the herein described
22 line.

23
24 **Excepting** therefrom the 970.435 acre parcel shown on Record of Survey 98-1077, filed
25 in Book 173, Pages 28 through 31, inclusive, in the office of the County Recorder of said
26 County.

27
28 Containing 1752.43 acres, more or less.

29
30 Subject to covenants, conditions, restrictions, rights-of-way and easements of record, if
31 any.

PSOMAS

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2

The distances shown hereon are ground distances.

3

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As shown on Exhibit "B" attached hereto and made a part hereof.

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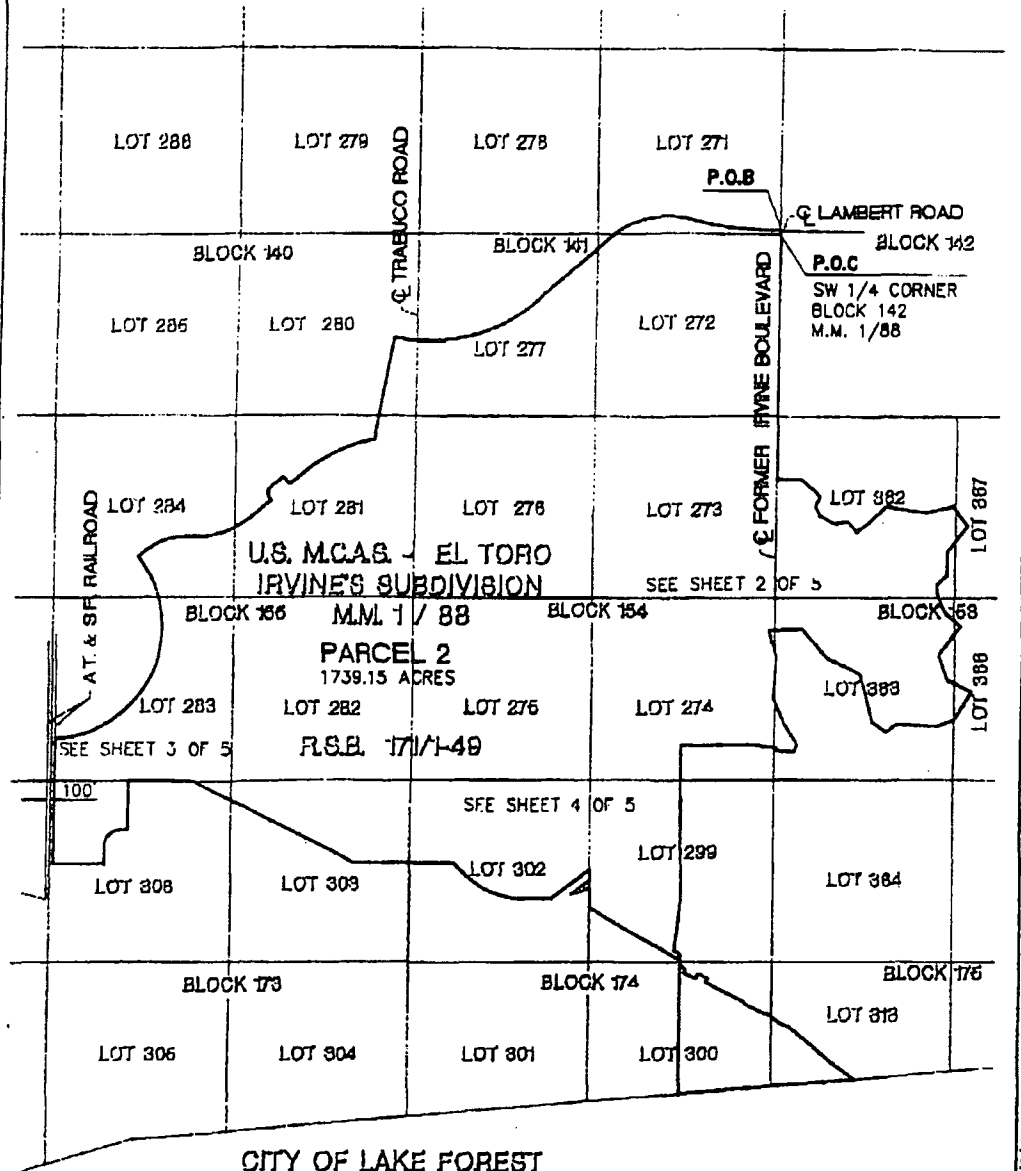
26

27

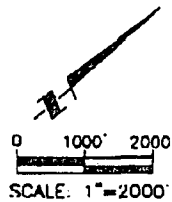
28

29

EXHIBIT B



CITY OF LAKE FOREST
 RANCHO CANADA DE LOS ALISOS
 M.F.L.A. CO 3/200-201



SEE SHEET 5 OF 5 FOR
 CURVE AND LINE TABLE

DESCRIPTION: That portion of Lots 306 & 303 of Block 173, Lots 281 thru 284 of Block 156, Lot 280 of Block 140, Lots 271, 272 & 277 of Block 141, Lots 273 thru 276 of Block 154, Lots 299 & 302 of Block 174, Lots 303, 304, 305, & 307 of Block 153, Lots 313, 314, 304, & 305 of Block 173, Lots 315 & 300 of Block 178, Lot of Block 380, and Lot 360 of Block 182, in the City of Irvine, County of Orange, State of California, as shown the Irvine's Subdivision, filed in Book 1 Page 88.

MCAS-EL TORO

REV 2 6/4/03
 REV 3 6/28/04

PSOMAS

287 Red Hill Avenue
 Suite 200
 Costa Mesa, CA 92626
 (714) 261-7272 Fax (714) 446-8823

SHEET 1 OF 5

SCALE 1" = 2000'

DRAFTED CM

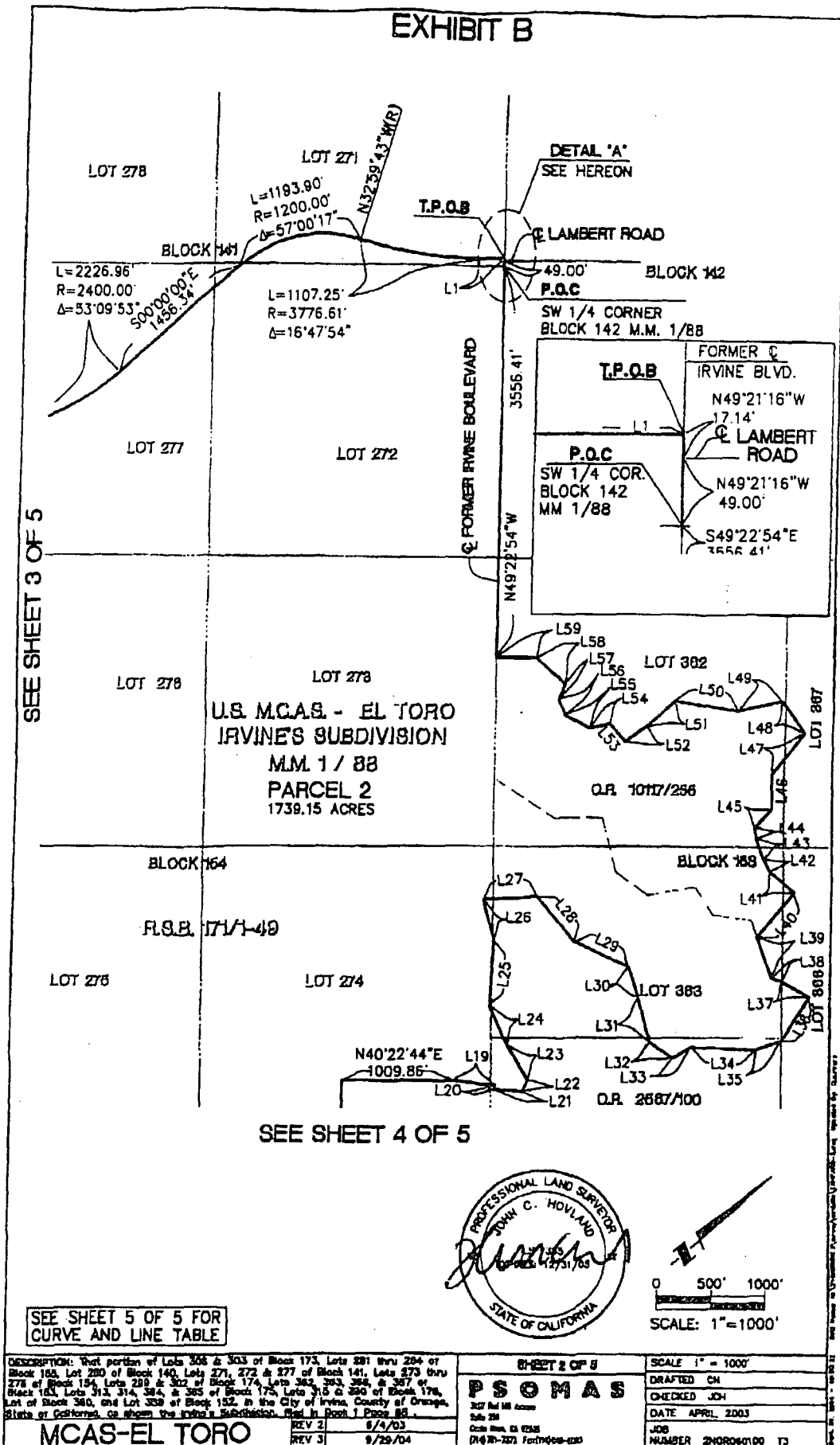
CHECKED JCH

DATE APRIL 2003

JOB NUMBER ZNOR060100 13

EXHIBIT A-II

EXHIBIT B



SEE SHEET 3 OF 5

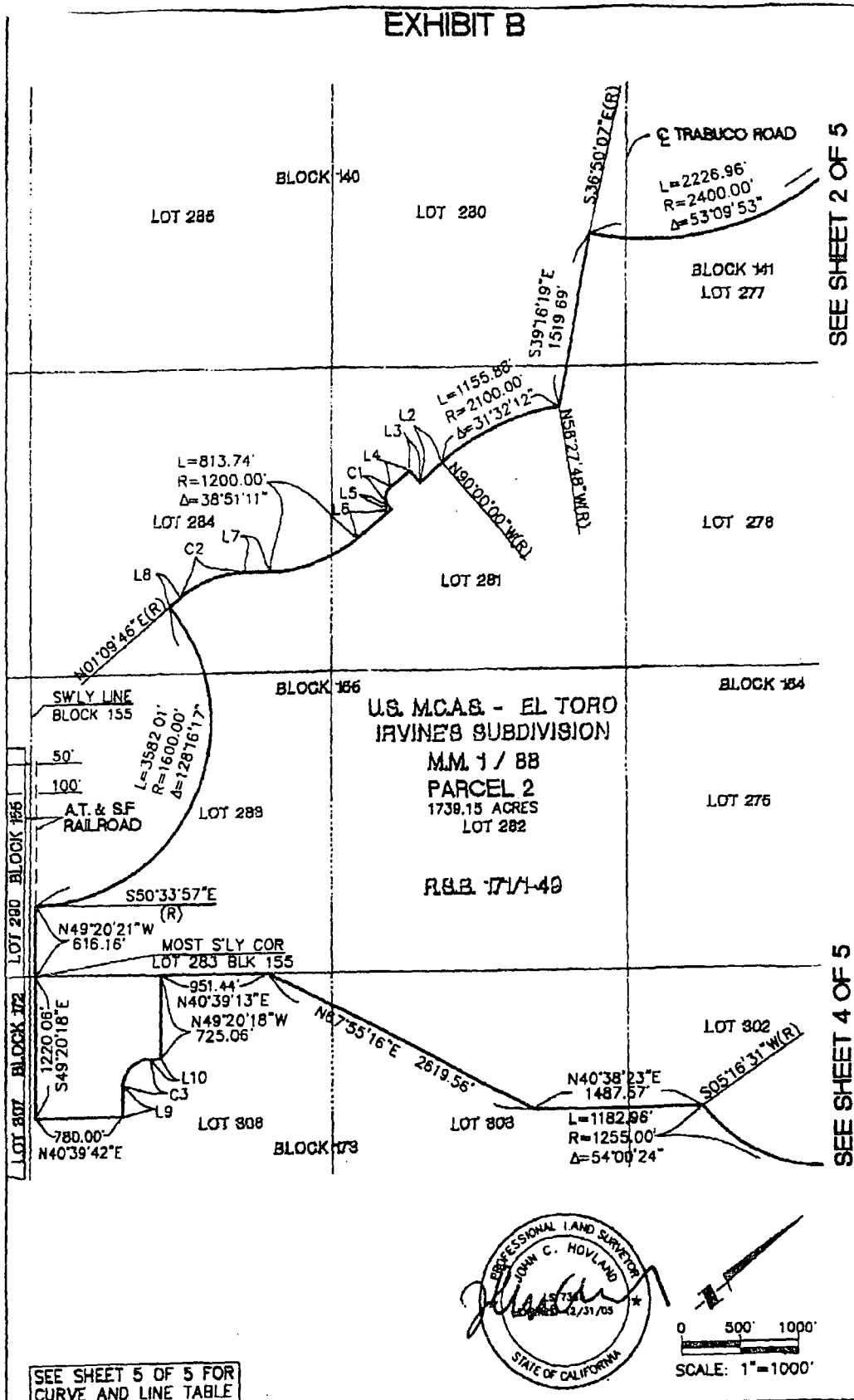
SEE SHEET 4 OF 5

SEE SHEET 5 OF 5 FOR CURVE AND LINE TABLE

| | | |
|---|--|--|
| DESCRIPTION: That portion of Lots 302 & 303 of Block 173, Lots 381 thru 384 of Block 163, Lot 280 of Block 140, Lots 271, 272 & 277 of Block 141, Lots 273 thru 276 of Block 154, Lots 289 & 302 of Block 174, Lots 382, 383, 386, & 387 of Block 163, Lots 313, 314, 384, & 385 of Block 175, Lots 315 & 320 of Block 176, Lot of Block 340, and Lot 339 of Block 132, in the City of Irvine, County of Orange, State of California, as shown the Irvine's Subdivision, filed in Book 1 Page 85. | SHEET 2 OF 5 | SCALE 1" = 1000' |
| | PSOMAS 207 Red Hill Avenue Suite 201 Costa Mesa, CA 92626 (714) 261-3270 Fax (714) 261-3280 | DRAFTED CN CHECKED JON DATE APRIL 2003 JOB NUMBER 2NOR060100 13 |
| MCAS-EL TORO | REV 2 6/4/03 REV 3 9/29/04 | |

EXHIBIT A-II

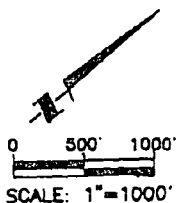
EXHIBIT B



SEE SHEET 2 OF 5

SEE SHEET 4 OF 5

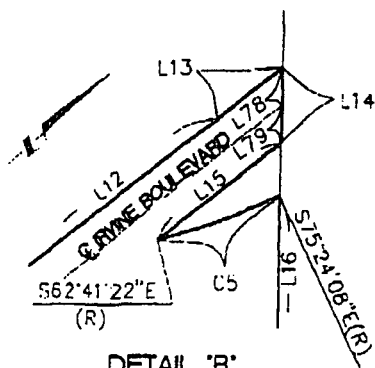
SEE SHEET 5 OF 5 FOR CURVE AND LINE TABLE



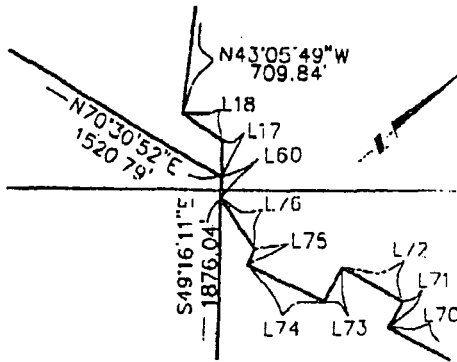
| | | |
|--|---|--|
| DESCRIPTION: That portion of Lots 308 & 309 of Block 173, Lots 291 thru 294 of Block 155, Lot 280 of Block 140, Lots 271, 272 & 277 of Block 141, Lots 273 thru 276 of Block 154, Lots 289 & 301 of Block 174, Lots 362, 363, 368 & 387 of Block 153, Lots 313, 314, 364, & 328 of Block 175, Lots 318 & 350 of Block 176, Lot of Block 300, and Lot 308 of Block 182, in the City of Irvine, County of Orange, State of California, as shown the Irvine's Subdivision, filed in Book 1 Page 88. | SHEET 3 OF 5 | SCALE 1" = 1000' |
| | PSOMAS 387 Red Hill Avenue Suite 129 Costa Mesa, CA 92626 (714) 261-7021 Fax (714) 446-6003 | DRAFTED CH CHECKED JCH DATE APRIL 2003 JOB NUMBER 2NOR080100 T3 |
| MCAS-EL TORO | REV 2 6/4/03 REV 3 6/28/04 | |

EXHIBIT A-II

EXHIBIT B

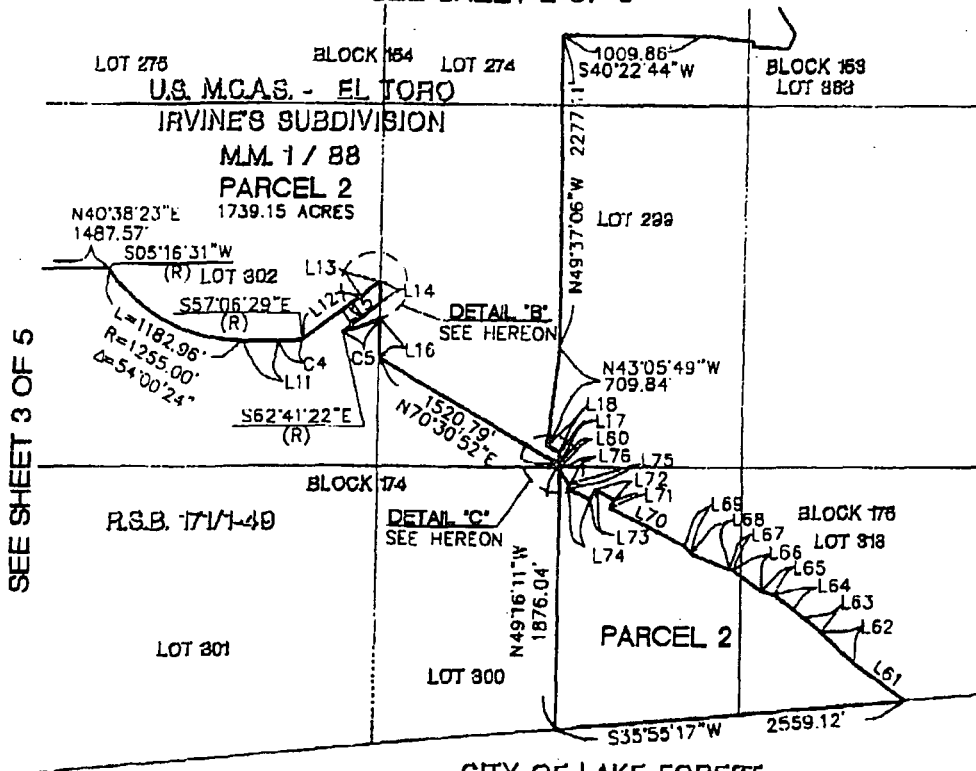


DETAIL 'B'
SCALE 1" = 300'



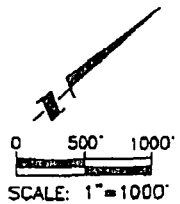
DETAIL 'C'
SCALE 1" = 300'

SEE SHEET 2 OF 5



SEE SHEET 3 OF 5

CITY OF LAKE FOREST
RANCHO CANADA DE LOS ALISOS
M.R.L.A. CO 3/280-291



SEE SHEET 5 OF 5 FOR
CURVE AND LINE TABLE

| | | | | |
|---|---------------|--------------------------|------------------|-------------|
| DESCRIPTION: That portion of Lots 308 & 303 of Block 173, Lots 281 thru 284 of Block 155, Lot 220 of Block 140, Lots 271, 272 & 277 of Block 141, Lots 273 thru 278 of Block 154, Lots 299 & 302 of Block 174, Lots 283, 285, 286, & 307 of Block 153, Lots 313, 314, 304, & 305 of Block 175, Lots 315 & 309 of Block 178, Lot of Block 320, and Lot 309 of Block 152, in the City of Irvine, County of Orange, State of California, as shown the Irvine's Subdivision, filed in Book 1, Page 811. | SHEET 4 OF 5 | | SCALE 1" = 1000' | |
| | PSOMAS | | DRAFTED CH | |
| | REV 2 6/4/03 | DATE APRIL, 2003 | | CHECKED JCH |
| | REV 3 6/29/04 | JOB NUMBER 2NCR060100 13 | | |

MCAS-EL TORO

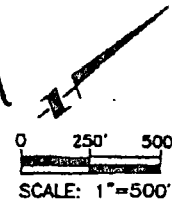
EXHIBIT A-II

EXHIBIT B

| LINE TABLE | | |
|------------|------------|-------------|
| NO. | LENGTH(FT) | BEARING |
| L1 | 208.48 | S40°12'23"W |
| L2 | 276.58 | S00°57'09"W |
| L3 | 141.47 | N89°02'51"W |
| L4 | 221.51 | S00°57'09"W |
| L5 | 38.00 | S89°02'51"E |
| L6 | 396.66 | S00°57'09"W |
| L7 | 226.79 | S39°48'20"W |
| L8 | 129.84 | S01°16'40"W |
| L9 | 265.16 | N49°20'18"W |
| L10 | 100.00 | N40°39'42"E |
| L11 | 249.30 | N41°16'07"E |
| L12 | 516.75 | N03°38'44"E |
| L13 | 176.68 | N02°41'27"E |
| L14 | 159.99 | S49°15'52"E |
| L15 | 332.04 | S02°41'27"W |
| L16 | 282.44 | S49°15'52"E |
| L17 | 77.98 | N49°16'11"W |
| L18 | 103.60 | S74°22'29"W |
| L19 | 378.73 | N47°00'59"E |
| L20 | 36.97 | S43°46'25"E |
| L21 | 253.88 | N44°10'35"E |
| L22 | 114.34 | N27°39'45"W |
| L23 | 358.80 | N80°16'46"W |
| L24 | 395.26 | N73°37'35"W |
| L25 | 600.49 | N46°14'31"W |
| L26 | 386.94 | N84°33'36"W |
| L27 | 485.85 | N37°18'55"E |
| L28 | 542.47 | S89°00'03"E |
| L29 | 542.88 | N65°05'59"E |
| L30 | 292.98 | S87°02'19"E |
| L31 | 419.52 | S84°00'47"E |
| L32 | 250.57 | N77°23'57"E |
| L33 | 202.52 | N08°37'42"E |
| L34 | 602.13 | N43°04'22"E |
| L35 | 245.79 | N19°58'15"E |
| L36 | 469.87 | N17°07'55"W |
| L37 | 284.78 | S89°29'32"W |
| L38 | 103.05 | S58°28'51"W |
| L39 | 400.68 | N69°03'15"W |
| L40 | 525.37 | N09°57'17"W |
| L41 | 290.35 | S81°17'11"W |
| L42 | 124.67 | N78°49'46"W |
| L43 | 203.08 | N88°35'40"W |
| L44 | 104.09 | N56°18'27"W |
| L45 | 216.34 | N06°22'01"W |
| L46 | 325.40 | N49°05'35"W |
| L47 | 477.81 | N11°45'54"W |
| L48 | 360.00 | N84°51'40"W |
| L49 | 417.78 | S27°40'18"W |
| L50 | 598.73 | S48°36'32"W |
| L51 | 344.48 | S02°59'41"E |
| L52 | 228.32 | S03°00'59"W |
| L53 | 220.14 | S87°55'12"W |
| L54 | 186.94 | S28°01'09"W |
| L55 | 255.62 | S69°51'58"W |
| L56 | 156.90 | N72°56'54"W |

| CURVE TABLE | | | |
|-------------|------------|---------|-----------|
| NO. | LENGTH(FT) | RADIUS | DELTA |
| C1 | 188.50 | 120.00 | 90°00'00" |
| C2 | 605.19 | 900.00 | 38°31'40" |
| C3 | 361.28 | 230.00 | 90°00'00" |
| C4 | 183.48 | 1255.00 | 08°22'36" |
| C5 | 278.46 | 1255.00 | 12°42'46" |
| C6 | 457.83 | 955.00 | 27°28'04" |
| C7 | 506.24 | 845.00 | 34°19'33" |
| C8 | 133.34 | 211.96 | 36°02'33" |
| C9 | 603.27 | 646.25 | 53°29'05" |

| LINE TABLE | | |
|------------|------------|-------------|
| NO. | LENGTH(FT) | BEARING |
| L57 | 151.70 | N24°32'07"W |
| L58 | 367.42 | S83°17'33"W |
| L59 | 358.95 | S40°40'32"W |
| L60 | 45.06 | S49°16'11"E |
| L61 | 476.64 | N76°05'15"E |
| L62 | 320.43 | N82°25'15"E |
| L63 | 165.87 | N78°20'15"E |
| L64 | 265.63 | N79°45'15"E |
| L65 | 103.32 | N55°15'15"E |
| L66 | 257.59 | N75°55'15"E |
| L67 | 34.25 | N44°40'15"E |
| L68 | 290.62 | N84°40'15"E |
| L69 | 78.87 | N88°45'15"E |
| L70 | 612.07 | N67°20'15"E |
| L71 | 65.00 | S21°00'30"E |
| L72 | 155.00 | N88°59'30"E |
| L73 | 83.12 | N21°00'30"W |
| L74 | 184.71 | N65°30'27"E |
| L75 | 37.00 | S23°59'33"E |
| L76 | 132.97 | S84°39'33"E |
| L77 | 438.55 | S19°46'09"E |
| L78 | 79.99 | S49°15'52"E |
| L79 | 80.00 | S49°15'52"E |



| | | | |
|--|--|--|--------------------------|
| DESCRIPTION: That portion of Lots 308 & 303 of Block 173, Lots 281 thru 284 of Block 155, Lot 280 of Block 140, Lots 271, 272 & 277 of Block 141, Lots 273 thru 276 of Block 134, Lots 278 & 302 of Block 174, Lots 312, 313, 314, & 317 of Block 153, Lots 315, 316, & 318 of Block 176, Lots 319 & 320 of Block 178, Lot of Block 390, and Lot 382 of Block 182, in the City of Irvine, County of Orange, State of California, as shown on the Irwin's Subdivision, filed in Book 1 Page 85. | SHEET 6 OF 6 | | SCALE 1" = 500' |
| | PSOMAS | | DRAFTED <i>JH</i> |
| | 207 1st St. Irvine, CA 92614 (949) 261-2222 Fax: (949) 261-2221 | | CHECKED <i>JH</i> |
| | REV 1 5/27/03 REV 2 6/4/03 | | DATE APRIL 2003 |
| MCAS-EL TORO | | | JOB NUMBER 2NOR020100 TJ |

EXHIBIT A-II

PSOMAS

LEGAL DESCRIPTION

Exhibit "A"

Parcel 3A-1

In the City of Irvine, County of Orange, State of California, being those portions of Lots 290 of Block 156, and Lots 307 and 310 of Block 172 of Irvine's Subdivision, as shown on the map filed in Book 1, Page 88 of Miscellaneous Maps, and also those portions of Parcels 1A and 2, described in the deed recorded in Book 11831, Page 1062 and Book 11253, Page 959 of Official Records, lying within the U.S. M.C.A.S. El Toro property, all as shown on Record of Survey 97-1038, filed in Book 171, Pages 1 through 49 inclusive, all of the above documents and maps on file in the Recorders Office of said County, lying northerly of the following described line:

Beginning at the intersection of the centerline of Alton Parkway with the westerly line of said Parcel 2, said intersection being also the beginning of a non-tangent curve concave northeasterly having a radius of 1800.00 feet, a radial line to the beginning of said curve bears South 37°36'19" West, (shown as South 37°36'05" West on said Record of Survey); thence southeasterly along said curve and said centerline 815.37 feet through a central angle of 25°57'15"; thence leaving said centerline South 04°46'49" West 323.29 feet to the beginning of a curve concave easterly having a radius of 1400.00 feet; thence southerly along said curve 616.04 feet through a central angle of 25°12'42"; thence South 20°25'53" East 490.17 feet; thence North 40°26'55" East 1130.96 feet to the beginning of a curve concave northwesterly having a radius of 417.00 feet; thence northeasterly along said curve 299.22 feet through a central angle of 41°06'48" to the beginning of a reverse curve concave southeasterly having a radius of 518.00 feet, a radial line to the beginning of said curve bears South 89°20'07" West; thence northeasterly along said curve 265.18 feet through a central angle of 29°19'55"; thence non-tangent to said curve North 09°24'49" West 60.00 feet to a point on said centerline; thence North 80°35'11" East 399.69 feet along said centerline to the beginning of a non-tangent curve concave northerly having a radius of 1800.00 feet, a radial line to the

PSOMAS

1 beginning of said curve, bears South 08°31'46" East; thence easterly along said curve
2 496.71 through a central angle of 15°48'39" to the easterly line of said Parcel 2.

3
4 Together with the following described parcel:

5
6 **Parcel 3A-2**

7 In the City of Irvine, County of Orange, State of California, being those portions of Lots
8 279, 280, 285, and 286 of Block 140, and Lots 281, 283, and 284 of Block 155 of Irvine's
9 Subdivision, as shown on a map filed in Book 1 Page 88, of Miscellaneous Maps, lying
10 within the U.S. M.C.A.S. El Toro property, and as shown on Record of Survey 97-1038,
11 filed in Book 171, Pages 1 through 49, inclusive, all of the records of said County,
12 described as follows:

13
14 Commencing at the southwest quarter corner of Block 142 said quarter corner being
15 shown on said Record of Survey; thence along the northeasterly line of said Lot 271, said
16 line being also the former centerline of Irvine Boulevard, as shown on said Record of
17 Survey, North 49°21'16" West 49.00 feet to the centerline of Lambert Road as shown on
18 said Record of Survey; thence continuing North 49°21'16" West 17.14 feet along said
19 former centerline of Irvine Boulevard; thence leaving said former centerline
20 South 40°12'23" West 208.48 feet to the beginning of a curve concave northwesterly
21 having a radius of 3776.61 feet; thence southwesterly along said curve 1107.25 feet
22 through a central angle of 16°47'54" to beginning of a reverse curve concave
23 southeasterly having a radius of 1200.00 feet, a radial line to the beginning of said curve
24 bears South 32°59'43" East; thence southwesterly along said curve 1193.90 feet through
25 a central angle of 57°00'17"; thence South 00°00'00" West 1456.34 feet to the beginning
26 of a curve concave northwesterly having a radius of 2400.00 feet; thence southwesterly
27 along said curve 2226.96 feet through a central angle of 53°09'53" to the **True Point of**
28 **Beginning**; thence South 39°16'19" East 1519.69 feet to the beginning of a non-tangent
29 curve concave southeasterly having a radius of 2100.00 feet, a radial line to the beginning

PSOMAS

1 of said curve bears North 58°27'48" West; thence southerly along said curve 1155.88 feet
2 through a central angle of 31°32'12"; thence non-tangent to said curve
3 South 00°57'09" West 276.56 feet; thence North 89°02'51" West 141.47 feet; thence
4 South 00°57'09" West 221.51 feet to the beginning of a curve concave northeasterly
5 having a radius of 120.00 feet; thence southeasterly along said curve 188.50 feet through
6 a central angle of 90°00'00"; thence South 89°02'51" East 38.00 feet; thence South
7 00°57'09" West 396.66 feet to the beginning of a curve concave westerly having a radius
8 of 1200.00 feet; thence southerly along said curve 813.74 feet through a central angle of
9 38°51'11"; thence South 39°48'20" West 226.79 feet to the beginning of a curve concave
10 easterly having a radius of 900.00 feet; thence southerly along said curve 605.19 feet
11 through a central angle of 38°31'40"; thence South 01°16'40" West 129.84 feet to the
12 beginning of a non-tangent curve concave southwesterly having a radius of 1600.00 feet,
13 a radial line to the beginning of said curve bears North 01°09'46" East; thence easterly,
14 southeasterly, southerly and southwesterly along said curve 3582.01 feet through a
15 central angle of 128°16'17" to a point on a line parallel with and distant 50.00 feet
16 northeasterly from the southwesterly line of said Blocks 155 and 140, said point lying
17 distant along said parallel line North 49°20'21" West 616.16 feet from the southeasterly
18 line of said Lot 283; thence North 49°20'21" West 9954.02 feet along said parallel line to
19 a point on the northwesterly line of said Lot 286; thence North 40°39'31" East 3554.68
20 feet along the northwesterly line of said Lots 286 and 279 to a point lying distant thereon
21 South 49°39'31" West 1675.66 feet from the most northerly corner of said Lot 279;
22 thence South 49°21'34 East 817.62 feet; thence North 41°14'17" East 275.57 feet; thence
23 South 49°14'49" East 1446.32 feet to the beginning of a non-tangent curve concave
24 easterly having a radius of 1000.00 feet, a radial line to the beginning of said curve bears
25 North 49°39'37" West; thence southwesterly, southerly, and southeasterly along said
26 curve 1574.20 feet through a central angle of 90°11'43"; thence South 49°51'20" East
27 281.26 feet; thence North 42°16'45" East 235.22 feet to the beginning of a curve concave
28 southeasterly having a radius of 2500.00 feet; thence northeasterly along said curve
29 1038.99 feet through a central angle of 23°48'43"; thence North 66°05'28" East
30 353.80 feet to the beginning of a curve concave northwesterly having a radius of

PSOMAS

1 2400 feet; thence northeasterly along said curve 541.46 feet through a central angle of
2 12°55'35" to the **True Point of Beginning**.

3

4 Containing 862.84 acres, more or less.

5

6 Subject to covenants, conditions, restrictions, rights-of-way and easements of record, if
7 any.

8

9 As shown on Exhibit "B" attached hereto and made a part hereof.

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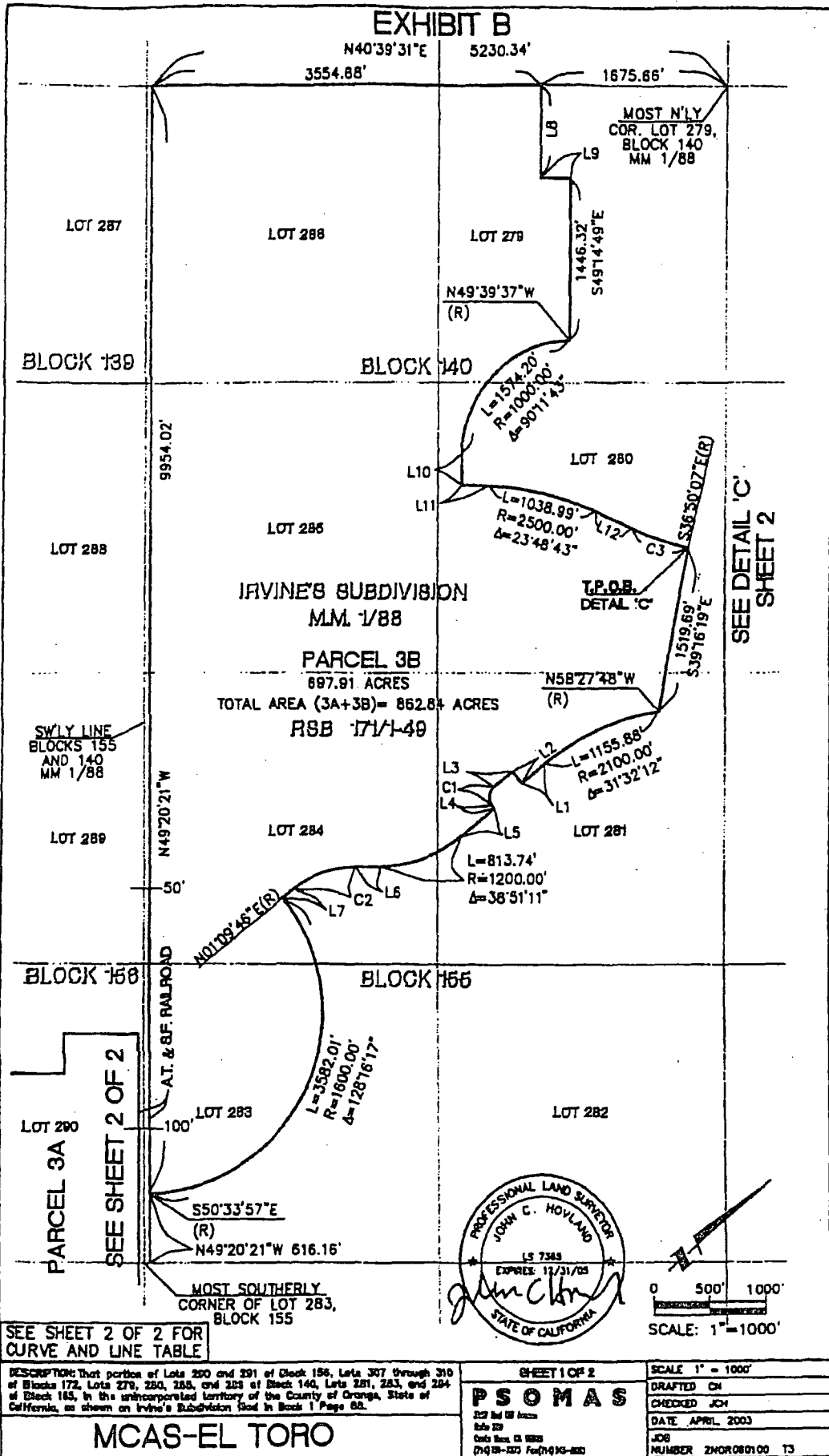
28

29

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31

EXHIBIT B



SEE SHEET 2 OF 2 FOR CURVE AND LINE TABLE

DESCRIPTION: That portion of Lots 290 and 291 of Block 156, Lots 307 through 310 of Blocks 172, Lots 279, 280, 283, and 285 of Block 140, Lots 281, 283, and 284 of Block 155, in the unincorporated territory of the County of Orange, State of California, as shown on Irvine's Subdivision filed in Block 1 Page 68.

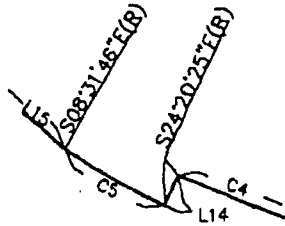
MCAS-EL TORO

PSOMAS
 227 1/2 W. 1st St.
 Suite 100
 Costa Mesa, CA 92626
 (714) 261-3333 Fax: (714) 935-8820

| | |
|-----------------|--------------------------|
| SHEET 1 OF 2 | SCALE 1" = 1000' |
| DRAFTED CH | CHECKED JCH |
| DATE APRIL 2003 | JOB NUMBER ZH0R080100 13 |

EXHIBIT B

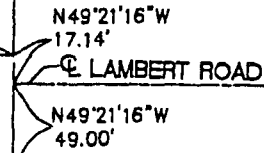
0 500' 1000'
SCALE: 1"=1000'



DETAIL 'A'
NO SCALE

SEE DETAIL 'C'

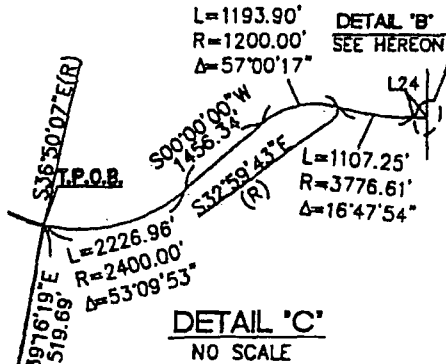
P.O.C.
SW 1/4 COR.
BLOCK 142
M.M. 1/88



DETAIL 'B'
NO SCALE

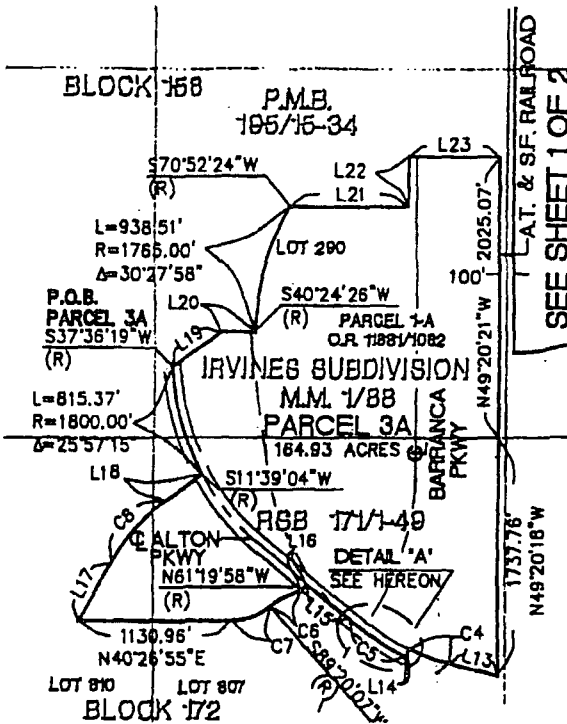
| LINE TABLE | | |
|------------|-------------|-------------|
| NO. | LENGTH (FT) | BEARING |
| L1 | 276.58 | S00°57'09"W |
| L2 | 141.47 | N89°02'51"W |
| L3 | 221.51 | S00°57'09"W |
| L4 | 38.00 | S89°02'51"E |
| L5 | 396.66 | S00°57'09"W |
| L6 | 226.78 | S39°48'20"W |
| L7 | 129.84 | S01°16'40"W |
| L8 | 817.62 | S49°21'34"E |
| L9 | 275.57 | N41°14'17"E |
| L10 | 281.26 | S49°51'20"E |
| L11 | 235.22 | N42°16'45"E |
| L12 | 353.80 | N66°05'28"E |
| L13 | 363.30 | N55°30'00"E |
| L14 | 60.00 | N24°20'25"W |
| L15 | 399.69 | N80°35'11"E |
| L16 | 60.00 | N09°24'49"W |
| L17 | 490.17 | S20°25'53"E |
| L18 | 323.29 | S04°46'49"W |
| L19 | 444.45 | S05°38'08"W |
| L20 | 245.00 | S40°24'26"W |
| L21 | 871.70 | S40°39'39"W |
| L22 | 359.93 | S49°20'21"E |
| L23 | 665.28 | S40°39'39"W |
| L24 | 208.48 | S40°12'23"W |

SEE SHEET 1 OF 2



DETAIL 'C'
NO SCALE

| CURVE TABLE | | | |
|-------------|--------|---------|-----------|
| NO. | LENGTH | RADIUS | DELTA |
| C1 | 188.50 | 120.00 | 90°00'00" |
| C2 | 605.18 | 900.00 | 38°31'40" |
| C3 | 541.46 | 2400.00 | 12°55'35" |
| C4 | 308.54 | 1740.00 | 10°09'35" |
| C5 | 496.71 | 1800.00 | 15°48'39" |
| C6 | 265.18 | 518.00 | 29°19'55" |
| C7 | 299.22 | 417.00 | 41°06'48" |
| C8 | 616.04 | 1400.00 | 25°12'42" |



SEE SHEET 1 OF 2

DESCRIPTION: That portion of Lots 280 and 281 of Block 188, Lots 307 through 310 of Block 172, Lots 271, 280, 283, and 284 of Block 140, Lots 281, 283, and 284 of Block 153, in the unincorporated territory of the County of Orange, State of California, as shown on Irvine's Subdivision Map in Book 1 Page 64.

MCAS-EL TORO

| | |
|---|--------------------------|
| SHEET 2 OF 2 | SCALE 1" = 1000' |
| PSOMAS | DRAFTED CH |
| 300 1st St Suite 30 Costa Mesa, CA 92626 (949) 271-7271 Fax (949) 440-4880 | CHECKED JCH |
| | DATE APRIL 2003 |
| | JOB NUMBER 240R060100 T3 |

PSOMAS

LEGAL DESCRIPTION

Exhibit A

Parcel 4

In the City of Irvine, County of Orange, State of California, being those portions of Lots 290 and 291 of Block 156, and Lots 307 through 310 inclusive of Block 172 of Irvine's Subdivision, as shown on the map filed in Book 1, Page 88 of Miscellaneous Maps, and also those portions of Parcels 2 and 3, described in the deed recorded in Book 11831, Page 1062, of Official Records, all lying within the U.S. M.C.A.S. El Toro property, as shown on Record of Survey 97-1038, filed in Book 171, Pages 1 through 49 inclusive, all of the above documents and maps on file in the Recorders Office of said County, lying southerly of the following described line:

Beginning at the intersection of the centerline of Alton Parkway with the westerly line of said Parcel 2, said intersection being also the beginning of a non-tangent curve concave northeasterly having a radius of 1800.00 feet, a radial line to the beginning of said curve bears South 37°36'19" West; thence southeasterly along said curve and said centerline 815.37 feet through a central angle of 25°57'15"; thence leaving said centerline South 04°46'49" West 323.29 feet to the beginning of a curve concave easterly having a radius of 1400.00 feet; thence southerly along said curve 616.04 feet through a central angle of 25°12'42"; thence South 20°25'53" East 490.17 feet; thence North 40°26'55" East 1130.96 feet to the beginning of a curve concave northwesterly having a radius of 417.00 feet; thence northeasterly along said curve 299.22 feet through a central angle of 41°06'48" to the beginning of a reverse curve concave southeasterly having a radius of 518.00 feet, a radial line to the beginning of said curve bears South 89°20'07" West; thence northeasterly along said curve 265.18 feet through a central angle of 29°19'55"; thence non-tangent to said curve North 09°24'49" West 60.00 feet to a point on said centerline; thence North 80°35'11" East 399.69 feet along said centerline to the beginning of a non-tangent curve concave northerly having a radius of 1800.00 feet, a radial line to the beginning of said curve bears South 08°31'46" East;

PSOMAS

1 | thence easterly along said curve 496.71 feet through a central angle of 15°48'39" to the
2 | easterly line of said Parcel 2.

3 |

4 | Containing 201.71 acres, more or less.

5 |

6 | Subject to covenants, conditions, restrictions, rights-of-way and easements of record, if
7 | any.

8 |

9 | As shown on Exhibit "B" attached hereto and made a part hereof.

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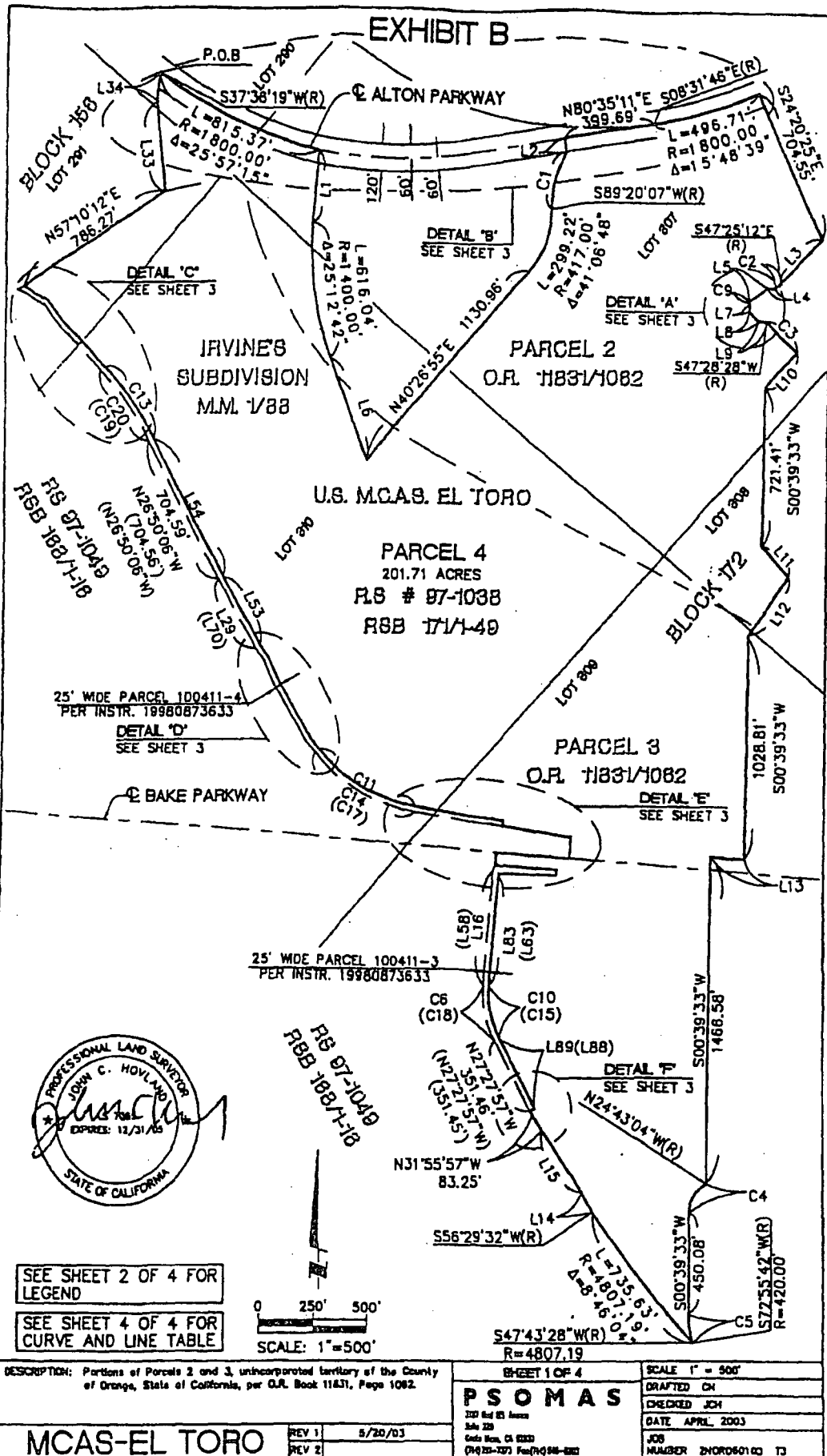
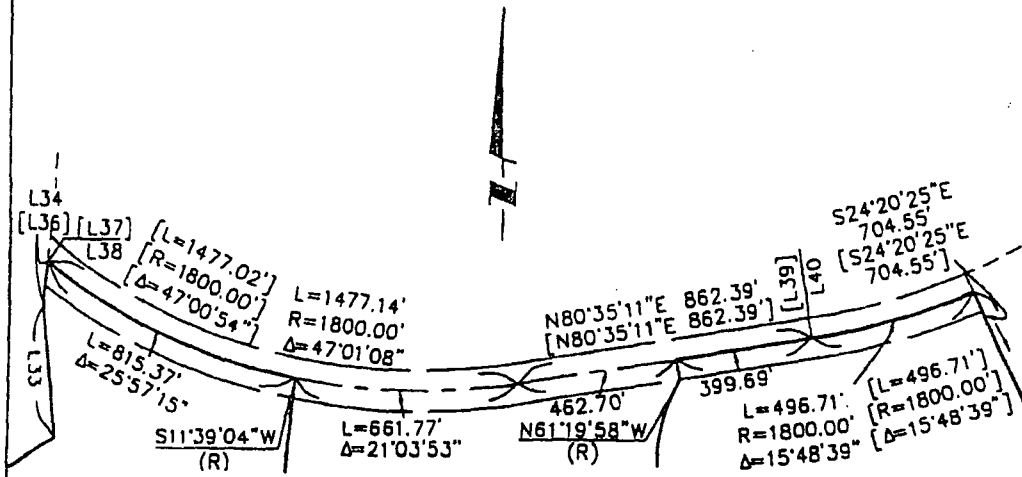
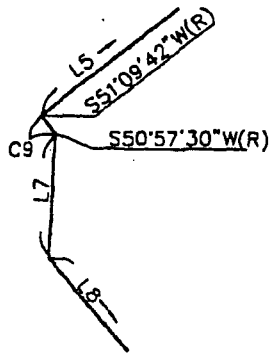


EXHIBIT A-IV

EXHIBIT B



DETAIL 'B'
SCALE 1" = 400'



DETAIL 'A'
SCALE 1" = 40'

LEGEND

- () Record Per Record of Survey 97-1038 RSB 171/1-49.
- () Record Per Quitclaim Deed Recorded December 17, 1998, Instrument No. 19980873633, O.R. and Record of Survey 97-1049, RSB 168/1-16.



SEE SHEET 4 OF 4 FOR
CURVE AND LINE TABLE

DESCRIPTION: Portions of Parcels 2 and 3, unincorporated territory of the County of Orange, State of California, per C.L.R. Book 11831, Page 1082.

SHEET 2 OF 4

SCALE 1" = 500'

PSOMAS

DRAFTED SFB

CHECKED JCH

DATE APRIL 2003

JOB

MANAGER ZNOR00100 T3

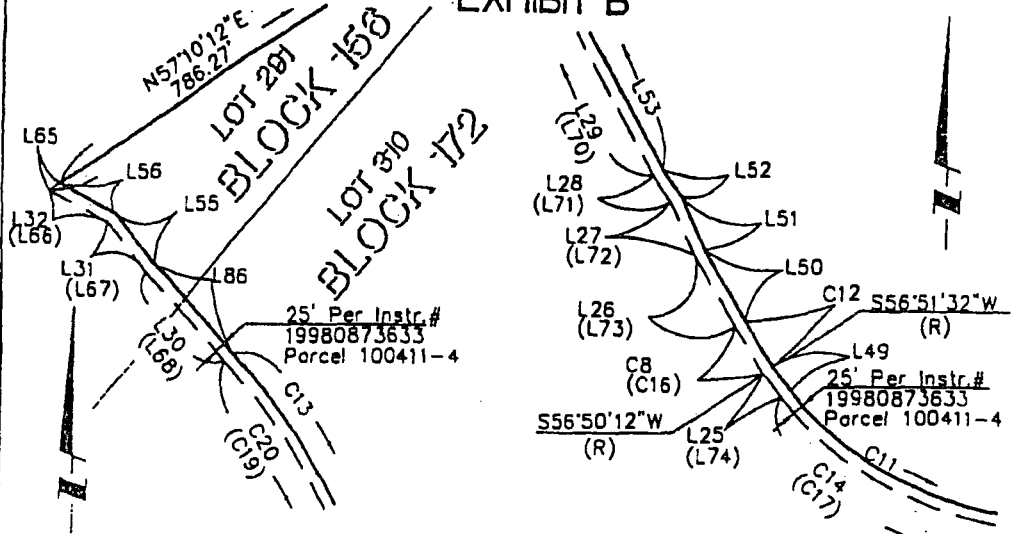
MCAS-EL TORO

REV 1 5/20/03
REV 2

200 East 10th Avenue
Suite 200
Costa Mesa, CA 92626
(714) 761-2203 Fax (714) 448-8803

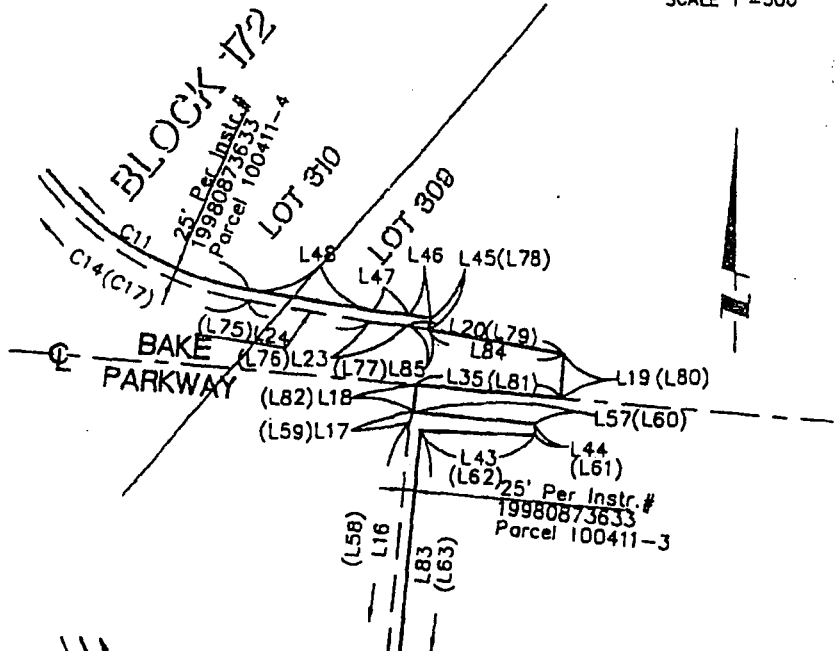
EXHIBIT A-IV

EXHIBIT B

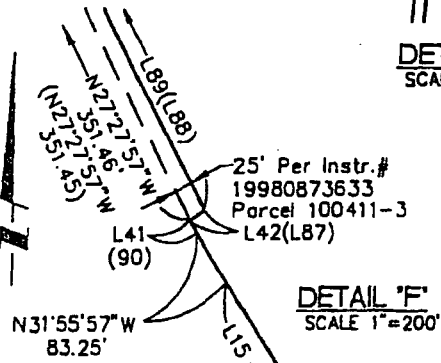


DETAIL 'C'
SCALE 1"=300'

DETAIL 'D'
SCALE 1"=300'



DETAIL 'E'
SCALE 1"=300'



DETAIL 'F'
SCALE 1"=200'



SEE SHEET 4 OF 4 FOR
CURVE AND LINE TABLE

SEE SHEET 2 OF 4 FOR
FOR LEGEND

DESCRIPTION: Portions of Parcels 2 and 3, unincorporated territory of the County of Orange, State of California, per O.R. Book 11831, Page 1082.

SHEET 3 OF 4

SCALE 1" = 500'

PSOMAS

DRAFTED SFJ

CHECKED JCH

DATE APRIL 2003

JCB

NUMBER 2N0R060100 T3

MCAS-EL TORO

REV 1 5/20/03
REV 2

300 Red Hill Avenue
Suite 202
Costa Mesa, CA 92626
(714) 261-3273 Fax (714) 446-8811

EXHIBIT A-IV



EXHIBIT B

SEE SHEET 2 OF 4 FOR FOR LEGEND

| LINE TABLE | | |
|------------|------------|---------------|
| NO. | LENGTH(FT) | BEARING |
| L1 | 323.29 | S04°46'49"W |
| L2 | 60.00 | N09°24'49"W |
| L3 | 269.60 | S42°34'48"W |
| L4 | 38.56 | N84°39'47"W |
| L5 | 100.00 | S51°09'42"W |
| L6 | 490.17 | S20°25'53"E |
| L7 | 36.23 | S02°49'08"W |
| L8 | 60.00 | S40°47'01"E |
| L9 | 36.23 | S84°23'22"E |
| L10 | 216.54 | S41°25'05"W |
| L11 | 185.84 | S41°30'00"E |
| L12 | 325.00 | S33°11'01"W |
| L13 | 150.37 | N85°20'42"W |
| L14 | 98.64 | N28°16'11"W |
| L15 | 319.56 | N32°20'05"W |
| L16 | 517.15 | N04°39'03"E |
| L17 | 27.92 | N18°31'06"E |
| L18 | 57.50 | N04°38'58"E |
| L19 | 95.79 | N04°38'58"E |
| L20 | 356.12 | N80°29'02"W |
| L23 | 81.08 | N84°45'40"W |
| L24 | 275.40 | N80°28'49"W |
| L25 | 63.38 | N38°20'00"W |
| L26 | 180.06 | N30°52'21"W |
| L27 | 120.81 | N24°13'05"W |
| L28 | 68.69 | N33°52'58"W |
| L29 | 360.05 | N28°55'06"W |
| L30 | 259.71 | N42°50'00"W |
| L31 | 135.82 | N39°25'00"W |
| L32 | 147.34 | N62°43'34"W |
| L33 | 395.85 | N05°37'01"W |
| L34 | 128.46 | N05°36'08"E |
| L35 | 325.78 | S85°21'02"E |
| L36 | [128.17] | [N05°36'08"E] |
| L37 | RADIAL | [S37°36'05"W] |
| L38 | RADIAL | [S37°36'19"W] |
| L39 | RADIAL | [S08°31'46"E] |
| L40 | RADIAL | S08°31'46"E |
| L41 | 20.64 | N27°27'57"W |
| L42 | 25.06 | S58°37'33"W |
| L43 | 257.70 | N88°21'06"W |
| L44 | 25.00 | N04°38'58"E |
| L45 | 25.09 | N04°38'50"E |
| L46 | 46.02 | N80°29'02"W |
| L47 | 81.08 | N84°45'40"W |
| L48 | 274.47 | N80°28'49"W |
| L49 | 62.25 | N38°20'00"W |
| L50 | 178.58 | N30°52'21"W |
| L51 | 121.47 | N24°13'05"W |

| LINE TABLE | | |
|------------|------------|---------------|
| NO. | LENGTH(FT) | BEARING |
| L52 | 69.72 | N33°52'58"W |
| L53 | 358.51 | N28°55'06"W |
| L54 | 704.13 | N26°50'06"W |
| L55 | 140.23 | N39°25'00"W |
| L56 | 138.12 | N62°43'34"W |
| L57 | 275.50 | N85°21'02"W |
| L58 | (517.13) | (N04°39'03"E) |
| L59 | (27.89) | (N19°11'07"E) |
| L60 | (275.50) | (S85°20'57"E) |
| L61 | (25.00) | (S04°39'03"W) |
| L62 | (257.85) | (N88°21'01"W) |
| L63 | (505.63) | (S04°39'03"W) |
| L65 | 28.84 | N57°10'12"E |
| L66 | (147.46) | (S62°43'34"E) |
| L67 | (135.82) | (S39°25'00"E) |
| L68 | (259.70) | (S42°50'00"E) |
| L70 | (360.04) | (S28°55'06"E) |
| L71 | (68.69) | (S33°52'58"E) |
| L72 | (120.81) | (S24°13'05"E) |
| L73 | (180.05) | (S30°52'21"E) |
| L74 | (63.38) | (S38°20'00"E) |
| L75 | (275.39) | (S80°28'49"E) |
| L76 | (81.05) | (S84°43'32"E) |
| L77 | (47.21) | (S80°28'49"E) |
| L78 | (25.09) | (N04°39'03"E) |
| L79 | (356.11) | (S80°28'49"E) |
| L80 | (95.79) | (S04°39'03"W) |
| L81 | (325.78) | (S85°20'57"E) |
| L82 | (57.50) | (S04°39'03"W) |
| L83 | 505.72 | N04°39'03"E |
| L84 | 308.91 | N80°29'02"W |
| L85 | 47.21 | N80°29'02"W |
| L86 | 258.97 | N42°50'00"W |
| L87 | (25.06) | (S58°37'33"W) |
| L88 | (349.74) | (S27°27'57"E) |
| L89 | 349.74 | N27°27'57"W |
| L90 | (20.64) | (N27°27'57"W) |

| CURVE TABLE | | | |
|-------------|------------|------------|-------------|
| NO. | LENGTH(FT) | RADIUS(FT) | DELTA |
| C1 | 265.18 | 518.00 | 29°19'55" |
| C2 | 39.42 | 770.00 | 02°56'00" |
| C3 | 195.55 | 1850.00 | 06°03'23" |
| C4 | 157.90 | 140.00 | 64°37'23" |
| C5 | 129.97 | 420.00 | 17°43'51" |
| C6 | 260.10 | 464.02 | 32°07'00" |
| C8 | 117.55 | 2940.11 | 02°17'27" |
| C9 | 6.57 | 1850.00 | 00°12'12" |
| C10 | 246.09 | 439.02 | 32°07'00" |
| C11 | 533.33 | 725.03 | 42°08'49" |
| C12 | 115.44 | 2915.11 | 02°16'08" |
| C13 | 397.91 | 1425.05 | 15°59'54" |
| C14 | 551.72 | 750.03 | 42°08'49" |
| C15 | (246.08) | (439.00) | (32°07'00") |
| C16 | (117.55) | (2940.00) | (02°17'27") |
| C17 | (551.70) | (750.00) | (42°08'49") |
| C18 | (260.09) | (464.00) | (32°07'00") |
| C19 | (390.91) | (1400.00) | (15°59'54") |
| C20 | 390.93 | 1400.05 | 15°59'54" |

DESCRIPTION: Portions of Parcels 2 and 3, unincorporated territory of the County of Orange, State of California, per O.R. Book 11831, Page 1032.

SHEET 4 OF 4

SCALE 1" = 500'

PSOMAS

207 Red Hill Avenue
Suite 201
Costa Mesa, CA 92626
(714) 766-7271 Fax: (714) 946-8863

DRAFTED SFB

CHECKED JCH

DATE APRIL 2003

JOB

NUMBER 2N09080100 T3

MCAS-EL TORO

REV 1 5/25/03
REV 2

EXHIBIT A-IV

EXHIBIT "B"

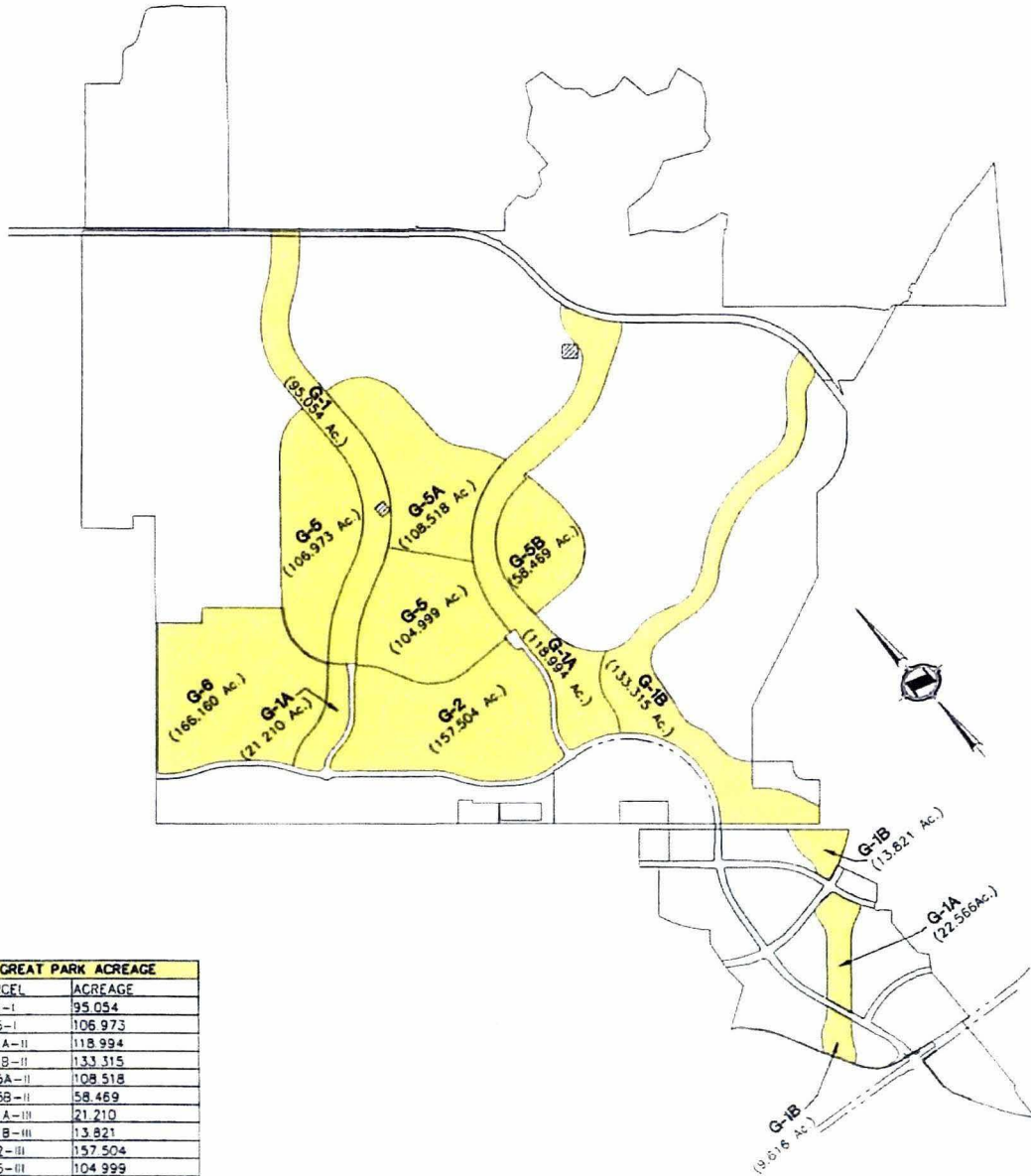
ACREAGE SUMMARY
 TOTAL ACREAGE OF THE GREAT PARK: 1,117.199 Ac.

LEGEND

- GREAT PARK CITY PARCELS
- INDICATES FAA PARCELS

EXHIBIT EXPLANATION:
 THE PARCELS SHOWN HEREON REPRESENT THE GREAT PARK PARCELS AS DESCRIBED IN THE DEVELOPMENT AGREEMENT RECORDED 7/12/05 AS INSTRUMENT NO. 2005000538136 OF OFFICIAL RECORDS.

THE ACREAGES SHOWN HEREON DO NOT INCLUDE FAA PARCELS WHICH ARE NOT A PART OF THE SUBJECT PROPERTY.



| GREAT PARK ACREAGE | |
|--------------------|----------|
| PARCEL | ACREAGE |
| G-1-I | 95.054 |
| G-5-I | 106.973 |
| G-1A-II | 118.994 |
| G-1B-II | 133.315 |
| G-5A-II | 108.518 |
| G-5B-II | 58.469 |
| G-1A-III | 21.210 |
| G-1B-III | 13.821 |
| G-2-III | 157.504 |
| G-5-III | 104.999 |
| G-6-III | 166.169 |
| G-1A-IV | 22.566 |
| G-1B-IV | 9.616 |
| SUM | 1117.199 |

HUNSAKER & ASSOCIATES
 IRVINE, INC.
 PLANNING • ENGINEERING • SURVEYING
 Three Hedges • Irvine, CA 92618 • P12 (949) 263-3070 • F12 (949) 263-0759

DATE: 2/28/08 REV: DATE 7-29-09 DWP: BY: K. LYNCH

INITIAL CITY PARK PROPERTY
ORANGE COUNTY GREAT PARK
 IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA

SCALE: W.O. 1856-80X

C:\KORY\Heritage Fields\ROP+ Revised\EXH-B.dwg

EXHIBIT 'C'

ACREAGE SUMMARY

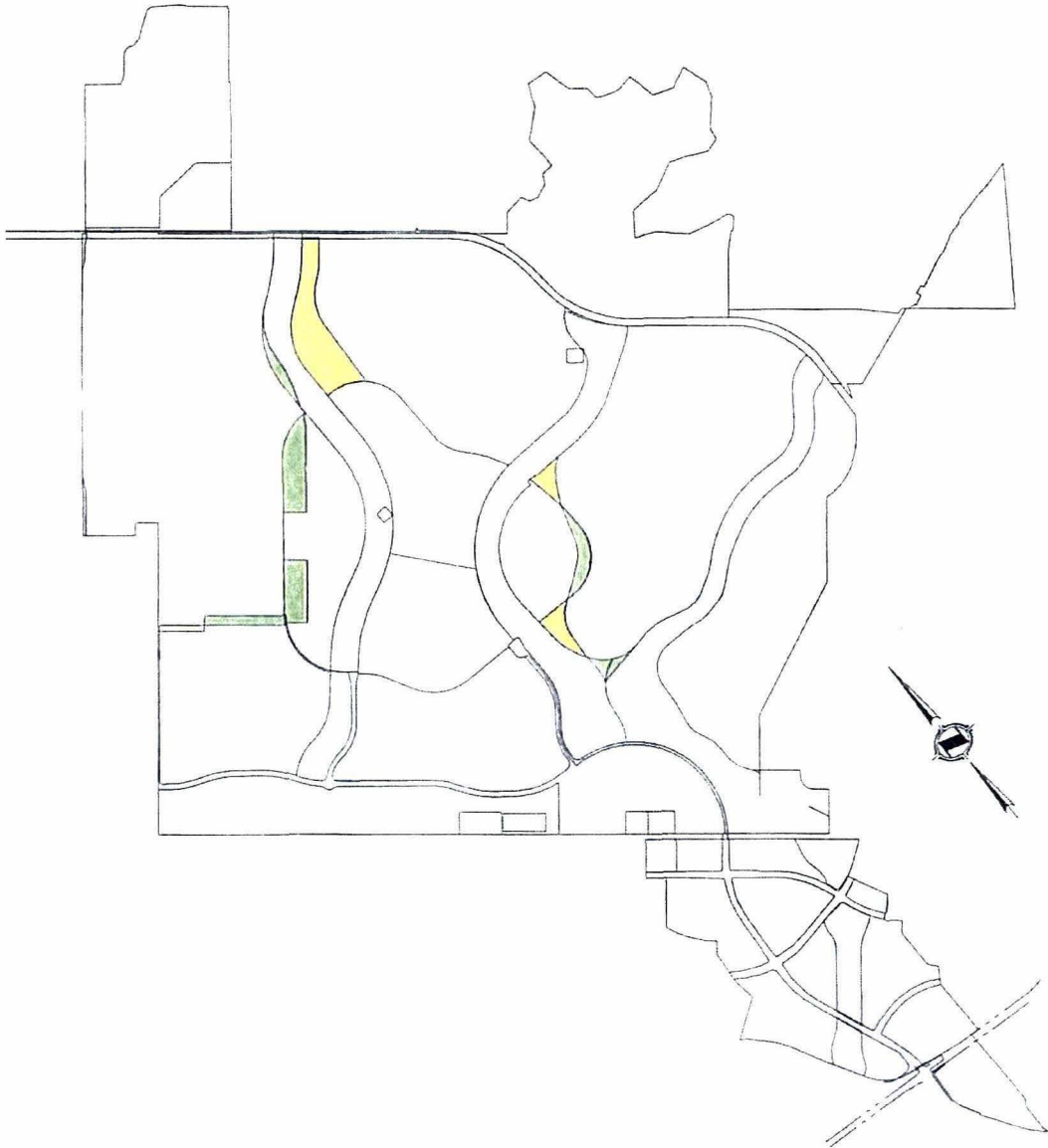
TOTAL ACREAGE TO BE GRANTED TO HERITAGE FIELDS: 44.971 Ac.
 TOTAL ACREAGE TO BE GRANTED TO CITY: 44.971 Ac.

LEGEND

- PARCELS TO BE TRANSFERRED TO HERITAGE FIELDS.
- PARCELS TO BE TRANSFERRED TO THE CITY OF IRVINE.

EXHIBIT EXPLANATION:

THE PARCELS SHOWN HEREON REPRESENT A PROPOSED EXCHANGE OF PROPERTY BASED ON THE APPROVED OCTOBER, 2006, GENERAL PLAN AMENDMENT AND ZONE CHANGE, PARCEL MAP 2006-271 AND THE AGREEMENT FOR EXCHANGE OF PROPERTY.



| | | | |
|---|-----------|--|---------------|
| HUNSAKER & ASSOCIATES IRVINE, INC. PLANNING • ENGINEERING • SURVEYING Three Hughes • Irvine, CA 92618 • P: (949) 583-1010 • F: (949) 583-0759 | | EXCHANGE PROPERTIES IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA | |
| DATE | REV. DATE | DWC BY | CHK BY |
| 2/28/08 | 03/06/09 | R. WHEELER | R. WILLIAMS |
| SCALE: 1" = 2000' | | | W.O. 1855-80X |
| I:\HeritageFields\Exhibits\DA\0903-revised\EXH-C.dwg | | | |

EXHIBIT 'D'

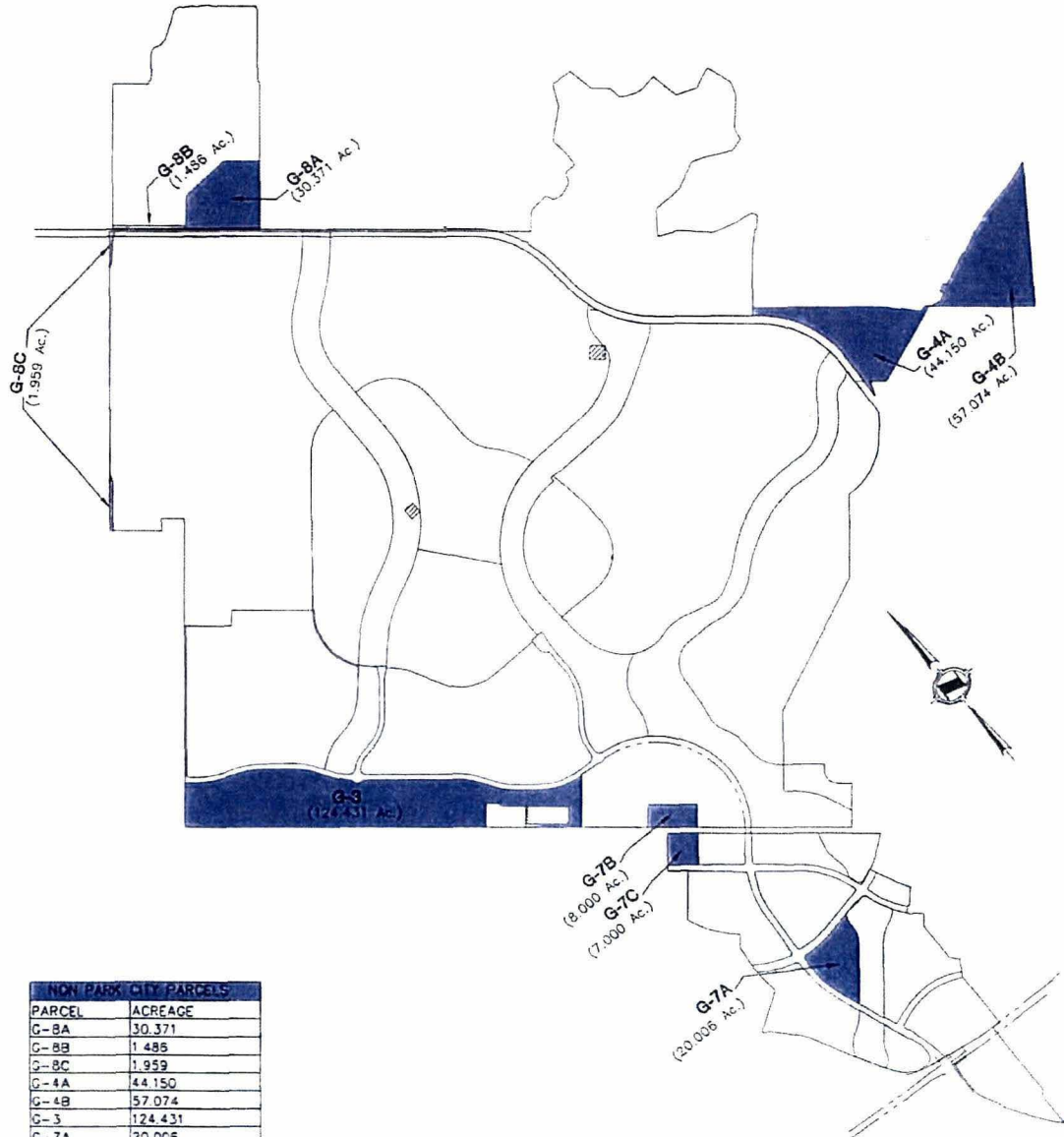
ACREAGE SUMMARY
 TOTAL ACREAGE OF NON-GREAT PARK CITY PROPERTY: 294.477 Ac.

LEGEND


- NON-PARK CITY PROPERTY
- INDICATES FAA PARCELS

EXHIBIT EXPLANATION:
 THE PARCELS SHOWN HEREON REPRESENT THE CITY PARCELS AS DESCRIBED IN THE DEVELOPMENT AGREEMENT RECORDED 7/12/05 AS INSTRUMENT NO. 2005000538136 OF OFFICIAL RECORDS NOT ASSOCIATED WITH THE GREAT PARK PROPERTY. THE ACREAGES REPRESENT THESE PARCELS AS DESCRIBED EXCLUDING ANY PORTION OF SAID PARCELS LYING WITHIN FAA PARCELS 2 AND 4 AND HOME PARCELS 1 AND 5. PARCEL G-8C IS SHOWN HEREON AS DESCRIBED IN CORRECTION GRANT DEED RECORDED 3/2/06 AS INSTRUMENT NO. 2006000141833 O.R.

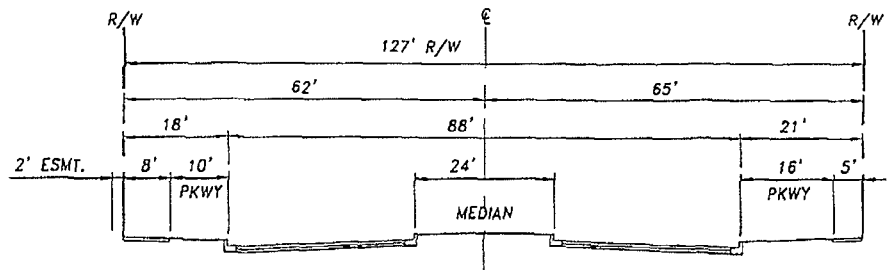
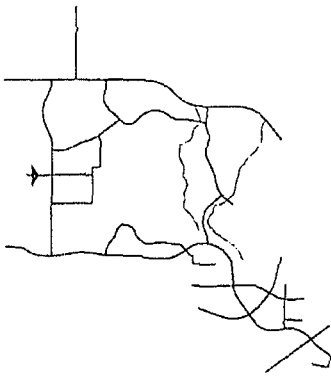
THE ACREAGES SHOWN HEREON DO NOT INCLUDE HOME PARCELS WHICH ARE NOT A PART OF THE SUBJECT PROPERTY.



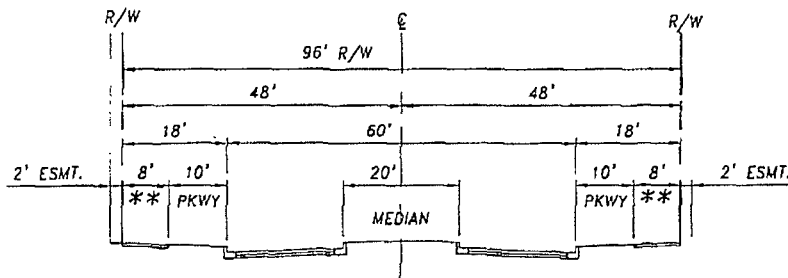
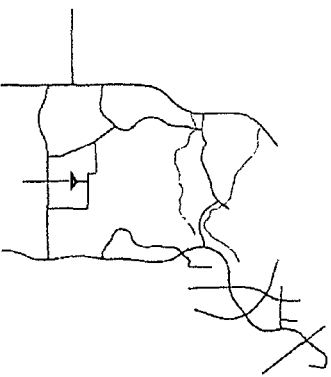
| NON PARK CITY PARCELS | |
|-----------------------|---------|
| PARCEL | ACREAGE |
| G-8A | 30.371 |
| G-8B | 1.485 |
| G-8C | 1.959 |
| G-4A | 44.150 |
| G-4B | 57.074 |
| G-3 | 124.431 |
| G-7A | 20.006 |
| G-7B | 8.000 |
| G-7C | 7.000 |
| SUM | 294.477 |

| | | | |
|---|--|-----------------|--------------------|
|  HUNSAKER & ASSOCIATES IRVINE, INC. PLANNING • ENGINEERING • SURVEYING Three Hights • Irvine, CA 92618 • P: (949) 263-1010 • F: (949) 263-0729 | ORIGINAL NON-PARK PROPERTY | | |
| | IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA | | |
| DATE: 2/28/08 | REV: 3/06/09 | DWG: R. WHEELER | CHK'D: R. WILLIAMS |
| | | SCALE: 1"=2000' | W.O. 1856-80X |
| I:\HeritageFields\Exhibits\DA\Q903-revised\EXH-D.dwg | | | |

*HERITAGE FIELDS / ORANGE COUNTY GREAT PARK
GROUP A AND GROUP B FACILITIES CROSS SECTIONS
JULY 2009*



TRABUCO ROAD



TRABUCO ROAD

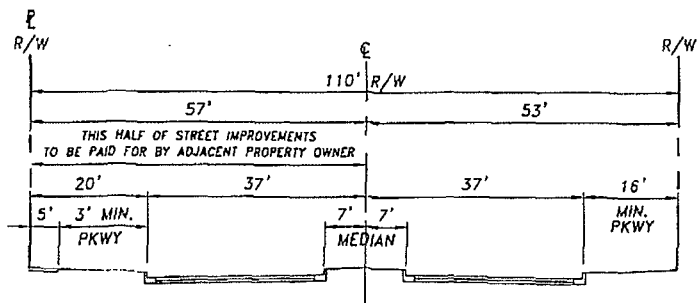
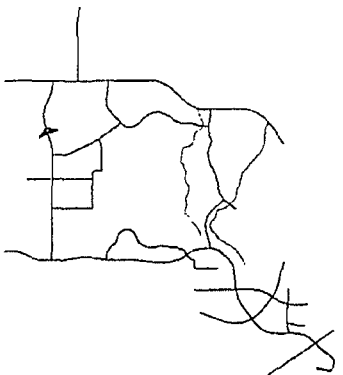
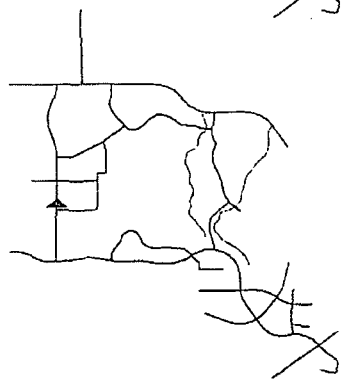
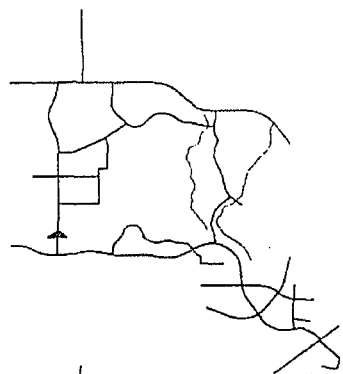
** TRAIL TRANSITIONS FROM PARKWAY ADJACENT TO CURB
ADJACENT AS REQUIRED TO PRESERVE EXISTING TREES

HUNSAKER & ASSOCIATES
P L A N N I N G • E N G I N E E R I N G • S U R V E Y I N G
Three Heights • Irvine, CA 92618 • TEL (949) 261-1010 • FAX (949) 261-0737

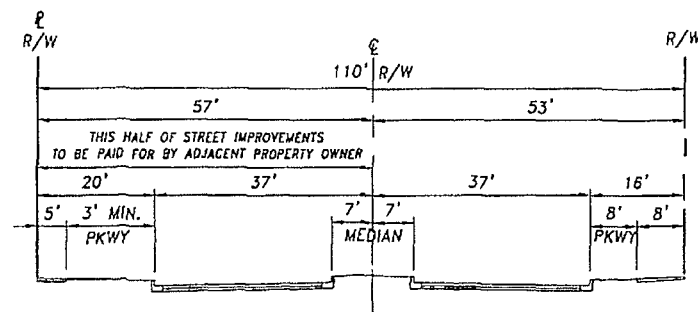
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SCALE: 1" = 30'
PROJECT NO.: 03/27/09

HORIZONTAL SCALE: 1" = 30'

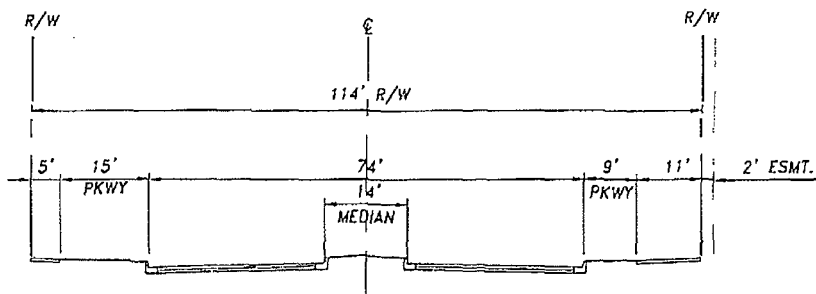
| | |
|------------------|-----------------------------|
| BACKBONE STREETS | PREPARED FOR |
| TRABUCO ROAD | Great Park NEIGHBORHOODS |



"O" STREET



"O" STREET



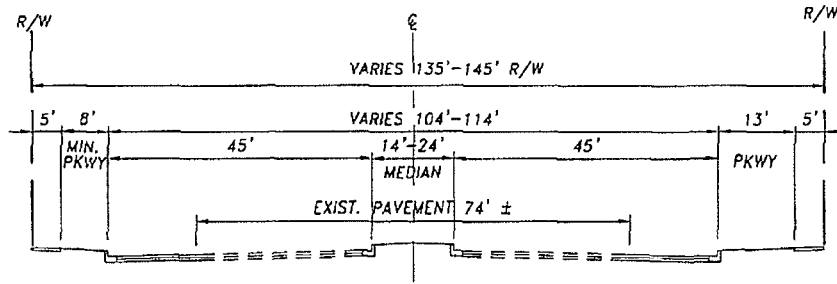
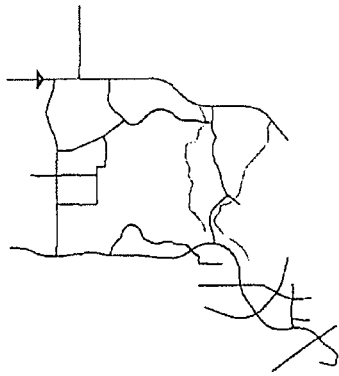
"O" STREET

HUNSAKER & ASSOCIATES
IRVINE, INC.
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Three Flights • Irvine, CA 92618 • Tel: (949) 263-1070 • Fax: (949) 263-0737

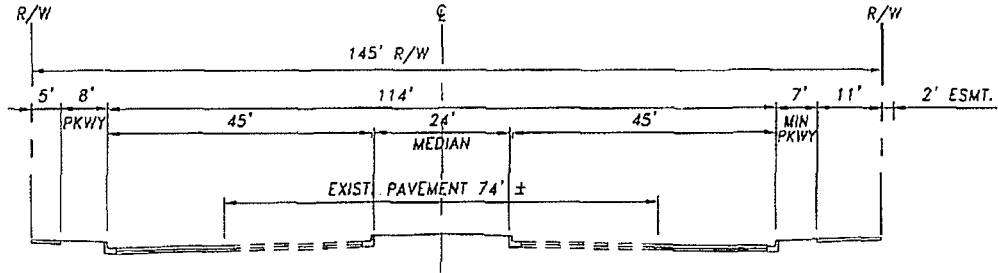
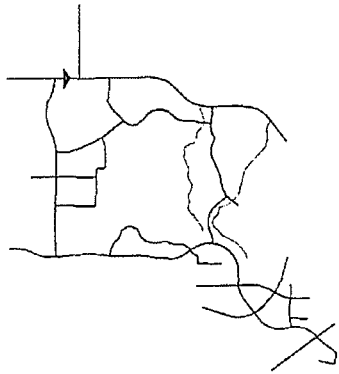
MAP DATE: 03/23/09
DATE: 03/23/09
PROJECT: GREAT PARK NEIGHBORHOODS

HORIZONTAL SCALE: 1" = 30'

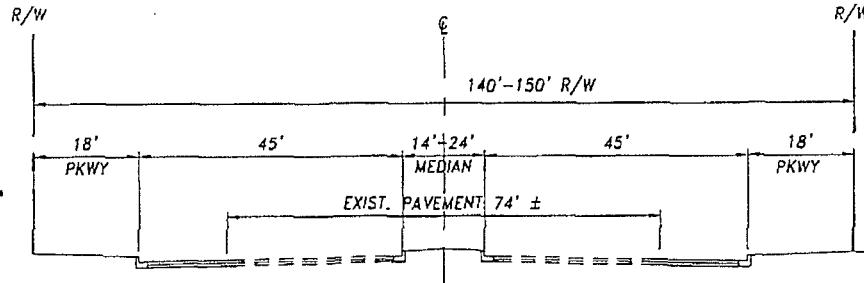
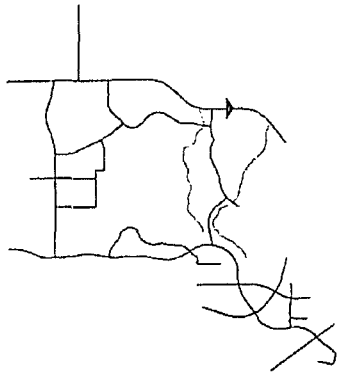
| | |
|-------------------|------------------------------------|
| BACKBONE STREETS | PREPARED FOR |
| "O" STREET | Great Park NEIGHBORHOODS |



IRVINE BOULEVARD



IRVINE BOULEVARD



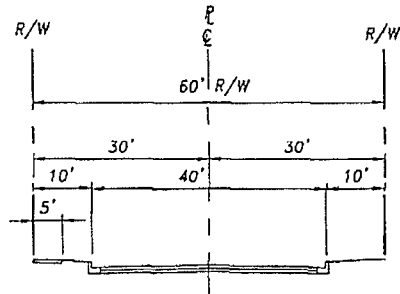
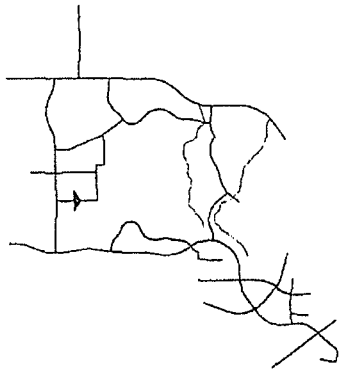
IRVINE BOULEVARD

HUNSAKER & ASSOCIATES
 IRVINE, INC.
 PLANNING • ENGINEERING • SURVEYING
 Three Highways • Irvine, CA 92618 • TEL: (949) 261-7070 • FAX: (949) 261-6771

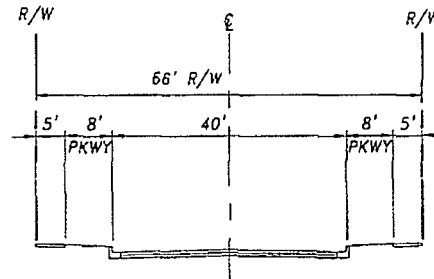
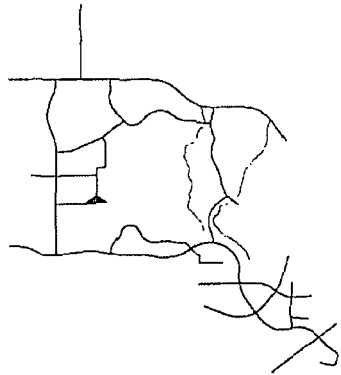
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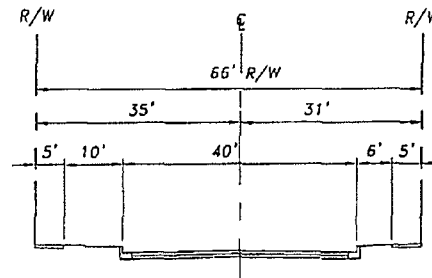
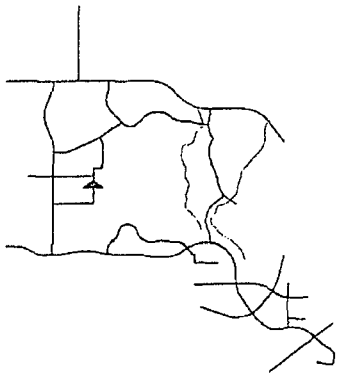
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|------------------|------------------------------------|
| BACKBONE STREETS | PREPARED FOR |
| IRVINE BLVD. | Great Park NEIGHBORHOODS |



"LV" STREET



"Y" STREET



"Y" STREET

HUNSAKER & ASSOCIATES
 IRVINE, CALIFORNIA
 PLANNING • ENGINEERING • SURVEYING
 One Regent • Irvine, CA 92618 • Tel: (949) 363-7910 • Fax: (949) 363-8729

MAP DATE: 02/23/09
 DATE: 03/23/09
 03/23/09

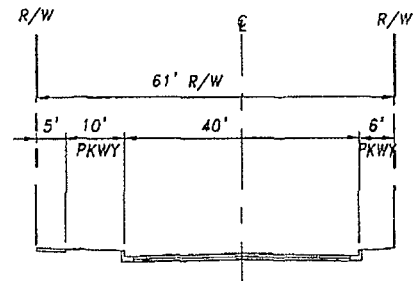
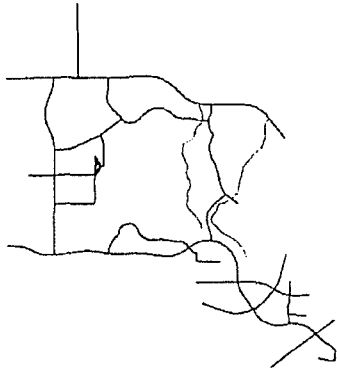
HORIZONTAL SCALE: 1" = 30'

BACKBONE STREETS

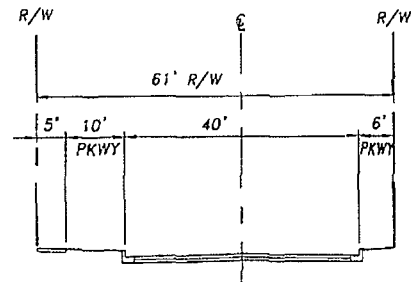
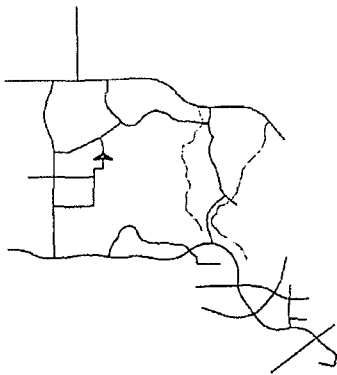
"LV" STREET &
 "Y" STREET

PREPARED FOR

Great Park
 NEIGHBORHOODS



"X" STREET



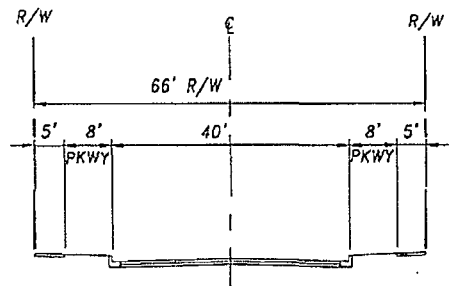
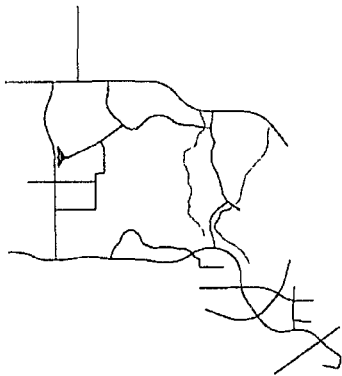
"T" STREET

HUNSAKER & ASSOCIATES
 IRVINE, INC.
 PLANNING • ENGINEERING • SURVEYING
 Three Eagles • Irvine, CA 92618 • PH 949 583-7070 • FX 949 583-0759

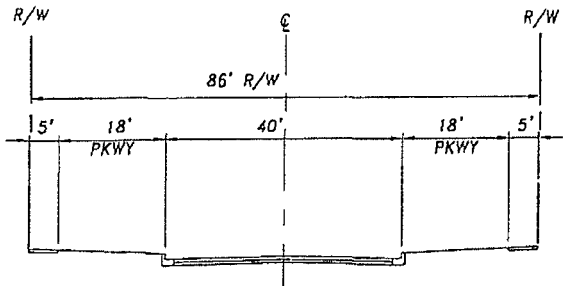
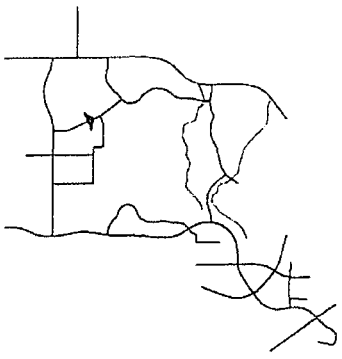
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 DATE PLOTTED
 03/23/09

HORIZONTAL SCALE: 1" = 30'

| | |
|----------------------------|------------------------------------|
| BACKBONE STREETS | PREPARED FOR |
| "X" STREET & "T" STREET | Great Park NEIGHBORHOODS |



"LQ" STREET



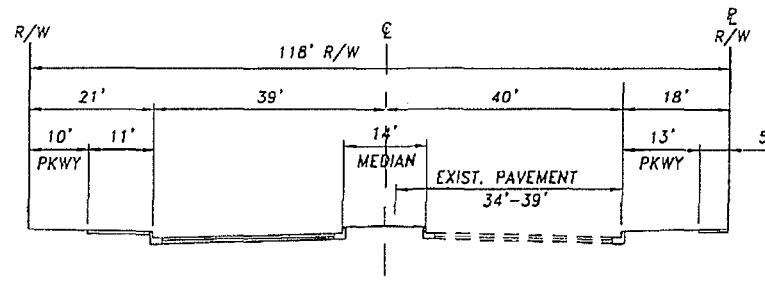
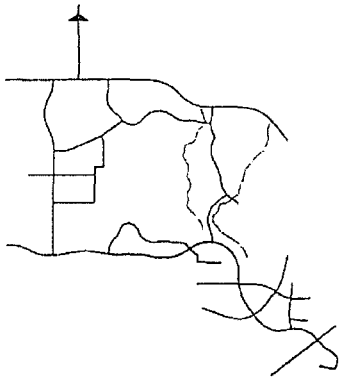
"LQ" STREET

HUNSAKER & ASSOCIATES
 IRVINE, INC.
 PLANNING • ENGINEERING • SURVEYING
 Three Hughes • Irvine, CA 92618 • Tel: (949) 543-7010 • Fax: (949) 543-0711

MAP DATE: 03/23/09
 BY: [Signature]
 CHECKED: [Signature]
 DATE: 03/23/09

HORIZONTAL SCALE: 1" = 30'

| | |
|--------------------|------------------------------------|
| BACKBONE STREETS | PREPARED FOR |
| "LQ" STREET | Great Park NEIGHBORHOODS |



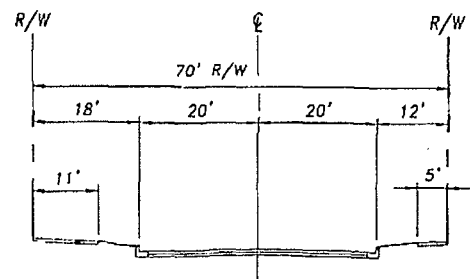
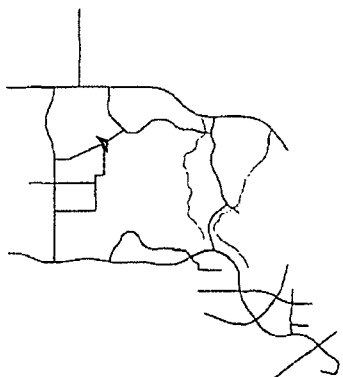
RIDGE VALLEY

HUNSAKER & ASSOCIATES
 IRVINE, INC.
 PLANNING • ENGINEERING • SURVEYING
 Three Pkwy • Irvine, CA 92618 • 714 (949) 543-7070 • FX: (949) 543-0751

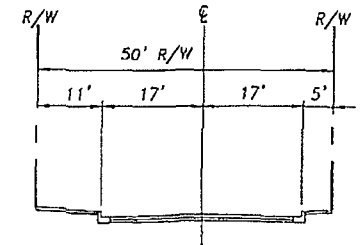
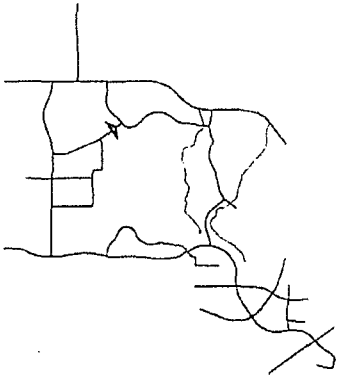
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 03/23/09 BY D.V.
 03/23/09

HORIZONTAL SCALE: 1" = 30'

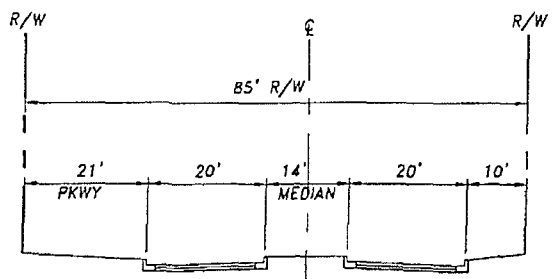
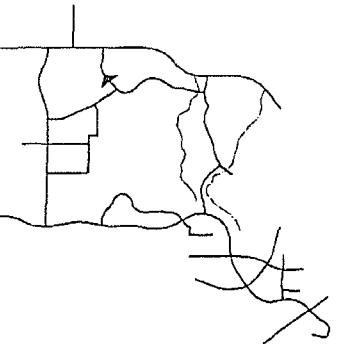
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|------------------|------------------------------------|
| BACKBONE STREETS | PREPARED FOR |
| RIDGE VALLEY | Great Park NEIGHBORHOODS |



"Q" STREET
(APPROVED ON AMENDED VTTM 17008 AS "T" ST.)



"Q" STREET
(APPROVED ON AMENDED VTTM 17008 AS "T" ST.)



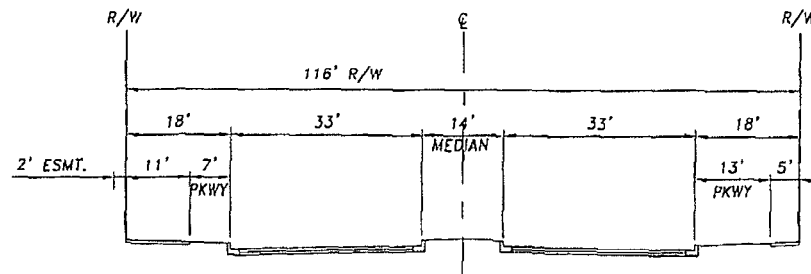
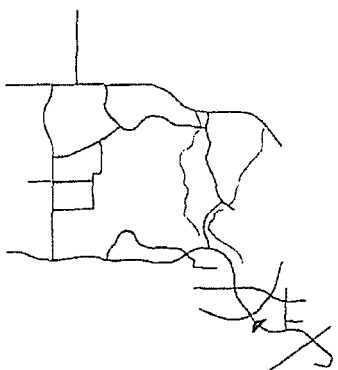
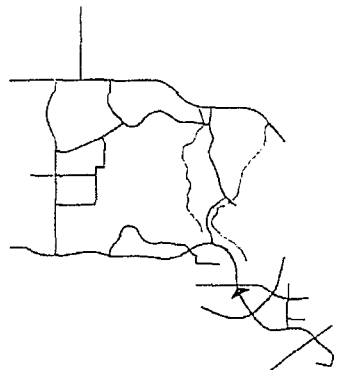
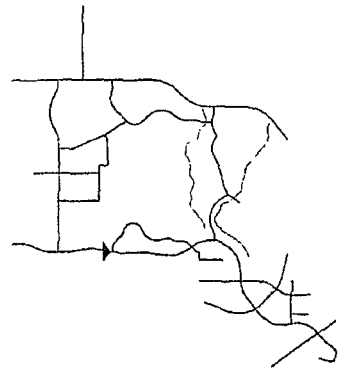
"A" STREET

HUNSAKER & ASSOCIATES
IRVINE, INC.
PLANNING • ENGINEERING • SURVEYING
17000 Hughes • Irvine, CA 92618 • TEL 949 263-1010 • FAX 949 263-0291

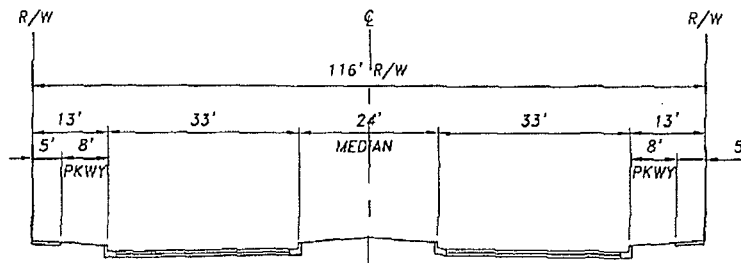
DATE CENTER
8/27/09
83723706

HORIZONTAL SCALE: 1" = 30'

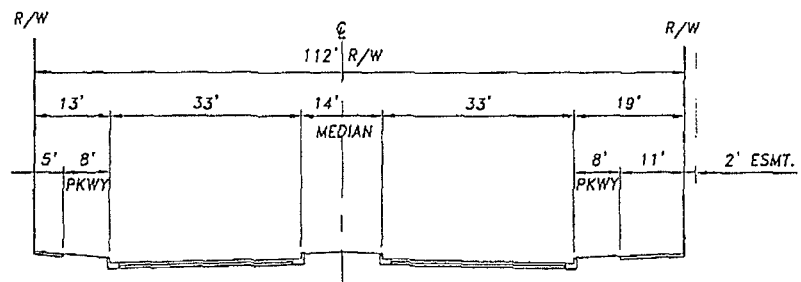
| | |
|---|--|
| BACKBONE STREETS "Q" STREET & "A" STREET | PREPARED FOR Great Park NEIGHBORHOODS |
|---|--|



MARINE WAY



MARINE WAY



MARINE WAY

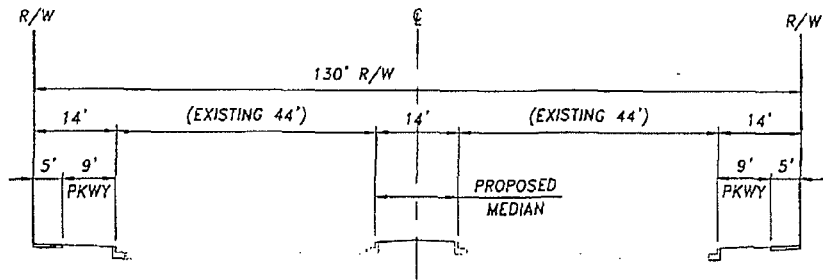
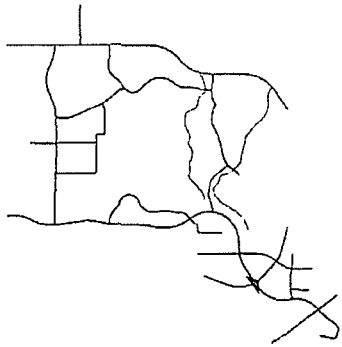
HUNSAKER & ASSOCIATES
 IRVINE, INC.
 PLANNING • ENGINEERING • SURVEYING
 Three Hughes • Irvine, CA 92618 • Tel: (949) 543-1010 • Fax: (949) 543-0759

MAP DATE: 08/26/09
 DATE: 03/23/09
 BY: B.S.V.

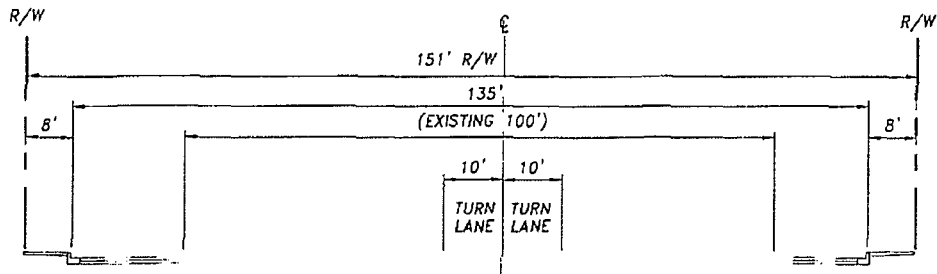
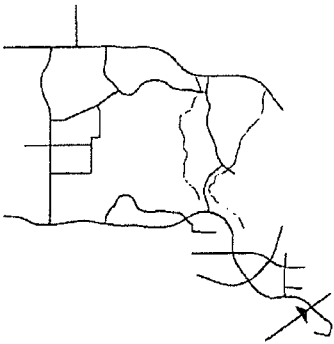
HORIZONTAL SCALE: 1" = 30'

BACKBONE STREETS
MARINE WAY

PREPARED FOR
Great Park
 NEIGHBORHOODS



ALTON PARKWAY



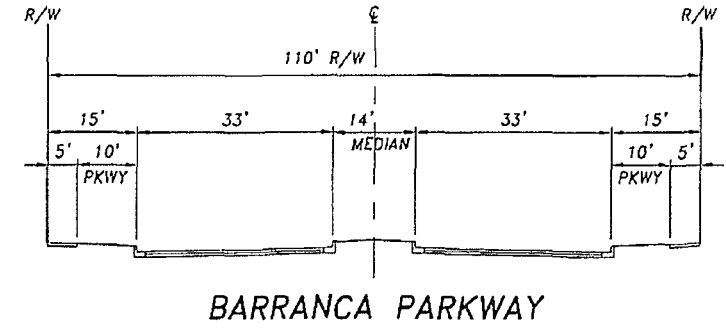
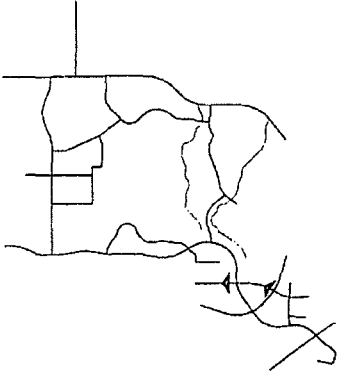
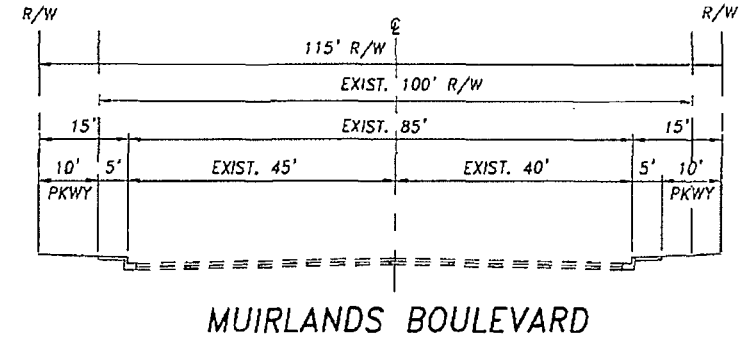
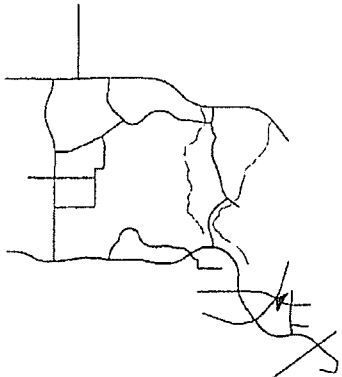
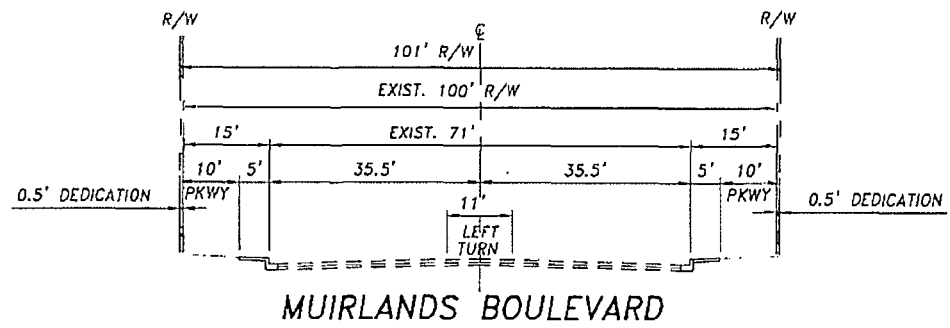
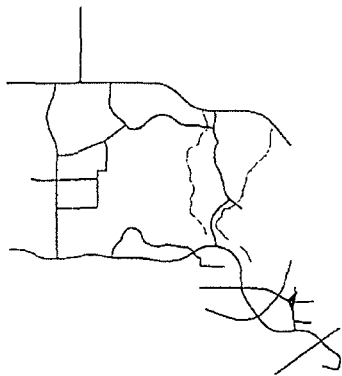
BAKE PARKWAY

HUNSAKER & ASSOCIATES
IRVINE, INC.
PLANNING • ENGINEERING • SURVEYING
13000 Highway 40 • Irvine, CA 92618 • TEL: (949) 263-7000 • FAX: (949) 263-0733

MAP DATE CENTER
BY: 07/23/09
BY: BDDY
DATE: 03/23/09

HORIZONTAL SCALE: 1" = 30'

| | |
|----------------------|------------------------------------|
| BACKBONE STREETS | PREPARED FOR |
| ALTON & BAKE PARKWAY | Great Park NEIGHBORHOODS |



HUNSAKER & ASSOCIATES
 IRVINE, INC.
 PLANNING • ENGINEERING • SURVEYING
 Three Hight • Irvine, CA 92618 • PH (949) 262-7070 • FX (949) 262-0779

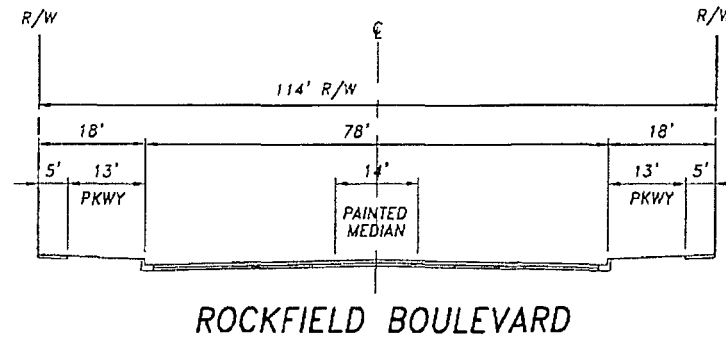
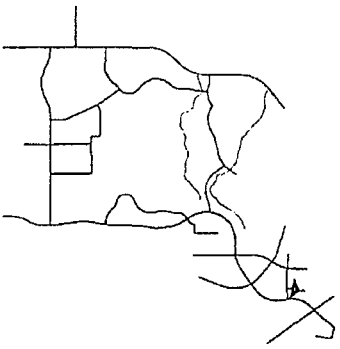
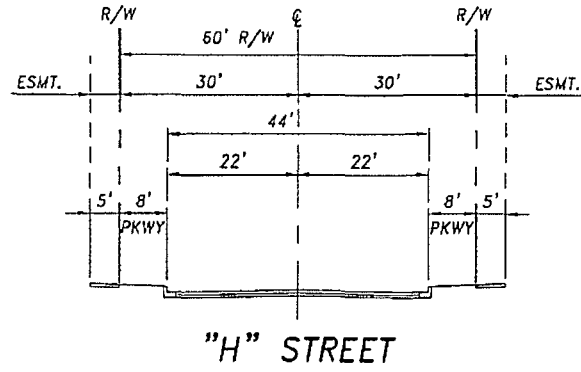
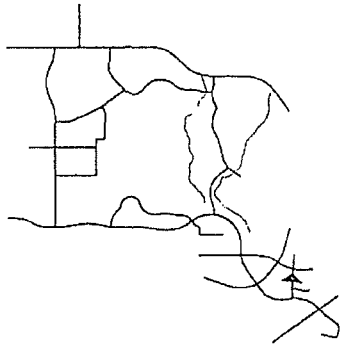
APP. DATE IDENTIFIER
 03/23/09 P.D.V.
 03/23/09

HORIZONTAL SCALE: 1" = 30'

BACKBONE STREETS
MUIRLANDS &
BARRANCA

PREPARED FOR

Great Park
 NEIGHBORHOODS

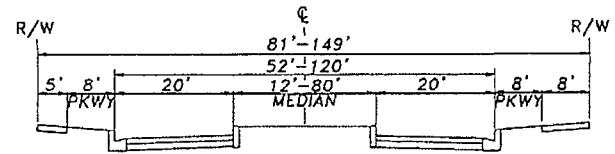
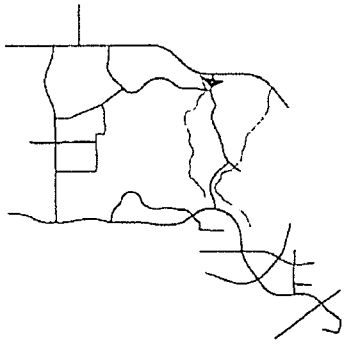


HUNSAKER & ASSOCIATES
 IRVINE, INC.
 PLANNING • ENGINEERING • SURVEYING
 Three Hughes • Irvine, CA 92618 • TEL 949 843-1000 • FAX 949 843-0753

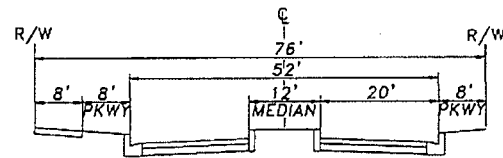
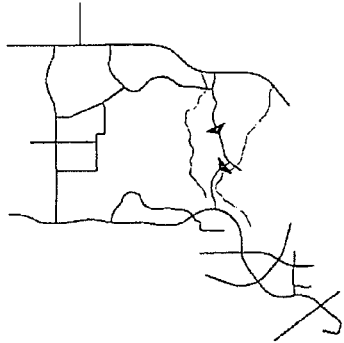
MAP DATE IDENTIFIER
 03/23/09 BY: D.V.
 03/23/09

HORIZONTAL SCALE: 1" = 30'

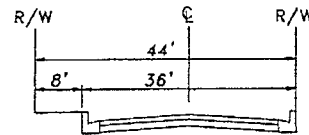
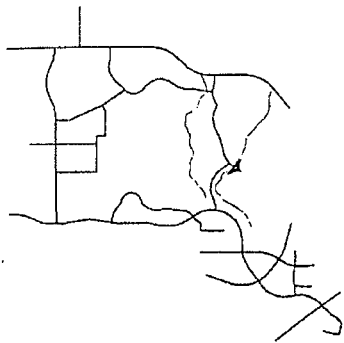
| | |
|---------------------------------------|---|
| BACKBONE STREETS | PREPARED FOR Great Park NEIGHBORHOODS |
| "H" STREET & ROCKFIELD | |



"C" STREET



"D" & "E" STREET



"PE" STREET



| |
|--------------------|
| MAP DATE: 03/23/09 |
| DATE: 03/23/09 |
| BY: D.V. |
| CHECKED: [] |

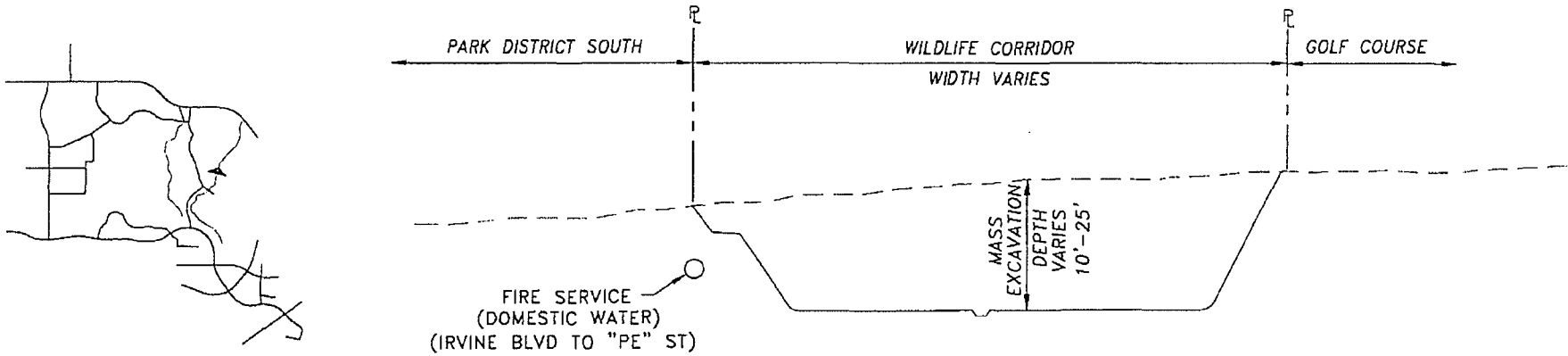
HORIZONTAL SCALE: 1" = 30'

BACKBONE STREETS

"C" STREET
"D" & "E" STREET
"PE" STREET

PREPARED FOR

Great Park
NEIGHBORHOODS



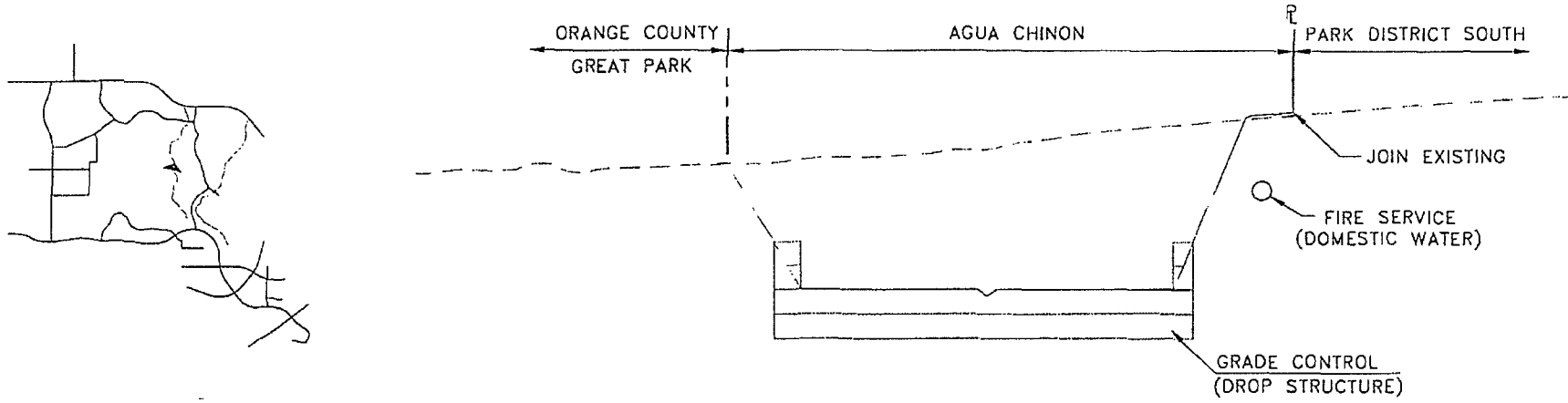
WILDLIFE CORRIDOR MASS EXCAVATION
 (FROM IRVINE BLVD TO BORREGO CHANNEL)



| |
|---------------------|
| MAP DATE IDENTIFIER |
| 11/17/08 |
| 07/08/09 |

HORIZONTAL SCALE: 1" = 100'

| | |
|-------------------|-----------------------------|
| BACKBONE STREETS | PREPARED FOR |
| WILDLIFE CORRIDOR | Great Park NEIGHBORHOODS |



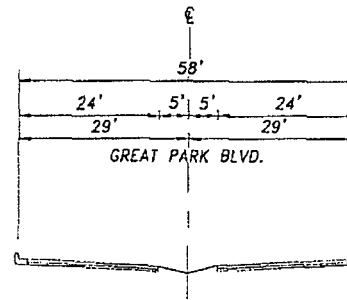
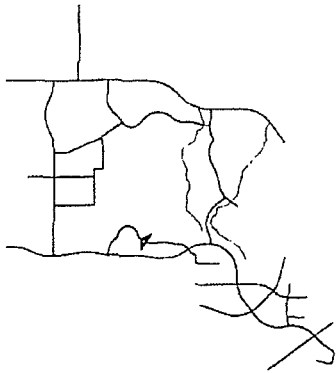
AGUA CHINON
 (FROM IRVINE BLVD TO NORTH OF MARINE WAY)



| |
|---------------------|
| MAP DATE IDENTIFIER |
| 07/06/09 |

HORIZONTAL SCALE: 1" = 100'

| | |
|--------------------|------------------------------------|
| BACKBONE STREETS | PREPARED FOR |
| AGUA CHINON | Great Park NEIGHBORHOODS |



***GREAT PARK BOULEVARD**

* NOTE: SECTION TAKEN FROM OCGP SCHEMATIC DESIGN

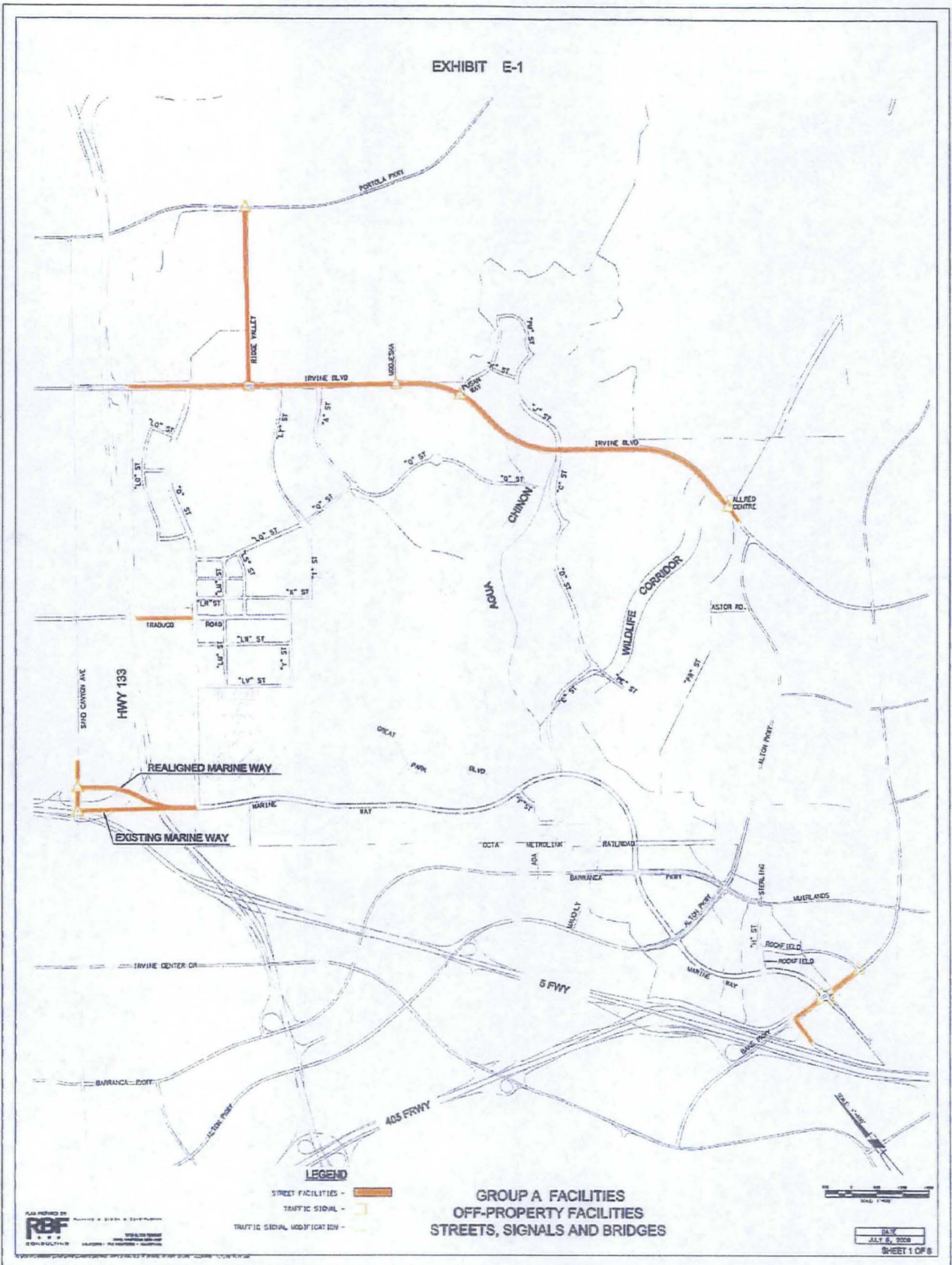
HUNSAKER & ASSOCIATES
 I A V I N E I N C.
 PLANNING • ENGINEERING • SURVEYING
 Three Heights • Irvine, CA 92618 • TEL: (949) 343-7000 • FAX: (949) 343-6729

MAP DATE CENTER
 03/23/09
 03/23/09

HORIZONTAL SCALE: 1" = 30'

| | |
|-----------------------------|------------------------------------|
| BACKBONE STREETS | PREPARED FOR |
| GREAT PARK BOULEVARD | Great Park NEIGHBORHOODS |

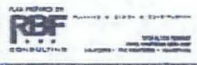
EXHIBIT E-1



LEGEND

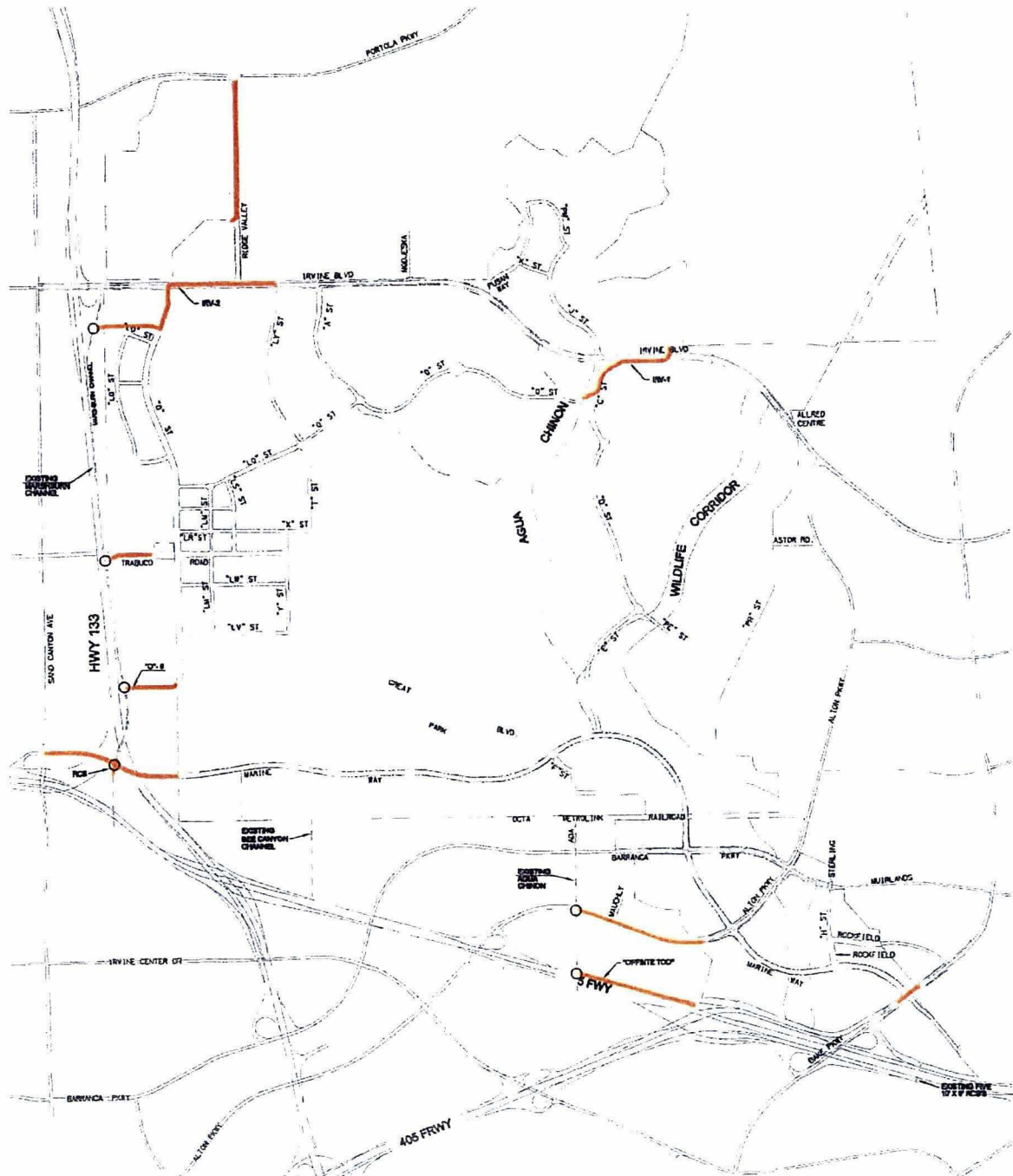
- STREET FACILITIES - [thick orange line]
- TRAFFIC SIGNAL - [yellow square]
- TRAFFIC SIGNAL MODIFICATION - [yellow rectangle]

GROUP A FACILITIES
OFF-PROPERTY FACILITIES
STREETS, SIGNALS AND BRIDGES






DATE: JULY 8, 2008
SHEET 1 OF 8

EXHIBIT E-1



LEGEND

- DRAINAGE FACILITIES - 
- EXISTING DRAINAGE FACILITY - 
- JOIN EXISTING DRAINAGE FACILITY - 

GROUP A FACILITIES
OFF-PROPERTY FACILITIES
STORM DRAIN



DATE
 JULY 8, 2009
 SHEET 2 OF 8

EXHIBIT E-1



LEGEND

- SEWER FACILITIES -
- EXISTING SEWER PIPELINES - - - - -

GROUP A FACILITIES
OFF-PROPERTY FACILITIES
SEWER

ALL PROVIDED BY
RBF
CONSULTING

SCALE: 1" = 100'

DATE
JULY 8, 2009
SHEET 3 OF 8

EXHIBIT E-1



LEGEND

- DOMESTIC WATER FACILITIES - [Orange line symbol]
- EXISTING DOMESTIC WATER PIPELINES - [Dashed line symbol]
- PRESSURE REDUCING STATION - [Inverted triangle symbol]

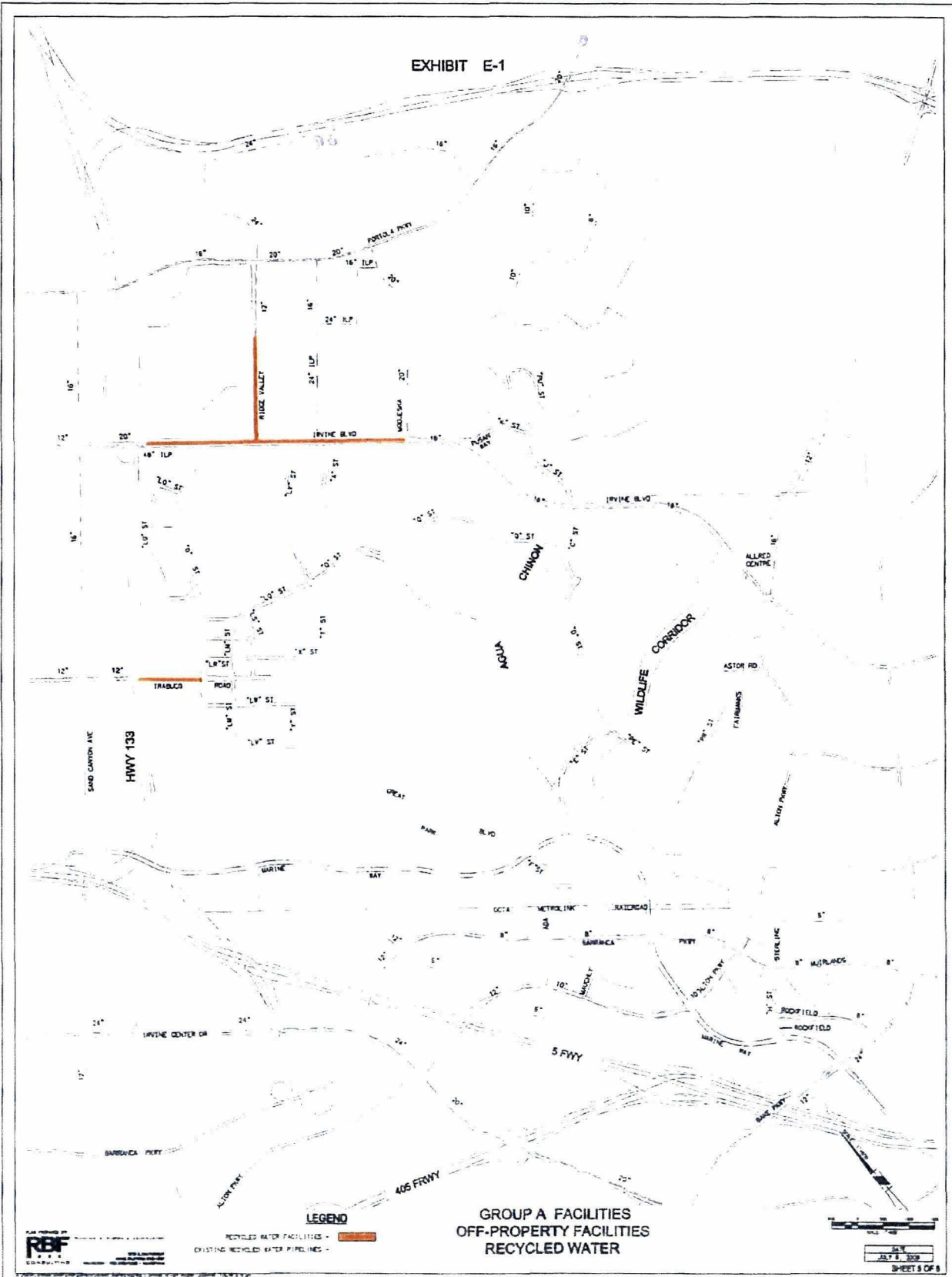


GROUP A FACILITIES
OFF-PROPERTY FACILITIES
DOMESTIC WATER



DATE
JULY 8, 2008
SHEET 4 OF 8

EXHIBIT E-1



LEGEND

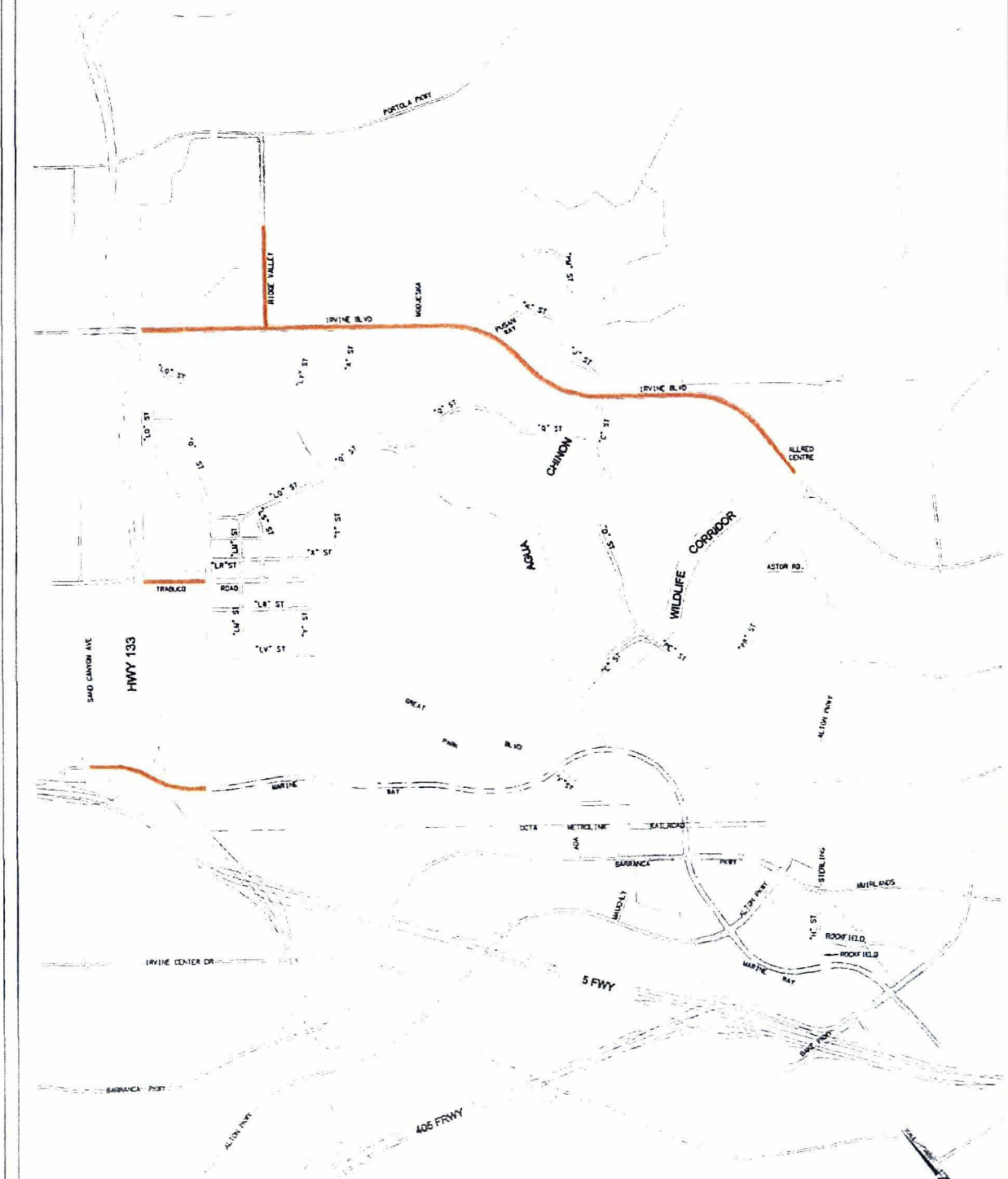
- RECYCLED WATER FACILITIES - [Thick orange line symbol]
- EXISTING RECYCLED WATER PIPELINES - [Thin orange line symbol]

GROUP A FACILITIES
OFF-PROPERTY FACILITIES
RECYCLED WATER



JULY 8, 2008
SHEET 5 OF 8

EXHIBIT E-1



LEGEND
 DRY UTILITY FACILITIES - [Red Line]

GROUP A FACILITIES
 OFF-PROPERTY FACILITIES
 DRY UTILITY

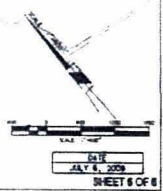
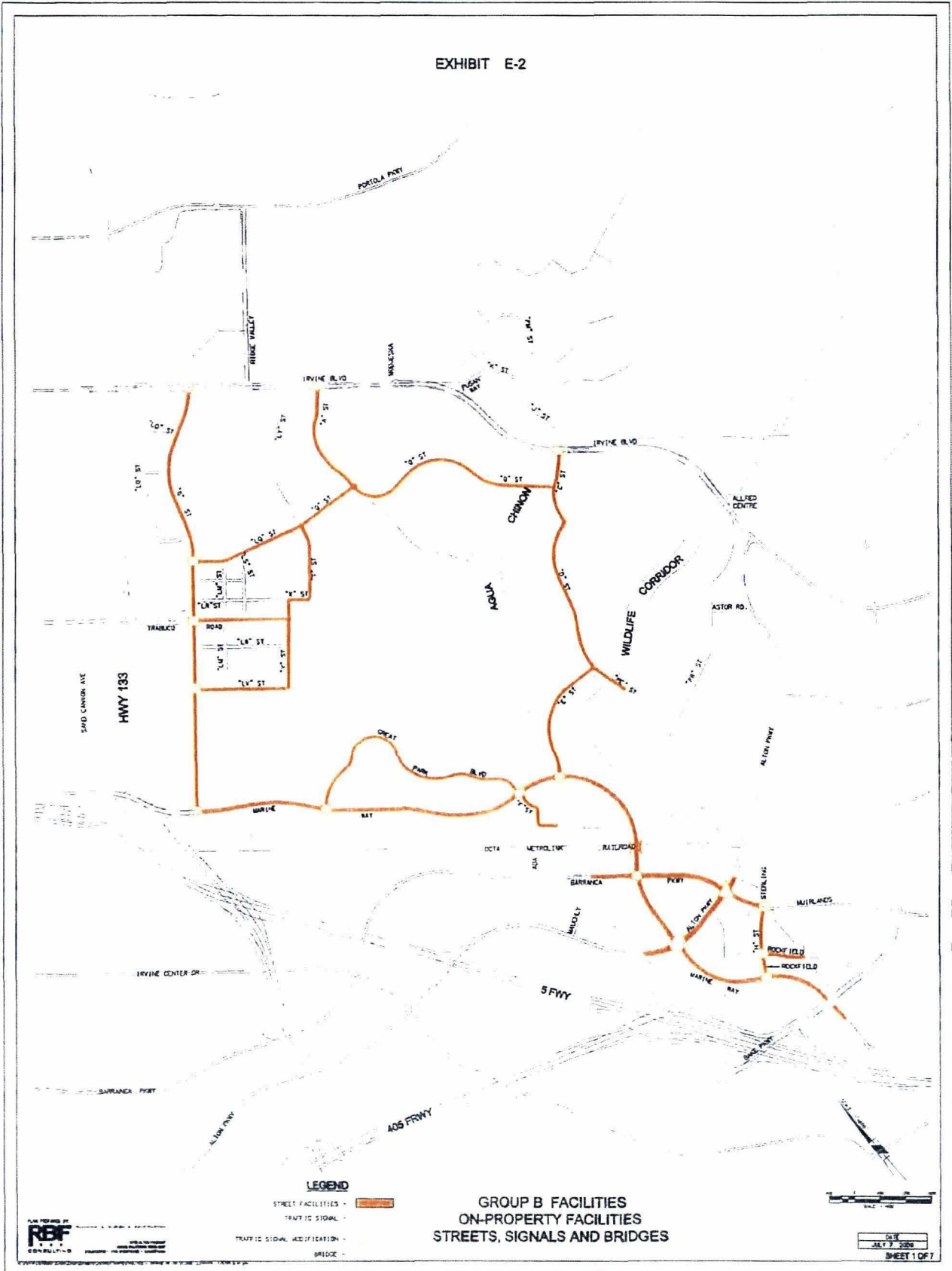


EXHIBIT E-2



LEGEND

- STREET FACILITIES - [Orange line symbol]
- TRAFFIC SIGNAL - [Yellow circle with black border symbol]
- TRAFFIC SIGNAL MODIFICATION - [Yellow circle with black border and central dot symbol]
- BRIDGE - [Yellow rectangle with black border symbol]

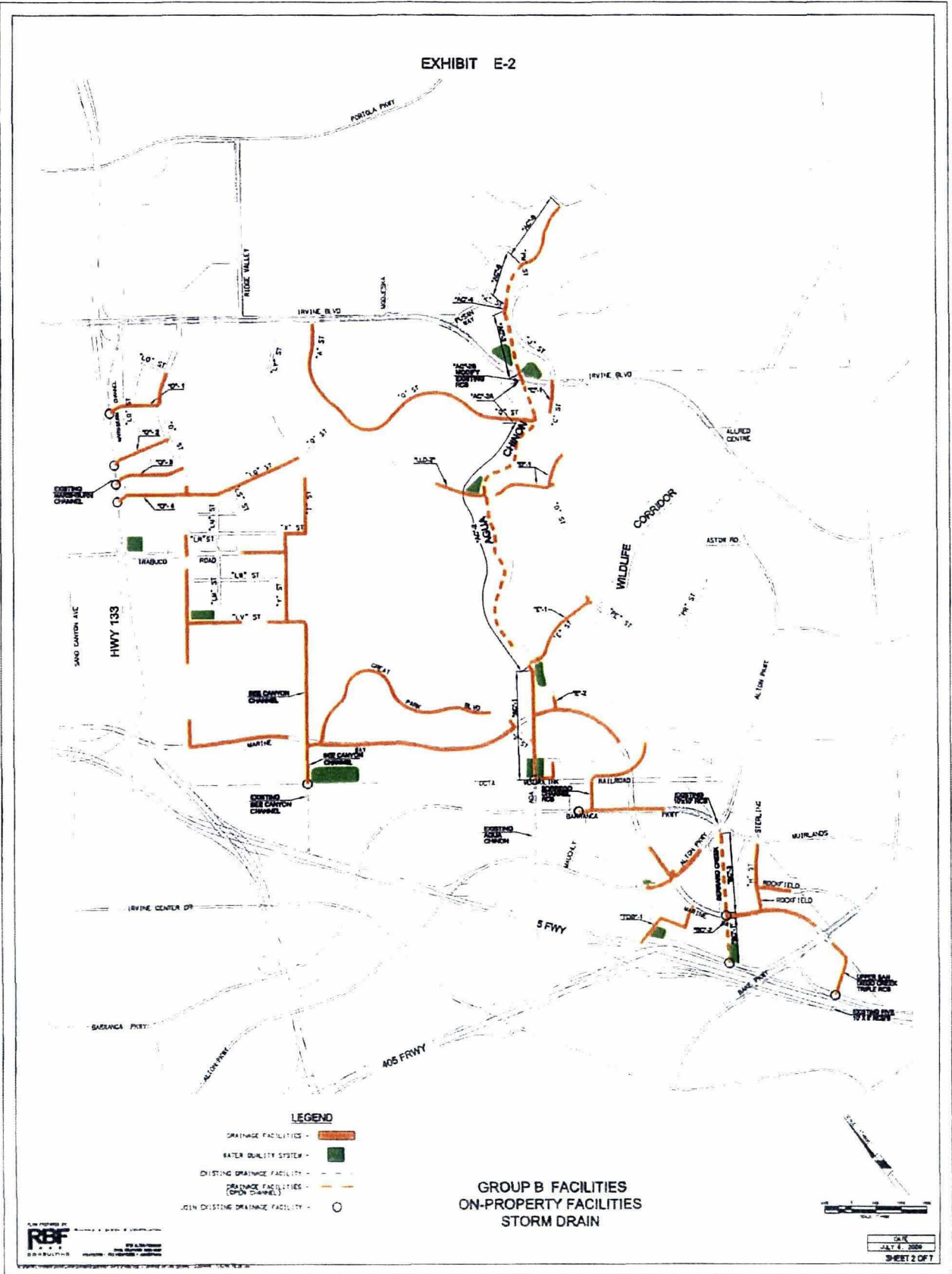
GROUP B FACILITIES
ON-PROPERTY FACILITIES
STREETS, SIGNALS AND BRIDGES

PREPARED BY
RBF
CONSULTING ENGINEERS
10000 BAYVIEW BLVD, SUITE 100, BAYVIEW, CA 94026
TEL: (415) 342-1000 FAX: (415) 342-1001
WWW.RBFCONSULTING.COM



DATE
JULY 2, 2008
SHEET 1 OF 7

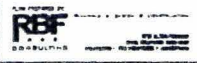
EXHIBIT E-2



LEGEND

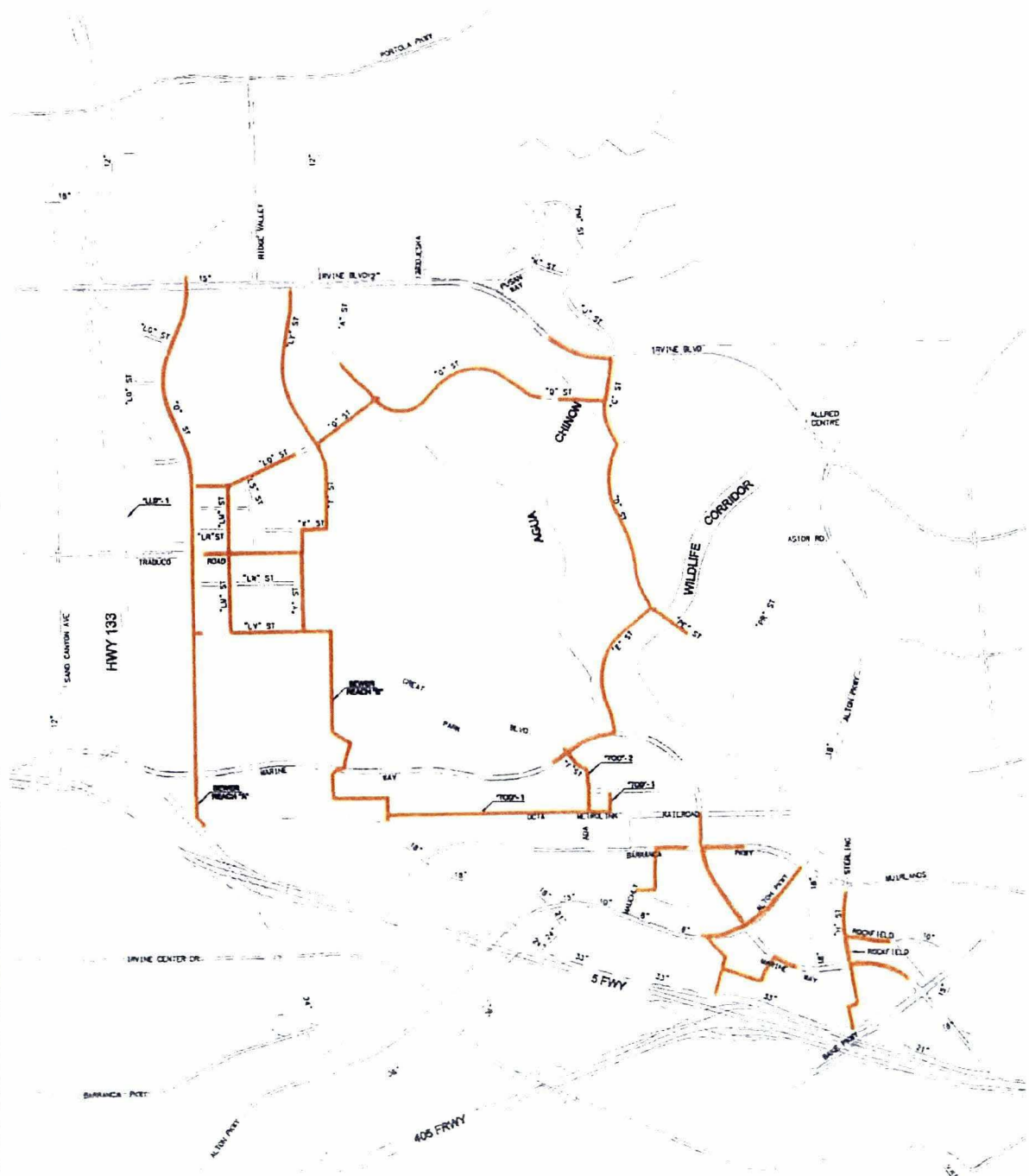
- DRAINAGE FACILITIES - [Orange line symbol]
- WATER QUALITY SYSTEM - [Green rectangle symbol]
- EXISTING DRAINAGE FACILITY - [Dashed line symbol]
- DRAINAGE FACILITIES (OPEN CHANNEL) - [Solid line symbol]
- JOIN EXISTING DRAINAGE FACILITY - [Circle symbol]

GROUP B FACILITIES
ON-PROPERTY FACILITIES
STORM DRAIN



DATE: JUL 4, 2009
SHEET 2 OF 7

EXHIBIT E-2

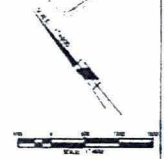


LEGEND

- SEWER FACILITIES - [Orange line symbol]
- EXISTING SEWER PIPELINES - [Dashed line symbol]

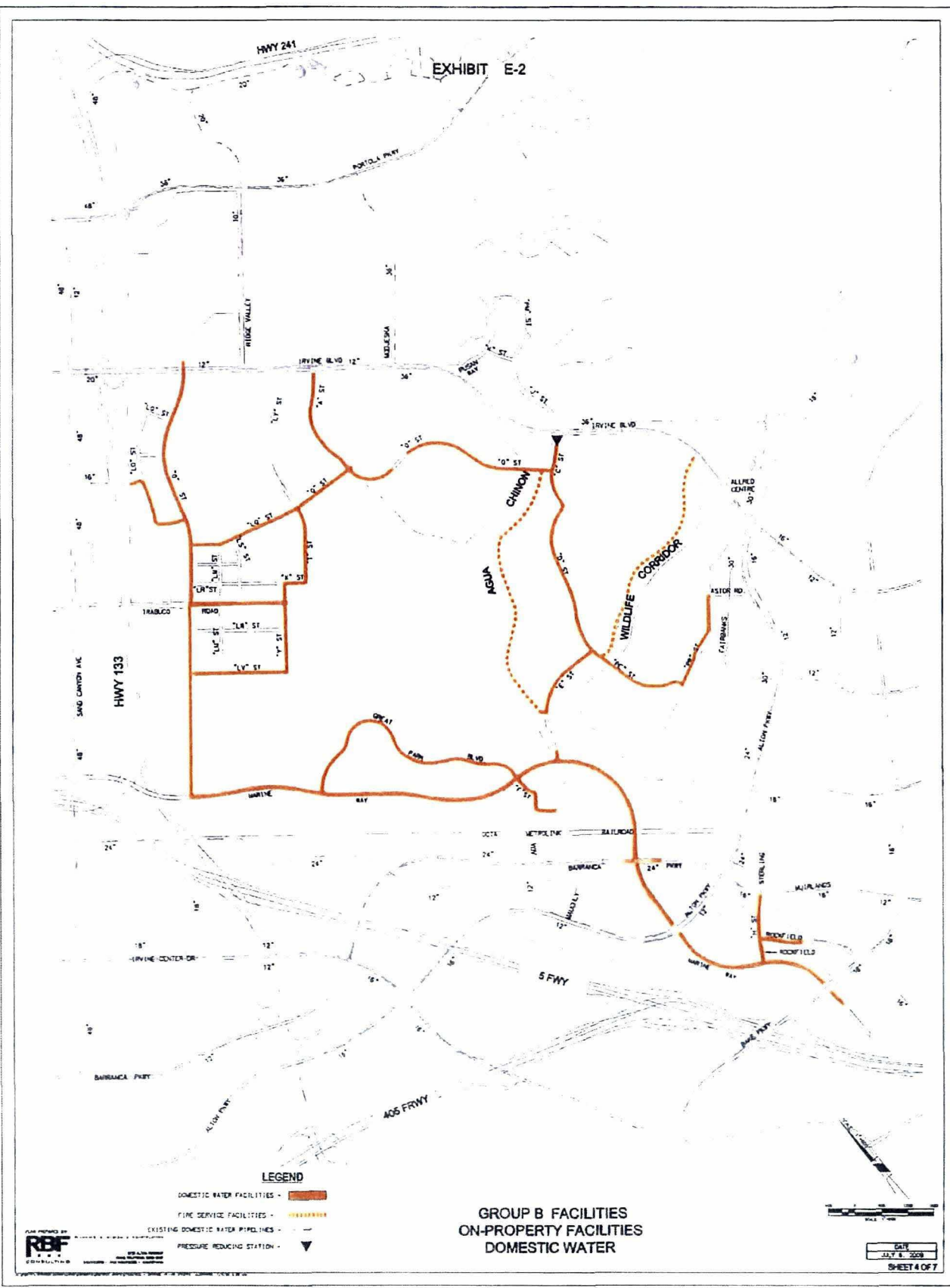
GROUP B FACILITIES
ON-PROPERTY FACILITIES
SEWER

PREPARED BY
RBF
REGISTERED PROFESSIONAL ENGINEER
CIVIL ENGINEERING
10000 BARRANCA PKY, SUITE 100
SAN DIEGO, CA 92121
TEL: 619-594-1100
WWW.RBFENGINEERS.COM



DATE
JULY 8, 2008
SHEET 3 OF 7

EXHIBIT E-2



LEGEND

- DOMESTIC WATER FACILITIES - [Orange line symbol]
- FIRE SERVICE FACILITIES - [Yellow line symbol]
- EXISTING DOMESTIC WATER PIPELINES - [Dashed line symbol]
- PRESSURE REDUCING STATION - [Downward triangle symbol]

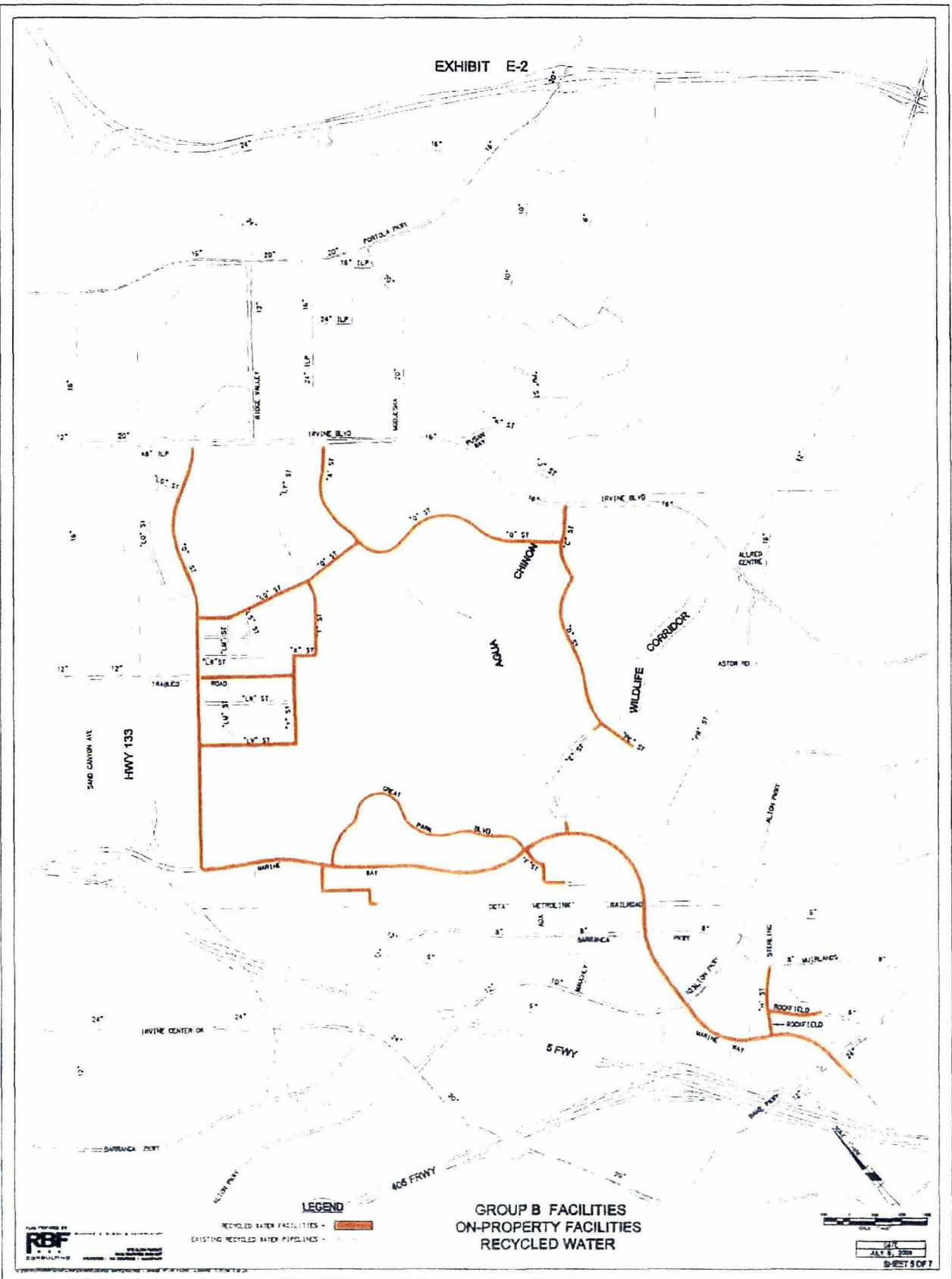
GROUP B FACILITIES
ON-PROPERTY FACILITIES
DOMESTIC WATER



DATE
JULY 8, 2008
SHEET 4 OF 7

PREPARED BY
RBF
REGISTERED PROFESSIONAL ENGINEER
CIVIL ENGINEERING
10000 W. CENTRAL EXPRESSWAY, SUITE 100
DALLAS, TEXAS 75243
TEL: 972.412.1100
WWW.RBFENGINEERS.COM

EXHIBIT E-2



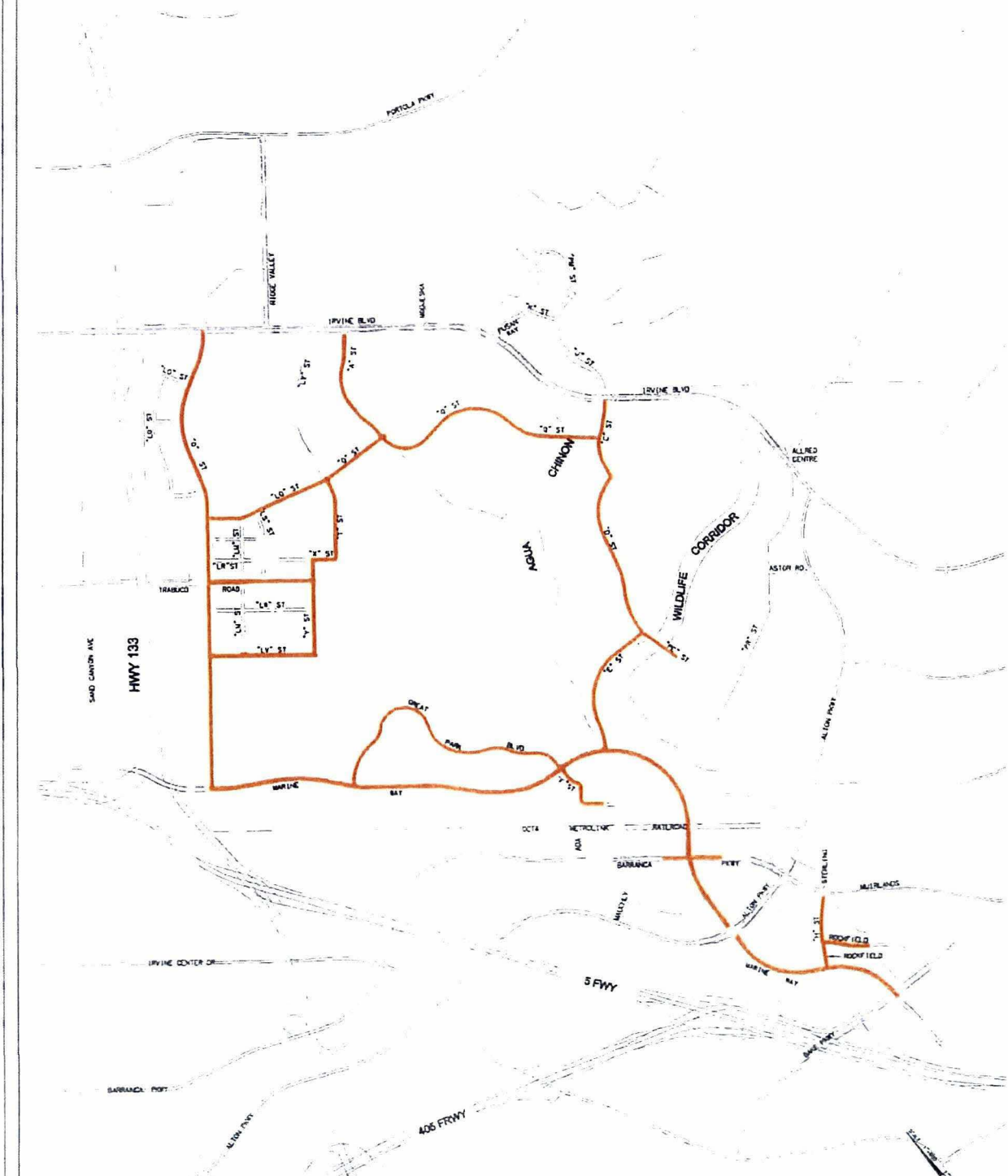
LEGEND

- RECYCLED WATER FACILITIES - (Orange line)
- EXISTING RECYCLED WATER PIPELINES - (Grey dashed line)

GROUP B FACILITIES
ON-PROPERTY FACILITIES
RECYCLED WATER

SCALE
JULY 8, 2009
SHEET 8 OF 7

EXHIBIT E-2



PLAN PREPARED BY
RBF
REGISTERED PROFESSIONAL ENGINEER
No. 10000
STATE OF CALIFORNIA
EXPIRES 12/31/2010

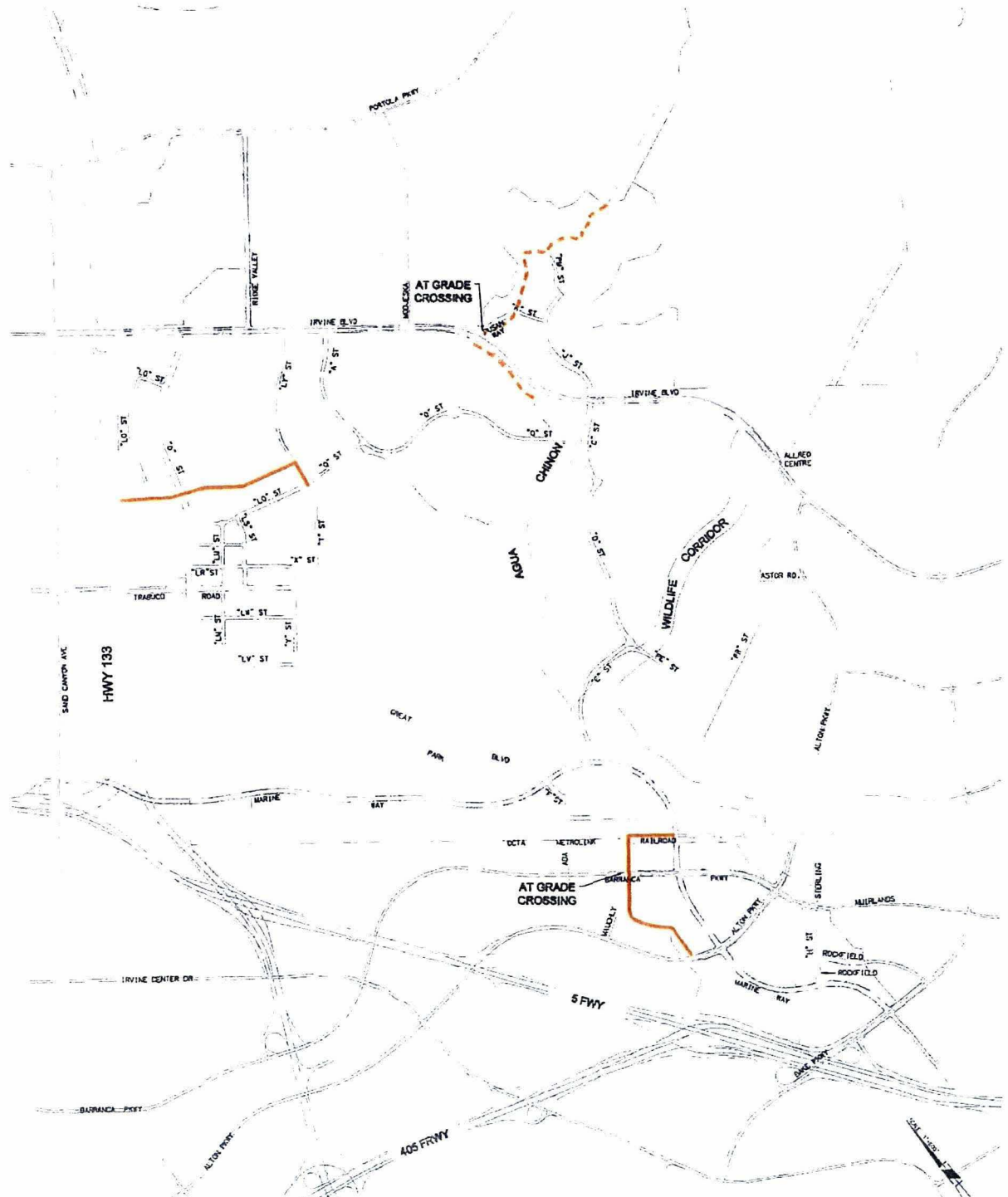
LEGEND
DRY UTILITY FACILITIES - [Orange Line]

**GROUP B FACILITIES
ON-PROPERTY FACILITIES
DRY UTILITIES**



DATE
JULY 8, 2009
SHEET 8 OF 7

EXHIBIT E-2

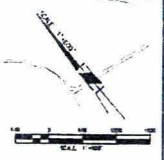


LEGEND

- REGIONAL TRAIL FACILITIES - [Orange line symbol]
- REGIONAL BIKING/HIKING TRAIL - [Yellow line symbol]
- TRAIL TO BE CONSTRUCTED BY OTHERS - [Dashed line symbol]

GROUP B FACILITIES
ON-PROPERTY FACILITIES
OFFSTREET TRAILS
(OUTSIDE OF STREET RIGHT OF WAY)

PLAN PREPARED BY
RFI
CONSULTANTS
CORPORATION



DATE
JULY 9, 2008
SHEET 7 OF 7

Exhibit E-3
Heritage Fields LLC / Orange County Great Park
Group A and Group B Facilities
Narrative

July 2009

CURRENT ENTITLEMENT AND PENDING APPROVALS

Group A and Group B facilities described herein are based upon the following approvals and pending approvals;

- 1) Approved Amended VTTM 17008 (Reso 08-2921)
- 2) Approved Master Landscape and Trail Plan for VTTM 17008 (Reso 08-2922)
- 3) Approved Modification to OCGP Streetscape Design Guidelines (Reso 08-2923)
- 4) Approved VTTM 17283 (Reso 08-2924)
- 5) Approved LLD Non Res Master Plan and Design Guidelines (Reso 08-2925)
- 6) Pending approval TPM 2008-152 for PA 30 R & D and Auto Center
- 7) Pending approval PA 30 6 Ac Parcel
- 8) City and County approved San Diego Creek Flood Control Master Plan Update dated October 2, 2008 (County case number EC29320, City case number 00457521-EMC).
- 9) City and County approved PA 51 Marshburn Watershed Update, dated October 2, 2008 (County case number EC29320, City case number 00457521-EMC)
- 10) IRWD SAMP (March 17, 2009).
- 11) Approved Conceptual Project Water Quality Management Plan (WQMP), Updating the Integrated Master Plan of Drainage, Water Quality and Habitat Mitigation. (April 23, 2009)

GROUP A FACILITIES (OFF-PROPERTY FACILITIES)^{1 2 3 4}

A) OFF-PROPERTY STREETS AND SIGNALS

- 1) **Irvine Blvd** - Street widening as required from State Highway 133 to west of Alton Parkway to include additional lanes (as required), right of way acquisition, multiple left turning lanes, right turn lanes, grading, subgrade prep, base, paving, curb and gutter, median, sidewalks, access ramps, trails (within ROW), adjust utilities to grade, remove utility poles, relocation/removal of existing utilities, underground utility lines, signing, striping, grinding, ac overlay, traffic control and street lights, slurry seal.
- 2) **Irvine Blvd Traffic Signals**- Proposed Signal at Ridge Valley, and signal modifications at Modjeska, Allred Centre and Pusan Way. Includes Signal interconnect, advance detection, easements and telemetry.

¹ Street Sections as illustrated per "HF / OCGP Backbone Facility Cross Sections.

² Demolition as required to construct Backbone Infrastructure is included.

³ "Green Streets" and "Sustainability" features are not considered Off or On-Property Facilities.

⁴ City shall provide right of way and easements necessary on City or County property to implement Backbone Infrastructure when required at no cost to Heritage Fields.

- 3) **Marine Way⁵** – Street improvements as required from Sand Canyon to “O” Street including grading, right of way acquisition and related relocation costs, base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, trails, adjust utilities to grade, access ramps, street lights and remove utility poles, relocation of existing utilities, signing, striping, and underground utility lines.
- 4) **Marine Way Traffic Signals** – Proposed Traffic Signal modification at Sand Canyon and at existing Marine Way / Sand Canyon intersection. Includes Signal interconnect, advance detections, easements and telemetry.
- 5) **Existing Marine Way at Sand Canyon** - Street improvements as required for the modifications to existing Marine Way and Sand Canyon to a “right-in and right out” entrance including existing signal pole and equipment removal, modifications on Sand Canyon and providing access to the existing users.
- 6) **Existing Sand Canyon at Marine Way / I-5 Ramps** – Restriping of the existing Sand Canyon and I-5 Ramps. As required in the approved Bake Parkway – Marine Way circulation system amendment.
- 7) **Bake Parkway** – Street-widening improvements as required including right of way acquisition, daylight grading, base, paving, curb, subgrade prep, gutter, signing, grinding, ac overlay, sidewalk, joins, striping, access ramps, traffic control, removals/relocation of existing utilities and adjust manholes and valves to grade. Includes Traffic Signal at Marine Way.
- 8) **Rockfield and Bake Parkway Intersection** – Street improvements as required including right of way acquisition for the modification to the existing intersection of Rockfield and Bake Parkway. Includes modification to the existing traffic signal.
- 9) **NB I-5 Bake Parkway Off Ramp**- Street improvements as required to the NB I-5 Bake Parkway off ramp. Includes Off Ramp widening as required including daylight grading, base, paving, joins, ac overlay, asphalt curb, signing, striping and modification to the existing signal.

⁵ For that portion of the Marine Way right of way affecting the area currently occupied by OCTA, Heritage Fields' contribution for such right of way acquisition costs shall not exceed \$2 million dollars and its contribution for the costs to relocate existing improvements within such right of way area shall not exceed \$500,000 (for a total of \$2.5 million dollars), provided that either the City or Heritage Fields can elect to obtain a third-party appraisal of the OCTA right of way area at the time of acquisition (from an appraiser mutually approved by both Parties) in which case Heritage Fields' contribution shall equal the valuation set forth in such appraisal. City shall contribute all amounts for the OCTA Marine Way right of way acquisition costs and costs to relocate existing improvements to the extent the same exceed Heritage Fields' contribution obligations. Notwithstanding any provision to the contrary in the Amended and Restated Agreement to which this Exhibit is attached or the Amended MIA, City shall be responsible to deliver right of way for purposes of commencement of work on such segment of Marine Way when dictated by the Master Phasing Plan & Schedule as defined in the Amended MIA.

- 10) **Ridge Valley** –Project related street improvements as required from existing Portola Parkway to Irvine Blvd including right of way acquisition, grading, removals, base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, trails, adjust manhole, access ramps, street lights, grinding, ac overlay, traffic control, water quality, remove utility poles, and underground utility lines. Includes traffic signal modification to existing traffic signal on Portola Parkway at Ridge Valley.

- 11) **Trabuco Road** - Full width street improvements from State Highway 133 to "O" street including right of way acquisition, base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, adjust manhole, access ramps, grinding, ac overlay, traffic control, street lights, water quality, remove utility poles, relocate existing utilities and underground of existing overhead 66 KV SCE transmission lines along Trabuco Road.

B) OFF-PROPERTY STORM DRAIN FACILITIES: (Facilities subject to change based upon processing the final Basis of Design Reports)

- 1) **Irvine Blvd (IRV-1, IRV-2)**- Storm Drain as required from State Highway 133 to west of Alton Parkway including laterals, catch basins, junction structures, manholes, local depressions for street drainage and connections to existing downstream facilities. Includes storm drain outside of Irvine Blvd. required to connect to existing downstream facilities.
- 2) **“O” Street (O-6)** – Storm drain as required from Marshburn Channel through PA-40 to “O” street including junction structures and connections to existing downstream facilities.
- 3) **Marine Way**-Storm Drain as required from Sand Canyon to “O” street including laterals, catch basins, junction structures, manholes and local depressions for street drainage, and connections to existing downstream facilities. Includes Raceway improvements, the Marshburn Channel and Marine Way crossing and roadway drainage improvements. Right of way required to connect to existing downstream facilities.
- 4) **Bake Parkway**- Storm Drain as required from Bake Parkway to San Diego Creek including laterals, catch basins, junction structures, manholes and local depressions for street drainage, and connections to existing downstream facilities.
- 5) **Alton Parkway**– Storm Drain as required from the T.O.D to existing Agua Chinon including laterals, junction structures, manholes, catch basins, local depressions, and connections to existing downstream facilities.
- 6) **Ridge Valley**– Storm drain as required from existing Portola Parkway to Marshburn Basin including right of way acquisition storm drain junction structures, manholes, catch basins, local depressions and connections to existing downstream facilities.
- 7) **Trabuco Road** – Storm drain as required from Marshburn Channel along Trabuco Road to “O” street including laterals, junction structures, manholes, catch basins, local depressions and connections to existing downstream facilities.
- 8) **“Offsite” TOD**– Regional drainage system from southeast corner of the General Industrial Zoning District Portion of PA 30 south of Marine Way and following the rear of the existing properties fronting Technology Drive, and connection to Agua Chinon. Improvements include a base level drainage infrastructure to provide flood protection, including any required modifications to the exiting downstream Caltrans drainage system. Includes land and right of way acquisition.

C) OFF-PROPERTY SEWER FACILITIES: ⁶

- 1) **Marine Way**-Sewer mainline as required from Sand Canyon to Marshburn Channel Includes laterals, monitoring manholes, manholes, adjusting rims to grade, connection to downstream facilities and replacement of existing pavement and striping.
- 2) **Reach "A" Sewer** -Sewer mainline as required from the existing sleeve (Under the I-5 freeway just south of Technology Drive) to the south side of the railway right of way. Includes monitoring manholes, manholes, adjusting rims to grade, connection to downstream facilities and replacement of existing pavement and striping.
- 3) **Trabuco Road**– Sewer mainline as required from SR 133 to "O" Street. Includes laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities.

D) OFF-PROPERTY DOMESTIC AND RECYCLED WATER FACILITIES: ⁶

- 1) **Irvine Blvd**- Domestic water main as required from State Highway 133 to "O" street includes tees and mainline stubs, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, connection to existing facilities and replacement of existing pavement and striping.
- 2) **Irvine Blvd**- Recycled water mains as required from State Highway 133 to Modjeska includes tees and mainline stubs, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, connection to existing facilities and replacement of existing pavement and striping.
- 3) **Marine Way**- Domestic water main as required from Sand Canyon to "O" street includes tees and mainline stubs, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, connection to existing facilities, and replacement of existing pavement and striping.
- 4) **Ridge Valley**– Domestic and recycled water mains as required from point of connection south of Portola to Irvine Blvd includes tees and mainline stubs, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, connection to existing facilities, pressure reducing, and replacement of existing pavement and striping
- 5) **Trabuco Road**– Domestic and recycled water mains as required from west of SR 133 (through Caltrans Bridge) to "O" street includes tees and mainline stubs, valves, air vac, blow off, fittings, fire hydrant assembly, tees, thrust blocks, concrete cap, irrigation water service and connection to existing facilities.

⁶ Regional IRWD Facilities are considered Off-property facilities.

- 6) **Astor Road**– Domestic water main as required from Borrego Channel to Fairbanks includes tees, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, connection to existing facilities, and pressure reducing.

E) OFF-PROPERTY LANDSCAPE, AMENITIES, IRRIGATION SYSTEM, AND PLANTINGS IN THE FOLLOWING RIGHT-OF-WAY

- 1) **Irvine Blvd.** from State Highway 133 to Alton Parkway.
- 2) **Marine Way** from Sand Canyon to "O" street.
- 3) **Bake Parkway.**
- 4) **Ridge Valley** from existing Portola to Irvine Blvd.
- 5) **Trabuco Road** from State Highway 133 to "O" street.

F) OFF-PROPERTY DRY UTILITIES

Facilities include CATV, telephone, electric, gas and may include relocation or conversion of transmission lines including trenching, shading, conduit risers, pullboxes, vaults, hand holes, etc., in the following streets:

- 1) **Irvine Blvd.** from State Highway 133 to west of Alton Parkway.
- 2) **Marine Way** from Sand Canyon to "O" street.
- 3) **Ridge Valley** from point of connection south of Portola Parkway to Irvine Blvd.
- 4) **Trabuco Road** from State Highway 133 to "O" street.

GROUP B FACILITIES (ON-PROPERTY FACILITIES)^{1 2 3 4}

A) ON-PROPERTY STREET AND SIGNALS

- 1) **Marine Way** – Street improvements as required from “O” street to Bake Parkway including grading, right of way acquisition, base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, trails, adjust utilities to grade, access ramps, street lights and remove utility poles, relocation of existing utilities, signing, striping, and underground utility lines.
- 2) **Marine Way at railroad bridge** – Bridge improvements including railway improvements, grading, abutments, access ramps, lighting, drainage, utility crossings, sidewalks, trails and right of way acquisition.
- 3) **Marine Way Traffic Signals** – Proposed Traffic Signals at “O”, “F”, “E”, Great Park Blvd., Barranca, Alton, and Rockfield. Includes Signal interconnect, advance detection, easements, and telemetry.
- 4) **Irvine Blvd Traffic Signals**- Proposed Traffic Signals at “O”, “A” street, “C” street. Includes Signal interconnect, advance detection, easements, and telemetry.
- 5) **Barranca Parkway/Muirlands Boulevard** - Street improvements as required from east of Ada to Sterling, including grading, base, paving, curb, median, subgrade prep, gutter, striping, access ramps, traffic control, grinding, ac overlay, sidewalk, joins and adjust existing utilities to grade. Also includes modifications to Barranca due to the Marine Way / Railway overcrossing and a modification to existing Traffic Signal on Barranca at Alton.
- 6) **Muirlands and Sterling Traffic signal** – Proposed traffic signal at Muirlands and Sterling ave. Signal interconnect, advanced detection, easements, and telemetry.
- 7) **Alton Parkway** - Street improvements, mostly comprised of widening of existing, as required from west of Marine Way to east of Barranca Parkway including base, paving, curb, medians, sidewalks, grinding, ac overlay, traffic control, subgrade prep, gutter, signing and striping, access ramps, and adjust existing utilities to grade.
- 8) **Rockfield Blvd** - Street improvements as required from existing Rockfield to Marine Way including right of way acquisition, base, paving, curb, subgrade prep, gutter, median, signing and striping, sidewalks, trails (within ROW), adjust manhole, access ramps, street lights and remove utility poles, and underground utility lines. Includes traffic signal at “H” Street.

¹ Street Sections as illustrated per “HF / OCGP Backbone Facility Cross Sections.

² Demolition as required to construct Backbone Infrastructure is included.

³ “Green Streets” and “Sustainability” features are not considered Off or On-Property Facilities.

⁴ City shall provide right of way and easements necessary on City or County property to implement Backbone Infrastructure when required at no cost to Heritage Fields.

- 9) **"F" Street** - Full width street improvements including base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, adjust manhole, access ramps, street lights, water quality, and underground utility lines.
- 10) **"O" Street (Trabuco to Irvine Blvd)**- Full width street improvements from Trabuco to Irvine Blvd including right of way acquisition, base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, trails, adjust manhole, access ramps, street lights, water quality, remove utility poles, relocate existing utilities and underground utility lines.
- 11) **"O" Street (Trabuco to Marine Way)**- Half width street improvements from Trabuco road to Marine Way including right of way acquisition, base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, adjust manhole, access ramps, street lights, water quality, remove utility poles, relocate existing utilities and underground of 66KV SCE Transmission line from Trabuco to approximately 2500 lf south of Trabuco.
- 12) **"O" Street Traffic Signals**– Proposed traffic signals at Trabuco Road", "L-Q", and "L-V". Signal interconnect, advance detection, easements, and telemetry
- 13) **Trabuco Road** - Full width street improvements from "O" street to "Y" street including base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, adjust manhole, access ramps, grinding, ac overlay, traffic control, street lights, and water quality.
- 14) **"L-V" Street** - Full width street improvements including base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, adjust manhole, access ramps, street lights, and water quality.
- 15) **"A" Street** - Full width street improvements including base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, adjust manhole, access ramps, street lights, and water quality.
- 16) **"Y" Street** - Full width street improvements including base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, adjust manhole, access ramps, street lights, and water quality.
- 17) **"X" Street** - Full width street improvements including base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, adjust manhole, access ramps, street lights, and water quality.
- 18) **"T" Street** - Full width street improvements including base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, adjust manhole, access ramps, street lights, and water quality.
- 19) **"Q" Street** - Full width street improvements including base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, adjust manhole, access ramps, street lights, and water quality.
- 20) **"C" Street** - Full width street improvements including base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, adjust manhole, access ramps, street lights, and water quality.

- 21) **“D” Street** - Full width street improvements including base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, adjust manhole, access ramps, street lights, and water quality.
- 22) **“E” Street** - Full width street improvements including base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, adjust manhole, access ramps, street lights, and water quality.
- 23) **“P-E” Street** - Full width street improvements including base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, adjust manhole, access ramps, street lights, and water quality.
- 24) **“H” Street** - Full width street improvements including base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, adjust manhole, access ramps, street lights, and water quality.
- 25) **“L-Q” Street** - Full width street improvements including base, paving, curb, subgrade prep, gutter, median, striping, sidewalks, adjust manhole, access ramps, street lights, and water quality.
- 26) **Great Park Blvd** - Full width street improvements including base, paving, curb, subgrade prep, gutter, striping, sidewalks, adjust manhole, access ramps, street lights, and water quality for paved surface. Modification to Extraction Wells and Shallow Ground Water Unit is not included.

B) ON-PROPERTY STORM DRAIN FACILITIES: (Facilities subject to change based upon Processing the Basis of Design Reports)

- 1) **Marine Way**-Storm Drain as required from "O" street to Bake Parkway including laterals, catch basins, junction structures, manholes and local depressions for street drainage, and connections to existing downstream facilities. Includes storm drain outside of Marine Way.
- 2) **Barranca Parkway**- Storm Drain as required from east of Ada to east of Alton Parkway including laterals, catch basins, junction structures, manholes, and local depressions for street drainage, and connections to existing downstream facilities.
- 3) **Alton Parkway**- Storm Drain as required from west of Barranca Parkway to west property line of the T.O.D.including laterals, junction structures, manholes, catch basins, local depressions, and connections to existing downstream facilities.
- 4) **Rockfield Blvd** – Storm drain as required from Marine Way to "H" street including storm drain mainlines and connections to downstream facilities.
- 5) **"H" Street** – Storm drain as required from Rockfield Blvd to Muirlands. Includes storm drain from "H" st to existing storm drain (east property line of the TOD). Includes laterals, junction structures, manholes, catch basins, local depressions and connections to downstream facilities.
- 6) **"O" Street (O-1, O-2, O-3, O-4)**– Storm drain as required from L-G street to Trabuco Road including junction structures, manholes, catch basins, local depressions and connections to existing downstream facilities.
- 7) **"L-Q" Street**– Storm drain as required from "O" street to "L-Y" street including laterals, junction structures, manholes, catch basins, local depressions and connections to downstream facilities.
- 8) **"O" Street (O-6)**– Storm drain as required from PA-40 to "L-R" street within "O" street including junction structures, manholes, catch basins, local depressions and connections to downstream facilities.
- 9) **"O" Street to Marine Way**– Storm drain as required within "O" street, south of O-6, to Marine Way including junction structures, manholes, catch basins, local depressions and connections to existing downstream facilities.
- 10) **Trabuco Road** – Storm drain as required from "O" street to "Y" street including laterals, junction structures, manholes, catch basins, local depressions and connections to existing downstream facilities.
- 11) **"L-V" Street** – Storm drain as required between "O" street and "Y" street including laterals, junction structures, manholes, catch basins, local depressions and connections to downstream facilities.

- 12) **"T" Street** – Storm drain as required from south of "L-Q" street to "X" street including laterals, junction structures, manholes, catch basins, local depressions and connections to existing downstream facilities.
- 13) **"X" Street** – Storm drain as required from "Y" street to "T" street including laterals, junction structures, manholes, catch basins, local depressions and connections to existing downstream facilities.
- 14) **"Y" Street** – Storm drain as required from "X" street to "L-V" street including laterals, junction structures, manholes, catch basins, local depressions and connections to downstream facilities.
- 15) **"Bee Canyon Channel (Through OCGP)"** – Storm drain facility. Approximate limits are from Marine Way to "Y" street including laterals, junction structures, manholes, and connections to existing storm facilities and connections to downstream facilities.
- 16) **"Bee Canyon" Channel at Marine Way** – Regional storm drain facility (Double 7'x10' RCB) to facilitate storm drain connections, and construction of a regional facility from OCFCD connection south of the railway to Marine Way including laterals, junction structures, manholes, and connections to existing downstream facilities.
- 17) **"A" Street** – Storm drain as required from Irvine Blvd to "Q" street including laterals, junction structures, manholes, catch basins, local depressions and connections to downstream facilities.
- 18) **"Q" Street** – Storm drain as required including laterals, junction structures, manholes, catch basins, local depressions and connections to downstream facilities.
- 19) **"AC-1" Agua Chinon** – Regional storm drain facility (12'x12' RCB) as required from existing OCFCD Agua Chinon box to a proposed inlet structure, north of Marine Way. This will include required laterals, junction structures, manholes, and modification to existing downstream facilities and connections to the existing OCFCD system.
- 20) **"AC-2" Agua Chinon** – Regional drainage system as required from "AC-1" to the south edge of "Q" street consisting of open channel, soft bottom channel required to provide flood protection, grade control devices, flowline stabilization, access, maintenance, and required infrastructure for the establishment of jurisdictional habitat. Cross section as illustrated per "HF / OCGP Backbone Facility Cross Sections".
- 21) **"AC-2a" Agua Chinon** – Regional storm drain facility as required from "AC-2", under "Q" street to the existing culvert south of Irvine Blvd as required to provide flood protection, grade control devices, flowline stabilization, access, maintenance and connections to downstream facilities.
- 22) **"AC-2b" Agua Chinon** – Modifications to the existing culvert under Irvine Blvd. Includes modifications to the existing entrance and outlet walls.

- 23) **“AC-3” Agua Chinon** – Regional drainage system as required from Irvine Blvd to “K” street including modification to the Irvine Blvd undercrossing required to provide flood protection, grade control devices, flowline stabilization, access, maintenance, required infrastructure for the establishment of jurisdictional habitat. and connections to downstream facilities.
- 24) **“AC-4” Agua Chinon** – Regional storm drain facility (6’x8’ RCB) for the undercrossing of “K” street. Improvements include a culvert crossing to provide flood protection and connections to downstream facilities.
- 25) **“AC-5” Agua Chinon** – Regional storm drain facility (6’x8’ RCB) from “K” street to “P-M” street. Improvements include a RCB channel to provide flood protection, access, maintenance, and connections to downstream facilities.
- 26) **“AC-6” Agua Chinon** – Regional storm drain facility (6’x8’ RCB) from “P-M” street to north property line. Improvements include a RCB to provide flood protection, including an inlet structure north of the property line of Park District North.
- 27) **“C” Street (C-1)**– Storm drain as required within “C” street to connect to Agua Chinon including laterals junction structures, manholes, catch basins, local depressions and connections to downstream facilities.
- 28) **“D” Street (D-1)**– Storm drain as required within “D” street and outside of “D” Street to connect to Agua Chinon including laterals junction structures, manholes, catch basins, local depressions and connections to downstream facilities.
- 29) **“E” Street (E-1,E-2)**– Storm drain as required within “E” street and outside of “E” Street to connect to Agua Chinon including junction structures, manholes, catch basins, local depressions and connections to downstream facilities. Includes storm drain within “E” Street to Marine Way.
- 30) **“F” Street**– Storm drain as required from “F” street to Agua Chinon including junction structures, manholes, catch basins, local depressions and connections to downstream facilities.
- 31) **Borrego Channel** – Regional storm drain facility as required from the Wildlife Corridor, under Marine Way, to existing Borrego Channel includes replacement of existing Borrego Channel to meet OCFCD standards and to provide flood protection, right of way acquisition, flood control maintenance and access facilities and connections to downstream facilities.
- 32) **“TOD-1”** Regional drainage system from Marine Way, through portion of the General Industrial Zoning District Portion of PA 30 south of Marine Way. Improvements include a base level drainage infrastructure to provide flood protection, including required modifications to the existing downstream Caltrans drainage system.
- 33) **“SC-1” Serrano Creek** – Regional drainage system from existing I-5 culvert to Marine Way. Improvements include a open channel with flowline stabilization, grade control devices in order to provide flood protection, including any required modifications to the existing Caltrans culvert.

- 34) **"SC-2" Serrano Creek** – Regional drainage system undercrossing at Marine Way. Improvements include culvert crossing to provide flood protection, access and maintenance facilities.
- 35) **"SC-3" Serrano Creek** – Regional drainage system from Marine Way to Alton Parkway. Improvements include a soft bottom open channel with grade control devices to provide flood protection, including required modifications to outlet structure of the culvert at Alton Parkway, access and maintenance facilities.
- 36) **Upper San Diego Creek** – Regional drainage system as required from an existing culvert at I-5 to the easterly property line. Improvements include a RCB to provide flood protection and required modifications to the existing Caltrans entrance structure.
- 37) **Bee Canyon water quality system-** Water quality treatment systems as required to protect the backbone drainage facilities. This includes base level drainage infrastructure to provide treatment, access and maintenance facilities, and outlets to downstream facilities. Final locations are subject to final approval of a detailed Water Quality Management Plan.
- 38) **Agua Chinon water quality system-** Water quality treatment systems as required to protect the backbone drainage facilities. This includes base level drainage infrastructure to provide treatment, access and maintenance facilities, and outlets to downstream facilities. Final locations are subject to final approval of a detailed Water Quality Management Plan.
- 39) **Serrano Creek water quality system-** Water quality treatment systems as required to protect the backbone drainage facilities. This includes base level drainage infrastructure to provide treatment, access and maintenance facilities, and outlets to downstream facilities. Final locations are subject to final approval of a detailed Water Quality Management Plan.
- 40) **Great Park Blvd** – Storm drain as required within Great Park Blvd. to provide conveyance of roadway runoff including laterals junction structures, manholes, catch basins, local depressions and connections to downstream facilities.
- 41) **Backbone water quality treatment systems-** Water quality treatment systems as required to protect the backbone drainage facilities. This includes base level drainage infrastructure to provide treatment, access and maintenance facilities, and outlets to downstream facilities. Final locations are subject to final approval of a detailed Water Quality Management Plan.

C) ON-PROPERTY SEWER FACILITIES:

- 1) **Irvine Blvd-** Sewer mainline as required from "C" street to just west of "C" street includes laterals, monitoring manholes, manholes, adjusting rims to grade, connection to downstream facilities and replacement of existing pavement and striping.
- 2) **Marine Way-**Sewer mainline as required between "O" street and Bake Parkway. Includes laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities.
- 3) **Alton Parkway-** Relocation of the existing 18" sewer mainline within Serrano Creek to Alton Parkway from the southwest corner of the TOD to the intersection of Alton Parkway and Barranca Parkway. Includes laterals, monitoring manholes, manholes, adjusting rims to grade, connection to downstream facilities and replacement of existing pavement and striping.
- 4) **Barranca Parkway-**Sewer mainline as required from east of Ada to Alton Parkway includes laterals, monitoring manholes, manholes, adjusting rims to grade, connection to downstream facilities and replacement of existing pavement and striping. Includes offsite street connection to existing sewer in Mauchly.
- 5) **Rockfield Blvd-** Sewer mainline as required from existing Rockfield Blvd to Marine Way. Includes laterals, monitoring manholes, manholes, adjusting rims to grade, connection to downstream facilities and replacement of existing pavement and striping.
- 6) **"TOD-1" Sewer north of railroad tracks -** Sewer mainline as required from Sewer Reach "B", adjacent to and parallel with the north side of the railroad tracks, to "F" street. Includes all-weather access, laterals, monitoring manholes, manholes, and connection to downstream facilities.
- 7) **"TOD-2" Sewer mainline** as required from "TOD-1" to Marine Way. Includes laterals, monitoring manholes, manholes, and connection to downstream facilities.
- 8) **"O" Street-** Sewer mainline as required. Includes all-weather access, laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities.
- 9) **Trabuco Road-** Sewer mainline as required between "O" street and "Y" street. Includes laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities.
- 10) **"L-V" Street-** Sewer mainline as required. Includes laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities.

- 11) **Sewer Reach "B" (through OCGP)** - Sewer mainline as required from existing point of connection just south of the railway to "L-V" street. Includes all-weather access, laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities.
- 12) **Sewer Reach "A" (south of Marine Way)** - Sewer mainline as required from just south of the railway to Marine Way. Includes all-weather access, laterals, monitoring manholes, manholes, adjusting rims to grade, sleeving and connection to downstream facilities.
- 13) **"A" Street**– Sewer mainline as required. Includes laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities.
- 14) **"L-Y" Street**– Sewer mainline as required from "O" st to Irv Blvd, Includes laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities.
- 15) **"Y" Street**– Sewer mainline as required. Includes laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities.
- 16) **"X" Street**– Sewer mainline as required. Includes laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities
- 17) **"Q" Street** – Sewer mainline as required. Includes laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities.
- 18) **"T" Street** – Sewer mainline as required. Includes laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities.
- 19) **"C" Street** – Sewer mainline as required. Includes laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities.
- 20) **"D" Street** – Sewer mainline as required. Includes laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities.
- 21) **"E" Street** – Sewer mainline as required. Includes laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities.
- 22) **"P-E" Street** -Sewer mainline as required. Includes laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities.
- 23) **"H" Street**– Sewer mainline as required. Includes laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities.

- 24) **“L-Q” Street**– Sewer mainline as required. Includes laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities.
- 25) **“L-M” Street**–Sewer mainline as required. Includes laterals, monitoring manholes, manholes, adjusting rims to grade, and connection to downstream facilities.

D) ON-PROPERTY DOMESTIC AND RECYCLED WATER FACILITIES:

- 1) **Marine Way**- Domestic and recycled water mains as required from “O” street to Bake Parkway includes tees and mainline stubs, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, connection to existing facilities, and replacement of existing pavement and striping. Includes recycled water main from a point of connection north of railroad to Marine Way.
- 2) **Barranca Parkway**- Domestic and recycled water facilities as required from east of Ada to east of Alton Parkway includes tees and mainline stubs, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, connection to existing facilities, replacement of existing pavement and striping.
- 3) **Rockfield Blvd**– Domestic and recycled water mains as required from existing Rockfield Blvd to Marine Way includes tees and mainline stubs, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, connection to existing facilities, and replacement of existing pavement and striping.
- 4) **“F” Street**– Domestic and recycled water mains as required includes tees and mainline stubs, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, and connection to existing facilities.
- 5) **“O” Street** – Domestic and recycled water mains as required includes tees and mainline stubs, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, and connection to existing facilities, pressure reducing and boosting.
- 6) **Trabuco Road**– Domestic and recycled water mains as required from “O” street to “Y” street includes tees and mainline stubs, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, and connection to existing facilities.
- 7) **“A” Street**– Domestic and recycled water mains as required includes tees and mainline stubs, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, and connection to existing facilities.

- 8) **“Y” Street**– Domestic and recycled water mains as required includes tees and mainline stubs, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, and connection to existing facilities.
- 9) **“X” Street**– Domestic and recycled water mains as required includes tees and mainline stubs, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, and connection to existing facilities.
- 10) **“L-V” Street**– Domestic and recycled water mains as required includes tees and mainline stubs, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, and connection to existing facilities.
- 11) **“T” Street**– Domestic and recycled water mains as required includes tees and mainline stubs, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, and connection to existing facilities.
- 12) **“P-R” Street**– Domestic water main as required includes tees and mainline stubs, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, and connection to existing facilities.
- 13) **“Q” Street**– Domestic and recycled water mains as required includes laterals, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, and connection to existing facilities.
- 14) **“C” Street**– Domestic and recycled water mains as required includes laterals, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, and connection to existing facilities.
- 15) **“D” Street**– Domestic and recycled water mains as required includes laterals, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, connection to existing facilities, and pressure reducing.
- 16) **“E” Street**– Domestic water main as required includes laterals, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, and connection to existing facilities.
- 17) **“P-E” Street**– Domestic and recycled water mains as required includes laterals, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, and connection to existing facilities.
- 18) **“H” Street**– Domestic and recycled water mains as required includes laterals, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, connection to existing facilities, and replacement of existing pavement and striping.
- 19) **“L-Q” Street**– Domestic and recycled water mains as required includes laterals, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, and connection to existing facilities.

- 20) **"L-O" Street**– Domestic water mains as required from the TCA property to "O" street includes laterals, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, and connection to existing facilities.
- 21) **Agua Chinon Fire service line**- Fire service main and appurtenances as required from "E" street to "Q" street per OCFA requirements.
- 22) **Great Park Blvd** - Domestic and recycled water mains as required includes laterals, valves, air vac, blow off, fittings, fire hydrant assembly, thrust blocks, concrete cap, irrigation water service, and connection to existing facilities.

E) ON-PROPERTY LANDSCAPE, AMENITIES, IRRIGATION SYSTEM, AND PLANTINGS IN THE FOLLOWING RIGHT-OF-WAY

- 1) **Marine Way** from "O" street to Bake Parkway.
- 2) **Barranca Parkway** from east of Ada to east of Alton Parkway.
- 3) **Alton Parkway** from south of Marine Way to Barranca Parkway.
- 4) **Rockfield Blvd.** from existing Rockfield to Marine Way.
- 5) **"F" Street**
- 6) **"O" Street (Trabuco to Irvine Blvd)**
- 7) **"O" Street (Trabuco to Marine Way)**
- 8) **Trabuco Road** from "O" street to OCGP.
- 9) **"L-V" Street**
- 10) **"A" Street**
- 11) **"Y" Street**
- 12) **"Q" Street**
- 13) **"T" Street**
- 14) **"X" Street**
- 15) **"P-E" Street**
- 16) **"C" "D" and "E" Street**
- 17) **"Off street Trail"** (in the TOD between Barranca and Alton Parkway)
- 18) **"Off street riding/hiking Trail"** in Park District, north of Irvine Blvd.
- 19) **"Off street riding/hiking Trail"** within the LLD, south of the LLD.
- 20) **"H" Street**
- 21) **"L-Q" Street**
- 22) **Great Park Blvd (median only).**

F) ON-PROPERTY DRY UTILITIES

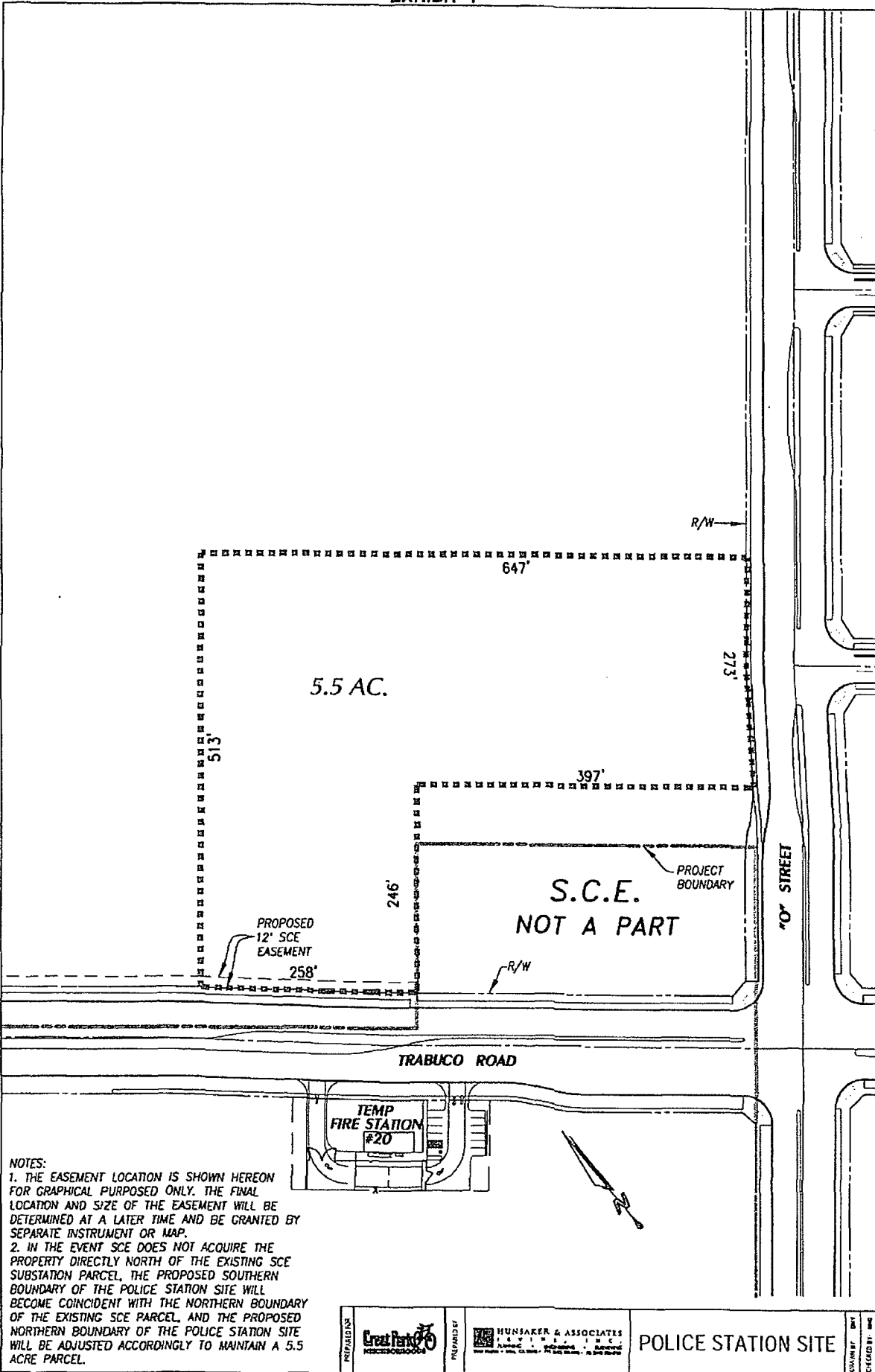
Facilities include CATV, telephone, electric, gas and may include relocation of regional or transmission lines including trenching, shading, conduit risers, pullboxes, vaults, hand holes, etc., in the following streets:

- 1) Marine Way from "O" street to Bake Parkway.
- 2) Rockfield Blvd. from existing Rockfield to Marine Way.
- 3) "F" Street
- 4) "O" Street (Trabuco to Irvine Blvd)
- 5) "O" Street (Trabuco to Marine Way)
- 6) Trabuco Road from "O" street to OCGP.
- 7) "L-V" Street
- 8) "A" Street
- 9) "Y" Street
- 10) "Q" Street
- 11) "T" Street
- 12) "X" Street
- 13) "P-E" Street
- 14) "C", "D", and "E" Street
- 15) "H" Street
- 16) "L-Q" Street
- 17) Barranca Parkway portion of east of Ada to east of Alton Parkway.
- 18) Great Park Blvd

G) Wildlife Corridor- Mass excavation for the Wildlife Corridor from Irvine Blvd to Borrego Channel. Improvements include required demolition and Fire service main and appurtenances as required from "P-E" street to Irvine Blvd per OCFA requirements. . (See WLC section as illustrated per the "HF / OCGP Backbone Facility Cross Sections").

H) Runway Demolition – Shall include all services necessary to support and manage runway demolition and recycling services as defined in the Amended and Restated Master Implementation Agreement.

EXHIBIT 'F'



NOTES:

1. THE EASEMENT LOCATION IS SHOWN HEREON FOR GRAPHICAL PURPOSES ONLY. THE FINAL LOCATION AND SIZE OF THE EASEMENT WILL BE DETERMINED AT A LATER TIME AND BE GRANTED BY SEPARATE INSTRUMENT OR MAP.
2. IN THE EVENT SCE DOES NOT ACQUIRE THE PROPERTY DIRECTLY NORTH OF THE EXISTING SCE SUBSTATION PARCEL, THE PROPOSED SOUTHERN BOUNDARY OF THE POLICE STATION SITE WILL BECOME COINCIDENT WITH THE NORTHERN BOUNDARY OF THE EXISTING SCE PARCEL, AND THE PROPOSED NORTHERN BOUNDARY OF THE POLICE STATION SITE WILL BE ADJUSTED ACCORDINGLY TO MAINTAIN A 5.5 ACRE PARCEL.



HUNSAKER & ASSOCIATES
 REGISTERED PROFESSIONAL ENGINEERS
 10000 San Diego Ave., Suite 100, San Diego, CA 92131
 (619) 584-1100

POLICE STATION SITE

DATE: JUN 28, 2009 09:21:33 PM
 DRAWN BY: [unintelligible]
 CHECKED BY: [unintelligible]

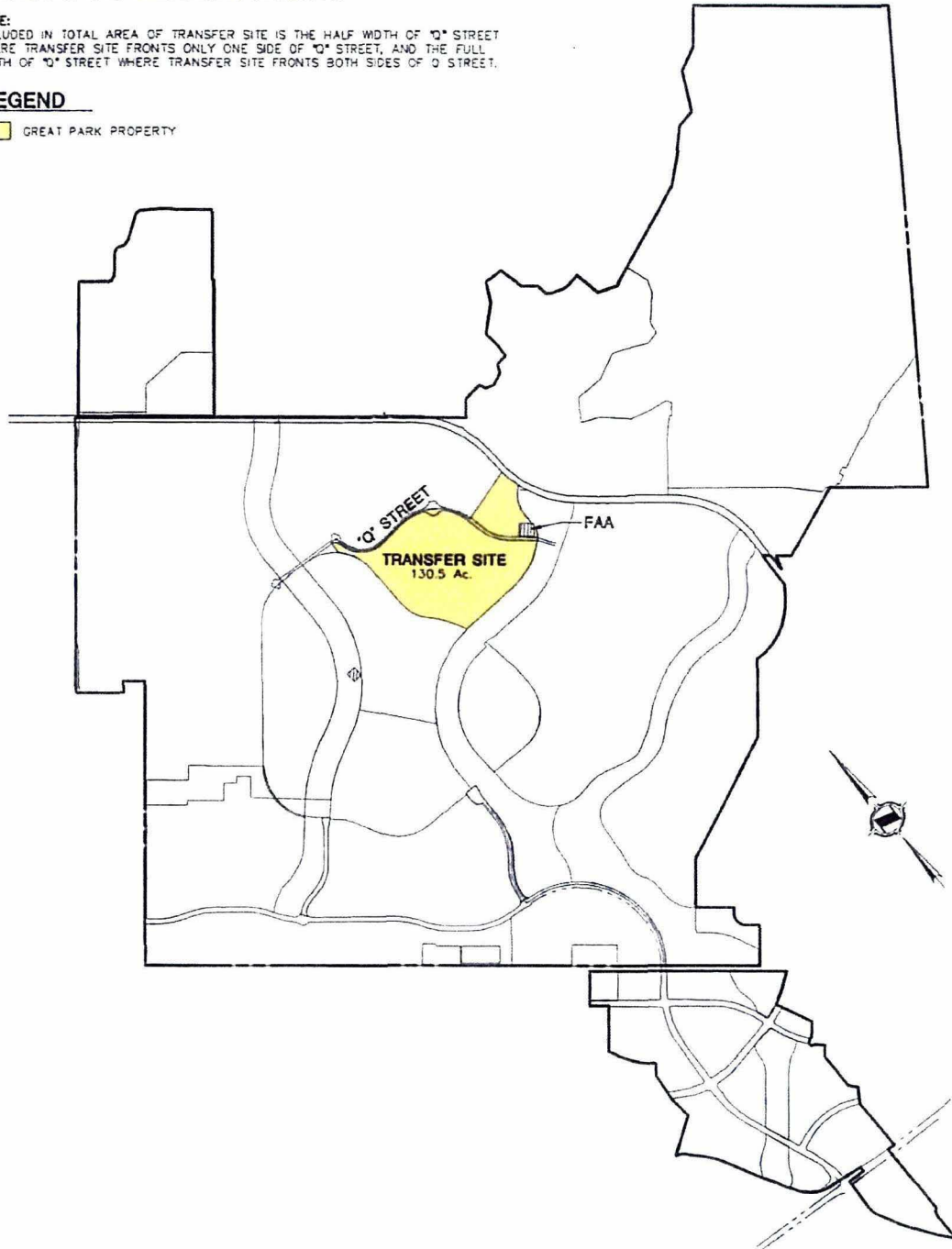
EXHIBIT 'G'

ACREAGE SUMMARY
 TOTAL ACREAGE TO BE TRANSFERRED TO CITY: 130.5 Ac.

NOTE:
 INCLUDED IN TOTAL AREA OF TRANSFER SITE IS THE HALF WIDTH OF 'O' STREET WHERE TRANSFER SITE FRONTS ONLY ONE SIDE OF 'O' STREET, AND THE FULL WIDTH OF 'O' STREET WHERE TRANSFER SITE FRONTS BOTH SIDES OF 'O' STREET.

LEGEND

 GREAT PARK PROPERTY




| | | |
|--|--|-----------------|
|  HUNSAKER & ASSOCIATES IRVINE, INC. PLANNING • ENGINEERING • SURVEYING <small>Three Hughes • Irvine, CA 92618 • Tel: (949) 583-7070 • Fax: (949) 583-6779</small> | ARDA TRANSFER SITE <small>IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA</small> | |
| | DATE: 3/06/08 REV: 8/04/09 DRG BY: K. LYNCH | SCALE: 1"=2000' |
| C:\KORY\Heritage Fields\EXH-G.dwg | | |

EXHIBIT "H"

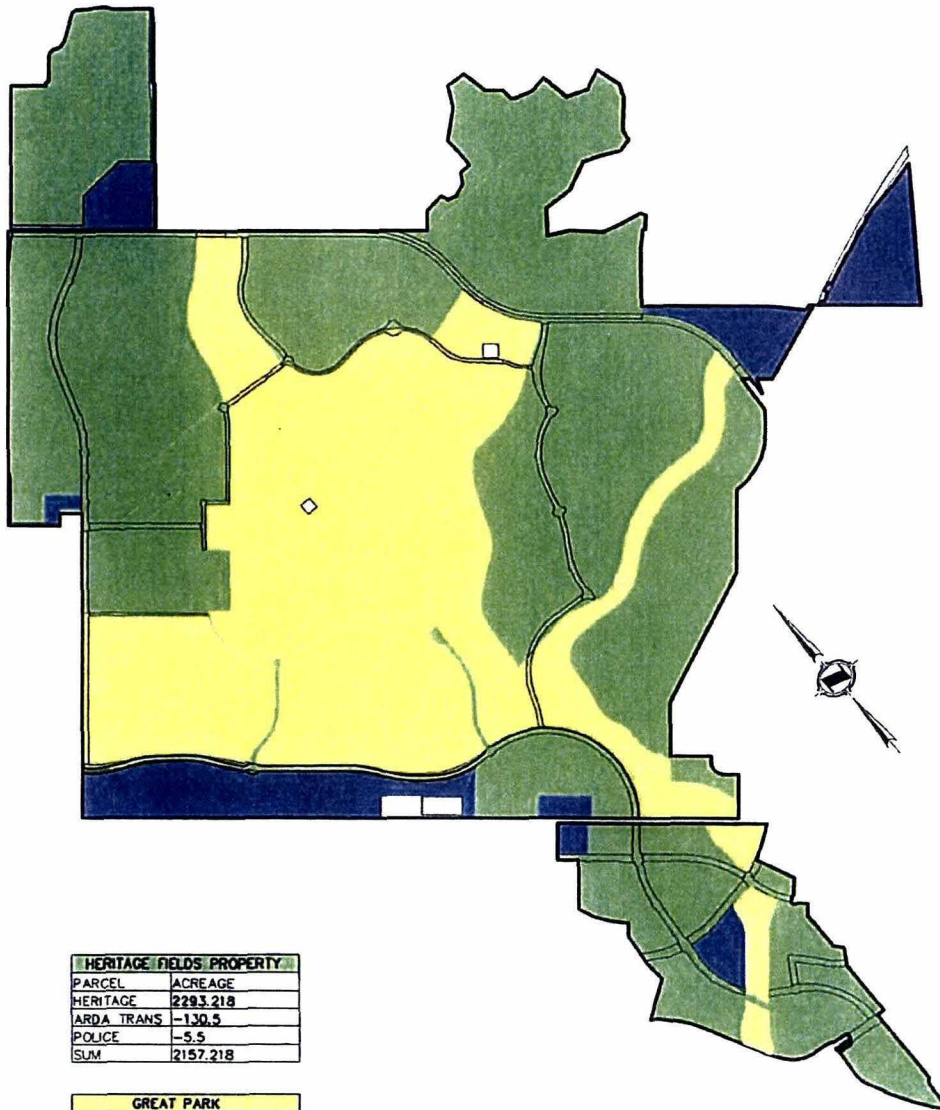
ACREAGE SUMMARY

TOTAL HERITAGE FIELDS ACREAGE: 2,157,218 Ac.
 TOTAL GREAT PARK ACREAGE: 1,247,699 Ac.
 TOTAL NON-PARK ACREAGE: 299,977 Ac.
 TOTAL ACREAGE: 3,704,894 Ac.

EXHIBIT EXPLANATION:
 THIS EXHIBIT SHOWS FINAL ACREAGES AFTER PROPOSED ARDA AND
 POLICE STATION TRANSFERS.

LEGEND

- HERITAGE FIELD PROPERTY
- GREAT PARK PROPERTY
- NON-PARK PROPERTY



| HERITAGE FIELDS PROPERTY | |
|--------------------------|----------|
| PARCEL | ACREAGE |
| HERITAGE | 2293,218 |
| ARDA TRANS | -130.5 |
| POLICE | -5.5 |
| SUM | 2157,218 |

| GREAT PARK | |
|------------|----------|
| PARCEL | ACREAGE |
| EXHIBIT B | 1117,199 |
| ARDA TRANS | 130.5 |
| SUM | 1247,699 |

| NON-PARK | |
|-----------|---------|
| PARCEL | ACREAGE |
| EXHIBIT D | 294,477 |
| POLICE | 5.5 |
| SUM | 299,977 |

| | | |
|---|--|--------------|
| HUNSAKER & ASSOCIATES IRVINE, INC. PLANNING • ENGINEERING • SURVEYING Three Hughes • Irvine, CA 92618 • PH (949) 583-1030 • FX (949) 583-0729 | HERITAGE FIELDS PROPERTY | |
| | IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA | |
| DATE: 2/28/08 | REV. DATE: 8/04/09 | DWG. BY: KML |
| SCALE: 1"=2000' | W.O. 1855-80X | |
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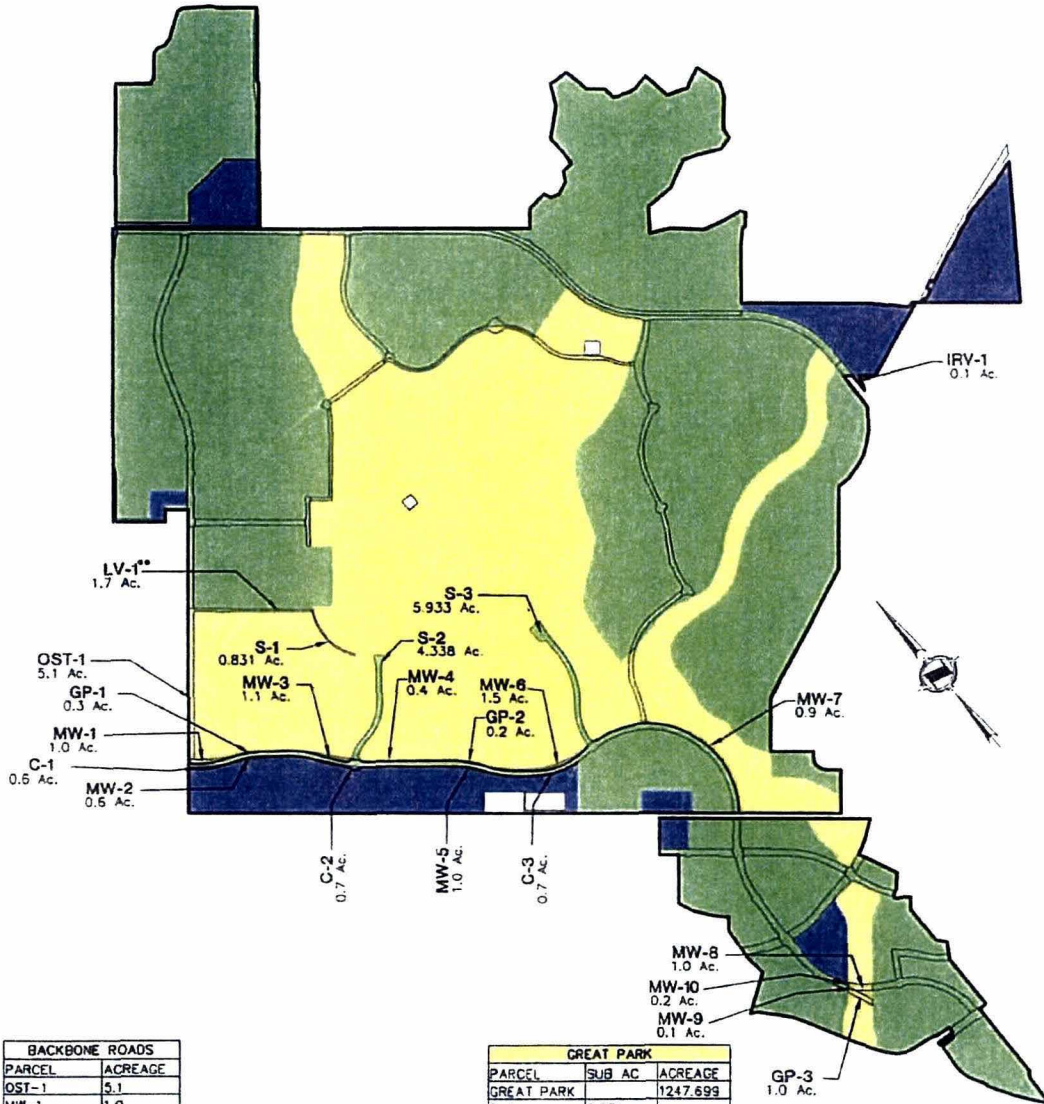
EXHIBIT H-1

ACREAGE SUMMARY
 TOTAL HERITAGE FIELDS ACREAGE: 2,142.516 Ac.
 TOTAL GREAT PARK ACREAGE: 1,247.601 Ac.
 TOTAL NON-PARK ACREAGE: 300.077 Ac.
 TOTAL ACREAGE IN BACKBONE ROADS: 13.0 Ac.
 TOTAL ACREAGE IN NON-BACKBONE ROADS: 1.7 Ac.
 TOTAL ACREAGE: 3,704.894 Ac.

EXHIBIT EXPLANATION:
 THIS EXHIBIT SHOWS FINAL ACREAGES AFTER REALIGNMENT OF MARINE WAY, O STREET AND LV STREET FROM ORIGINAL MASTER PLAN AND GRANT OF S1, S2 AND S3 AND REMNANTS OF OLD MARINE WAY TO THE GREAT PARK AND THE CITY.

LEGEND

- HERITAGE FIELD PROPERTY
- GREAT PARK PROPERTY
- NON-PARK PROPERTY



| BACKBONE ROADS | |
|----------------|---------|
| PARCEL | ACREAGE |
| OST-1 | 5.1 |
| MW-1 | 1.0 |
| MW-2 | 0.6 |
| MW-3 | 1.1 |
| MW-4 | 0.4 |
| MW-5 | 1.0 |
| MW-6 | 1.5 |
| MW-7 | 0.9 |
| MW-8 | 1.0 |
| MW-9 | 0.1 |
| MW-10 | 0.2 |
| IRV-1 | 0.1 |
| SUM | 13.0* |

| NON-BACKBONE ROADS | |
|--------------------|---------|
| PARCEL | ACREAGE |
| LV-1** | 1.7 |

| HERITAGE FIELDS PROPERTY | | |
|--------------------------|--------|----------|
| PARCEL | SUB AC | ACREAGE |
| HERITAGE | | 2157.218 |
| S-1 | -0.831 | |
| S-2 | -4.338 | |
| S-3 | -5.933 | |
| C-1 | -0.6 | |
| C-2 | -0.7 | |
| C-3 | -0.7 | |
| GP-1 | -0.3 | |
| GP-2 | -0.2 | |
| GP-3 | -1.0 | |
| MW-9 | -0.1 | |
| NET CHANGE | | -14.702 |
| SUM | | 2142.516 |

| GREAT PARK | | |
|------------|--------|----------|
| PARCEL | SUB AC | ACREAGE |
| GREAT PARK | | 1247.699 |
| S-1 | 0.831 | |
| S-2 | 4.338 | |
| S-3 | 5.933 | |
| LV-1 | -1.7 | |
| OST-1 | -5.1 | |
| MW-1 | -1.0 | |
| MW-3 | -1.1 | |
| MW-4 | -0.4 | |
| MW-6 | -1.5 | |
| MW-7 | -0.9 | |
| MW-8 | -1.0 | |
| GP-1 | 0.3 | |
| GP-2 | 0.2 | |
| GP-3 | 1.0 | |
| NET CHANGE | | -0.098 |
| SUM | | 1247.601 |

| NON-PARK | | |
|------------|--------|---------|
| PARCEL | SUB AC | ACREAGE |
| CITY | | 299.977 |
| C-1 | 0.6 | |
| C-2 | 0.7 | |
| C-3 | 0.7 | |
| MW-2 | -0.6 | |
| MW-5 | -1.0 | |
| MW-10 | -0.2 | |
| IRV-1 | -0.1 | |
| NET CHANGE | | 0.100 |
| SUM | | 300.077 |

* THIS 13 AC. IS A PORTION OF THE 198.2 AC. OF BACKBONE ROADS SHOWN ON EXHIBIT H-2.

** SHOWN HEREON FOR INFORMATION ONLY

HUNSAKER & ASSOCIATES
 I R V I N E I N C
 PLANNING • ENGINEERING • SURVEYING
 Three Highways • Irvine, CA 92618 • P.O. BOX 583-9000 • TEL: (949) 583-0779

DATE: 1/23/09 REV: 8/04/09 DWN BY: K. LYNCH

HERITAGE FIELDS PROPERTY

IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA

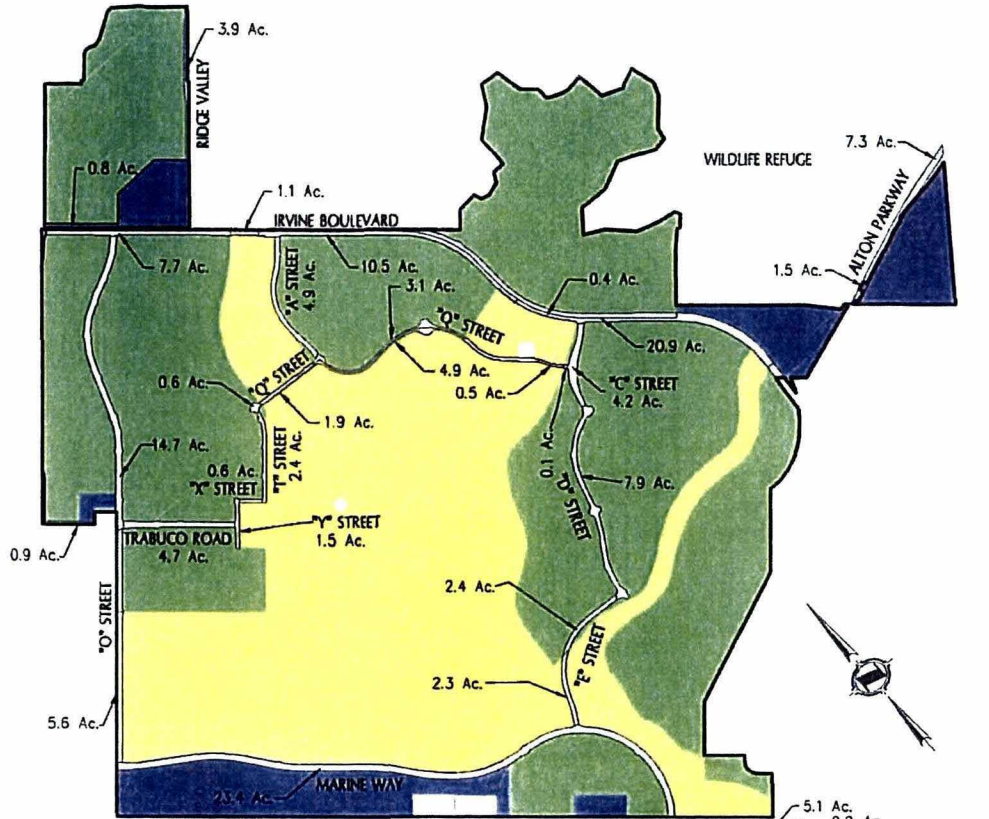
SCALE: 1"=2000' W.O. 1856-80X

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EXHIBIT H-2

ACREAGE SUMMARY
 TOTAL HERITAGE FIELDS ACREAGE: 1,979.416 Ac.
 TOTAL GREAT PARK ACREAGE: 1,238.001 Ac.
 TOTAL NON-PARK ACREAGE: 298.577 Ac.
 TOTAL ACREAGE IN BACKBONE ROADS: 196.2 Ac.
 TOTAL ACREAGE OF BACKBONE ROADS IN WILDLIFE REFUGE: -7.3 Ac.*
 TOTAL ACREAGE: 3,704.894 Ac. PER EXHIBIT "A"

EXHIBIT EXPLANATION:
 THIS EXHIBIT SHOWS FINAL ACREAGES LESS BACKBONE ROADS.
 * 7.3 ACRES OF ALTON LIES WITHIN THE WILDLIFE REFUGE AND IS NOT INCLUDED IN THE 3,704.894 ACRES.
 ** SEE EXHIBIT H-1 FOR LOCATION AND DETAILS



LEGEND

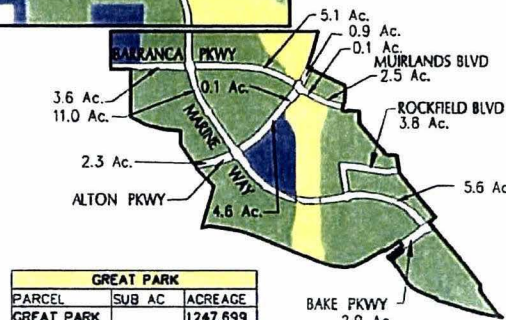
- HERITAGE FIELD PROPERTY
- GREAT PARK PROPERTY
- NON-PARK PROPERTY

| BACKBONE ROADS | | |
|----------------|--------|---------|
| PARCEL | SUB AC | ACREAGE |
| ALTON WLD | 7.3* | |
| ALTON | | 9.4 |
| IRVINE BLVD | 41.4 | |
| IRVINE (H-1) | 0.1** | |
| IRVINE TOTAL | 41.5 | |
| BAKE PKWY | 2.9 | |
| BARRANCA | 8.7 | |
| MUIRLANDS | 2.6 | |
| MARINE WAY | 40.0 | |
| MARINE (H-1) | 7.8** | |
| MARINE TOT | 47.8 | |
| RIDGE VALLEY | 3.9 | |
| TRABUCO | 5.6 | |
| ROCKFIELD | 3.8 | |
| O ST | 20.3 | |
| O ST (H-1) | 5.1** | |
| O ST TOTAL | 25.4 | |
| A ST | 4.9 | |
| C ST | 4.2 | |
| D ST | 7.9 | |
| E ST | 4.7 | |
| Q ST | 11.1 | |
| T ST | 2.4 | |
| X ST | 0.6 | |
| Y ST | 1.5 | |
| SUM | 196.2 | |

| HERITAGE FIELDS PROPERTY | | |
|--------------------------|----------|----------|
| PARCEL | SUB AC | ACREAGE |
| HERITAGE | | 2157.218 |
| S-1** | -0.831 | |
| S-2** | -4.338 | |
| S-3** | -5.933 | |
| C-1** | -0.6 | |
| C-2** | -0.7 | |
| C-3** | -0.7 | |
| GP-1** | -0.3 | |
| GP-2** | -0.2 | |
| GP-3** | -1.0 | |
| TRANSFERS | -14.602 | |
| MW-9** | -0.1 | |
| IRVINE BLVD | -39.9 | |
| ALTON | -7.8 | |
| BAKE PKWY | -2.9 | |
| BARRANCA | -8.7 | |
| MUIRLANDS | -2.5 | |
| MARINE WAY | -40.0 | |
| RIDGE VALLEY | -3.9 | |
| TRABUCO | -5.6 | |
| ROCKFIELD | -3.8 | |
| O ST | -20.3 | |
| A ST | -4.9 | |
| C ST | -4.2 | |
| D ST | -7.9 | |
| E ST | -2.4 | |
| Q ST | -3.8 | |
| T ST | -2.4 | |
| X ST | -0.6 | |
| Y ST | -1.5 | |
| ROADS | -163.2 | |
| NET CHANGE | -177.802 | |
| SUM | 1979.416 | |

| GREAT PARK | | |
|-------------|----------|----------|
| PARCEL | SUB AC | ACREAGE |
| GREAT PARK | | 1247.699 |
| S-1** | 0.831 | |
| S-2** | 4.338 | |
| S-3** | 5.933 | |
| GP-1** | 0.3 | |
| GP-2** | 0.2 | |
| GP-3** | 1.0 | |
| TRANSFERS | 12.602 | |
| QST-1** | -5.1 | |
| MW-1** | -1.0 | |
| MW-3** | -0.4 | |
| MW-4** | -1.5 | |
| MW-7** | -0.9 | |
| MW-8** | -1.0 | |
| IRVINE BLVD | -1.5 | |
| ALTON | -0.1 | |
| MUIRLANDS | -0.1 | |
| E ST | -2.3 | |
| Q ST | -7.3 | |
| ROADS | -22.3 | |
| NET CHANGE | -9.698 | |
| SUM | 1238.001 | |

| NON-PARK | | |
|------------|---------|---------|
| PARCEL | SUB AC | ACREAGE |
| CITY | | 299.977 |
| C-1** | 0.6 | |
| C-2** | 0.7 | |
| C-3** | 0.7 | |
| TRANSFERS | 2.0 | |
| MW-2** | -0.6 | |
| MW-5** | -1.0 | |
| MW-10** | -0.2 | |
| IRV-1** | -0.1 | |
| ALTON | -1.5 | |
| ROADS | -3.4 | |
| NET CHANGE | -1.400 | |
| SUM | 298.577 | |



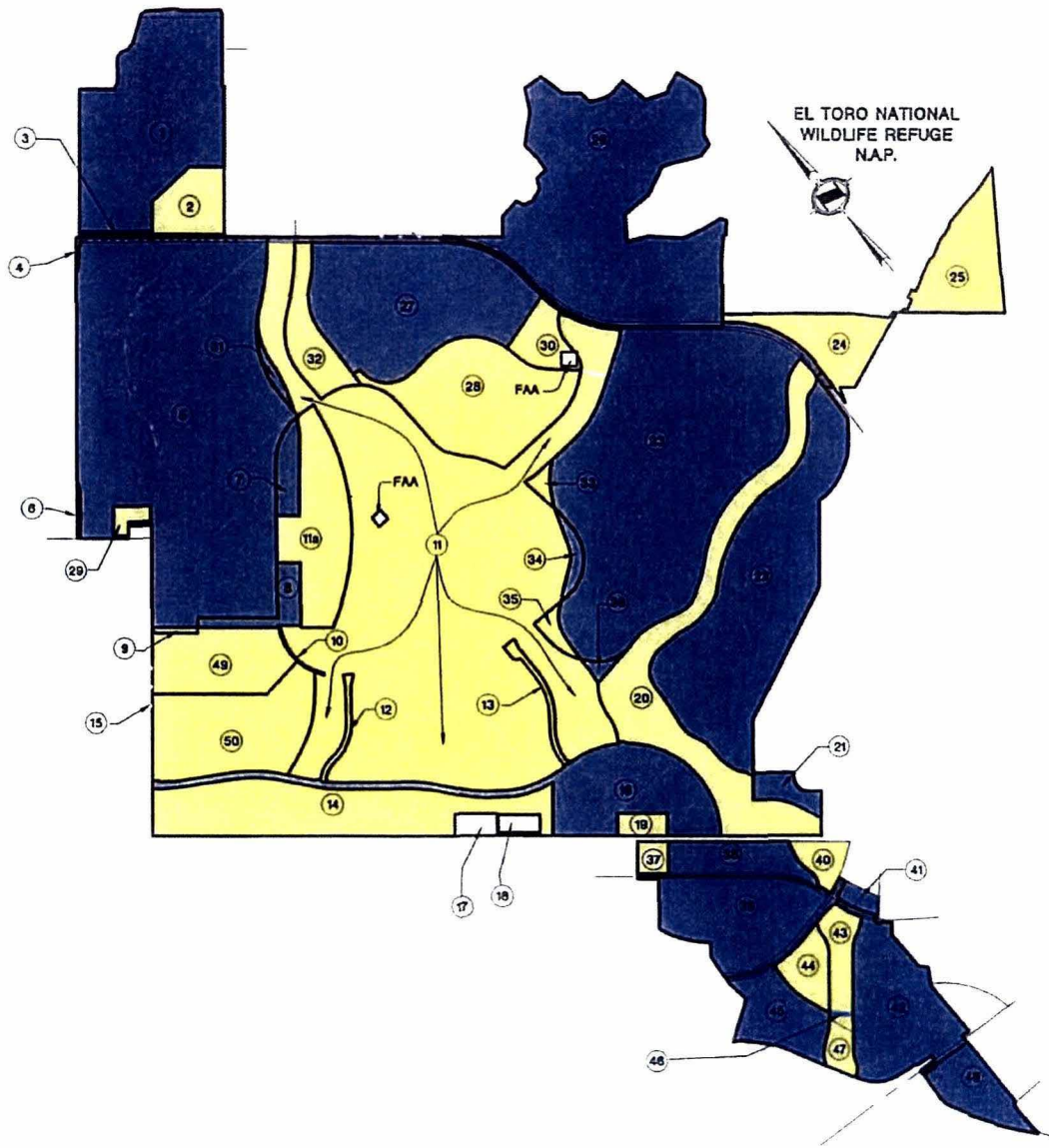
| | | |
|---|--|--------------------|
| HUNSAKER & ASSOCIATES IRVINE, INC. PLANNING • ENGINEERING • SURVEYING Three Highways • Irvine, CA 92618 • P.O. Box 543-1010 • (714) 449-5433-0739 | HERITAGE FIELDS PROPERTY | |
| | IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA | |
| DATE: 1/23/09 | REV. DATE: 8/04/09 | DR. # OF: K. LYNCH |
| SCALE: 1"=2000' | W.O. 1855-80X | SHEET 1 OF 1 |

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EXHIBIT 'I'

LEGEND

- ① INDICATES PROPERTY IDENTIFICATION NUMBERS
- INDICATES PROPERTY IDENTIFICATION PARCEL LINES
- INDICATES PROPOSED CITY PARCELS
- INDICATES PROPOSED HERITAGE FIELDS PROPERTY



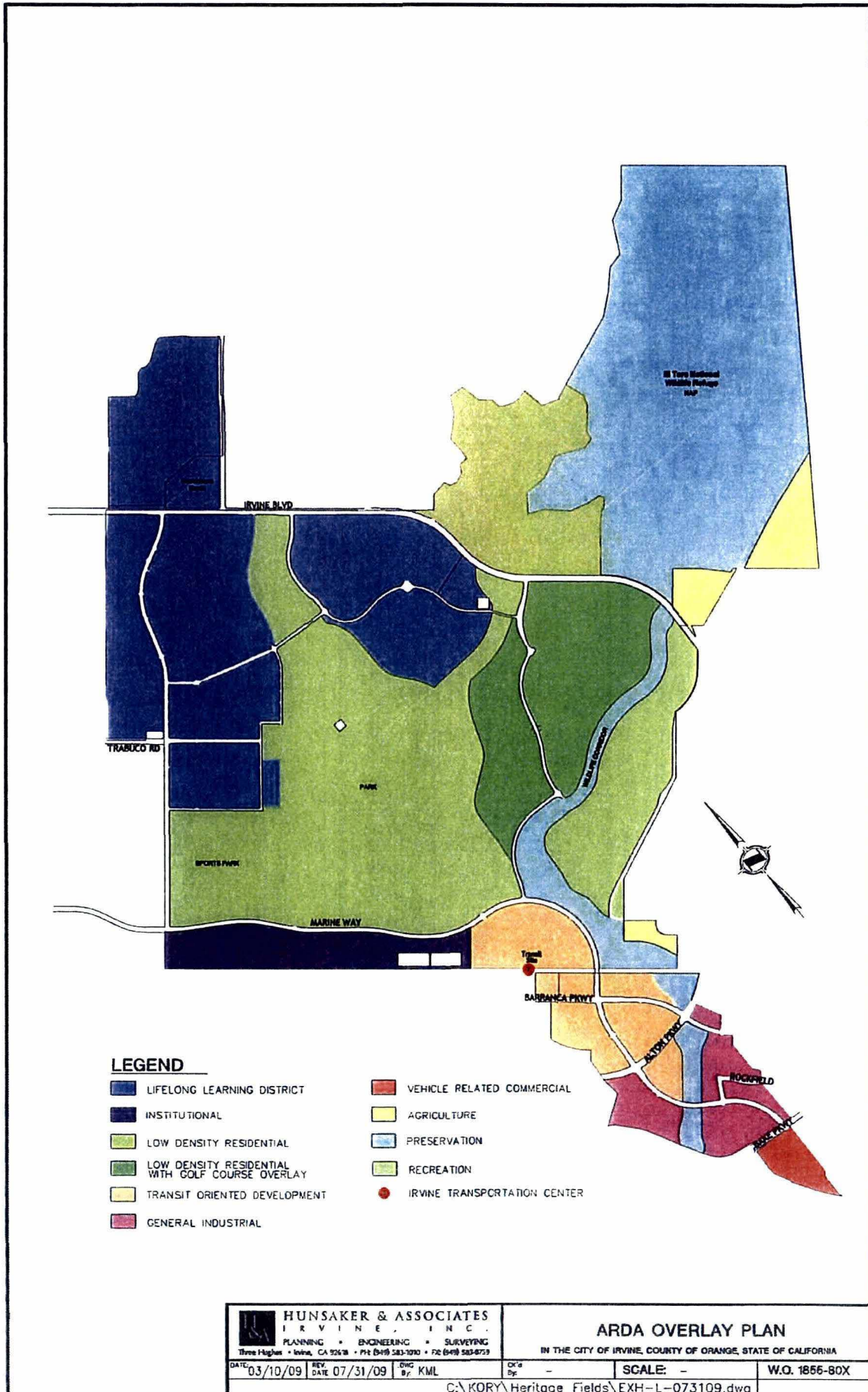
| | | | |
|---|--------------------|--|-------------------------------|
| | | PROPERTY IDENTIFICATION MAP | |
| PLANNING • ENGINEERING • SURVEYING Three Hughes • Irvine, CA 92618 • P/E (949) 583-1010 • F/X (949) 583-0759 | | IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA | |
| DATE 03/18/08 | REV. DATE 07/27/09 | DWG. BY K. LYNCH | SCALE: 1" = 2000' |
| | | C:\KORY\Heritage Fields\ROP+ Revised\EXH-1.dwg | W.O. 1855-80T SHEET 1 OF 1 |

(RESERVED)

EXHIBIT J

(RESERVED)

EXHIBIT "L"



LEGEND

- LIFELONG LEARNING DISTRICT
- INSTITUTIONAL
- LOW DENSITY RESIDENTIAL
- LOW DENSITY RESIDENTIAL WITH GOLF COURSE OVERLAY
- TRANSIT ORIENTED DEVELOPMENT
- GENERAL INDUSTRIAL
- VEHICLE RELATED COMMERCIAL
- AGRICULTURE
- PRESERVATION
- RECREATION
- IRVINE TRANSPORTATION CENTER

HUNSAKER & ASSOCIATES
 IRVINE, INC.
 PLANNING • ENGINEERING • SURVEYING
 Three Highways • Irvine, CA 92618 • P: (949) 583-1070 • F: (949) 583-8759

ARDA OVERLAY PLAN
 IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA

| | | | |
|----------------|---------------------|--------------|---------------|
| DATE: 03/10/09 | REV. DATE: 07/31/09 | DWG. BY: KML | DATE: - |
| SCALE: - | | | W.O. 1856-80X |

Exhibit 'L'

ARDA OVERLAY PLAN MAXIMUM INTENSITY STANDARDS FOR THE ORANGE COUNTY GREAT PARK (PLANNING AREAS 30 & 51)

| Land Use Type | ARDA Overlay Plan | | | Other Details |
|---|-------------------|----------------|------------------|--|
| | Acres | Dwelling Units | Square Feet | |
| Park District | | | | |
| Low Density Residential - North of Irvine | 269 | 470 | | |
| Low Density Residential - South of Irvine | 358 | 630 | | |
| Golf Course | 211 | | 25,000 | 18 Holes |
| Lifelong Learning District | | | | |
| Institutional (Education) | 108 | | 1,452,600 | Uses permitted by Sec. 3-37-39 8.1 |
| Agriculture | 168 | | | |
| Commercial Recreation | 268 | | 708,000 | Includes 130.5 Ac ARDA Transfer Site |
| Elementary School - Expo | 13 | | 40,000 | 650 Students |
| Retail | 29 | | 225,000 | |
| Medical & Science | 67 | | 1,000,000 | |
| Multi-Use Residential (Senior) | 261 | 800 | | |
| ETHIC | 10 | 165 | | |
| Multi-Use Residential | 7 | 60 | | |
| | | | 50,000 | Cemetery related building development A total of 73 acres of cemetery use is conditionally permitted in 8.1A of LLD |
| Institutional | | | | |
| Institutional | 100 | | 300,000 | County Facilities |
| Institutional | 25 | | 122,500 | |
| Transit Oriented Development District: | | | | |
| Transit Oriented Development | 173 | 1,500 | 150,000 | 75,000 Retail; 75,000 Office |
| Research & Development | 118 | | 1,600,000 | |
| Auto Sales, Parking, & Storage | 32 | | 102,000 | |
| Agriculture | 12 | | | |
| Other City Uses: | | | | |
| Marshburn Basin & Channel | 34 | | | |
| Music/Alton | 100 | | | |
| TOD Station Related Public Uses | 16 | | | 375 Parking Spaces |
| Remote Airport Terminal | 10 | | 9,000 | 675 Parking Spaces |
| Remote Airport Terminal Maintenance | 9 | | 44,500 | |
| Police Sub-Station | 5.5 | | | |
| Open Space & Recreational Uses | | | | |
| Open Space / Park | 348 | | | Per OCGP Master Plan - 9/27/07 |
| Cultural / Institutional | 175 | | 468,000 | |
| Sports Park | 154 | | 26,000 | |
| Drainage Corridor | 262 | | | |
| Wildlife Corridor | 174 | | | |
| Other Agency Uses: | | | | |
| Habitat Preserve | 962 | | | |
| Cal Trans Right of Way | 2.8 | | | |
| FAA 2 | 0.9 | | | |
| FAA 4 | 1.6 | | | |
| Home 1 | 6.5 | | 131,500 | McKinney Act Warehousing |
| Home 2 | 5.2 | | 131,500 | McKinney Act Warehousing |
| Roadways | | | | |
| Roadways | 196 | | | |
| TOTAL | 4,692 | 3,625 | 6,585,600 | |

Form of LIFOC Conveyance

EXHIBIT "M"

ASSIGNMENT OF LEASE

RECORDED AT THE REQUESTED OF AND
WHEN RECORDED RETURN TO

CITY OF IRVINE
City Hall
One Civic Center Plaza
P.O. Box 19575
Irvine, CA 92623-9525
Attn.: City Manager

(Space Above Line for Recorder's Use)

THIS ASSIGNMENT OF LEASE (this "Assignment") is made as of _____, 2005, by Heritage Fields El Toro, LLC, a Delaware limited liability company ("Assignor"), to and in favor of the CITY OF IRVINE, a charter municipal corporation ("Assignee").

WITNESSETH:

A. Assignor is the current owner of fee title to a portion of the former USMCAS El Toro ("**Former Base Project**"). Assignor also is the holder of a leasehold estate to the land more particularly described on Exhibit A attached hereto (the "**Transfer Parcel**"), which is located on the Former Base Project and has been leased under a "Lease in Furtherance of Conveyance" ("**LIFOC**") that was granted by the United States Department of Navy ("**Navy**").

B. Assignor and Assignee are parties to that certain Amended and Restated Development Agreement dated _____, 2009 and recorded in the official records of Orange County, California on _____, 2009 as Instrument No. _____ (the "**Development Agreement**"). The Development Agreement requires that Assignor convey fee title to the Transfer Parcel if and when Assignor acquires fee title from the Navy. The Development Agreement also requires that, pending Assignor's receipt of fee title from the Navy, Assignor assign its leasehold interest in and to the Transfer Parcel to Assignee, provided that the Navy consents to the assignment of the leasehold estate and that the LIFOC being assigned to the City is separate and distinct from other LIFOCs affecting other real property currently leased by the Navy to Assignor..

ARTICLE 1
DEFINITIONS

Section 1.1 Defined Terms and Rules of Construction. All capitalized terms used herein shall have the meaning of the same defined terms set forth in the Development Agreement. Article and Section captions used in this Assignment are for convenience only and shall not affect the construction of this Assignment. The words "Assignor", "Assignee", and "lessee", wherever used herein, shall include the persons named herein and designated as such and their respective successors and assigns, and all words and phrases shall be taken to include the singular or plural and masculine, feminine or neuter gender, as may fit the case.

No rules of construction against the drafter of this Assignment shall apply in any interpretation or enforcement of this Assignment, any documents or certificates executed pursuant hereto, or any provisions of any of the foregoing.

ARTICLE 2
TERMS AND CONDITIONS

Section 2.1 Assignment of Leases. Assignor hereby absolutely, unconditionally and irrevocably assigns, transfers, and conveys to Assignee all of Assignor's right, title and interest in and to the leasehold estate in the Transfer Parcel, which leasehold estate was created pursuant to the LIFO described on Exhibit "B" attached hereto (the "Lease"), except to the extent it may be limited by the terms contained in the LIFO entered into between the United States of America and Assignor (or its predecessor in interest) with respect to the Transfer Parcel.

Section 2.2 Enforcement of Assignment. Assignor does hereby empower Assignee, its agents or attorneys whether or not there has been any event of default or breach under the Development Agreement, to collect, sue for, settle, compromise and give acquaintances for all of the rents that may become due under any and all subleases under the Lease, and avail itself of and pursue all remedies for the enforcement of the Lease and any and all subleases, and Assignor's rights in and under the Lease and all any subleases as Assignor might have pursued but for this Assignment.

Section 2.3 Lease Warranties. Assignor warrants that:

(a) The Lease is in full force and effect, and that a copy thereof heretofore delivered to Assignee is a true and correct copy; and

(b) Assignor has not heretofore assigned or pledged the same or any interest therein (except for such assignment or pledge that is released concurrent with the delivery of this Assignment to Assignee), and, to the actual knowledge of Assignor, no default exists on the part of the lessee under the Lease (the "Lessee"), or Assignor, as lessor, in the performance on the part of either Assignor or Lessee, of the terms, covenants, provisions or agreements in the Lease;

Section 2.4 Transfer of Conveyance Deed Rights Upon Expiration of LIFOCs. Assignor absolutely, unconditionally and irrevocably covenants that following the date on which the Navy or an affiliate agency of the United States Government, executes and delivers to Assignor a Quitclaim deed conveying the Transfer Parcel, the Assignor shall execute and deliver

to Assignee a Grant Deed for that property in substantially the same form as the Quitclaim deed delivered by the Navy. Assignee understands that the deed may include restrictions, covenants, land use controls or other encumbrances required by the Navy with respect to environmental remediation of the property.

Section 2.5 Termination Upon Conveyance. This assignment shall terminate upon conveyance by deed of any conveyed portion of the Transfer Parcel. All references in the LIFO to the Leased Premises shall be deemed to exclude such conveyed portions and this Assignment shall continue in full force and effect with respect to the remainder of the Leased Premises.

ARTICLE 3 MISCELLANEOUS

Section 3.1 Extension and Renewals of Leases. This Assignment shall include any extensions and renewals of the Lease and any subleases or assignments of the Lease, and any reference herein to the Lease shall be construed as including any such extensions, renewals, subleases and assignments.

Section 3.2 No Third Parties Benefited. This Assignment is made for the purpose of defining and setting forth certain obligations, rights and duties of Assignor and Assignee, and is made for the protection of Assignee. There are no third party beneficiaries under this Assignment.

Section 3.3 Notices. All notices, demands, or other communications under this Assignment shall be in writing and shall be deemed to have been given and/or received: (i) upon delivery if personally delivered; (ii) three days after deposited in the United States Mail, postage pre-paid, by certified or registered mail; or (iii) on the next business day after deposit with a nationally recognized overnight delivery service marked for delivery the next business day, addressed to the party for whom it is intended at its address hereinafter set forth:

If to Assignee:

City of Irvine City Hall
One Civic Center Plaza
Irvine, CA 92623-9525
Attn.: City Manager

With a copy to:

Rutan & Tucker LLP
611 Anton Boulevard
14th Floor
Costa Mesa, CA 92626
Attn.: Jeff Melching, Esq.

If to Assignor:

Heritage Fields El Toro, LLC
7130 Trabuco Road
Irvine, California 92618
Attention: Division President
Allen Matkins Leck Gamble Mallory &
Natsis LLP
1900 Main Street, 5th Floor
Irvine, California 92614-7321
Attn.: Michael Alvarado, Esq.

Any party may designate a change of address by written notice to the others, given at least ten (10) days before such change of address is to become effective.

Section 3.4 Attorney's Fees and Expenses; Enforcement. In any judicial proceeding, arbitration, or mediation between Assignor and Assignee seeking enforcement of any of the terms and provisions of this Assignment (collectively, an "Action"), the prevailing Party in such Action shall recover all of its actual and reasonable costs and expenses (whether or not the same would be recoverable pursuant to Code of Civil Procedure Section 1033.5 or Civil Code Section 1717 in the absence of this Assignment), including expert witness fees, attorney's fees, and costs of investigation and preparation prior to the commencement of the Action. However, such recovery shall not exceed the dollar amount of the actual costs and expenses of the party from whom such recovery is sought for such same Action ("Non-Prevailing Party's Expenses"), and such prevailing party shall not recover any costs and expenses in excess of the Non-Prevailing Party's Expenses. The right to recover such costs and expenses shall accrue upon commencement of the Action, regardless of whether the Action is prosecuted to a final judgment or decision.

Section 3.5 Successors and Assigns. This Assignment shall be binding upon and inure to the benefit of Assignor, Assignee, and their respective successors and permitted assigns.

Section 3.6 Time. TIME IS OF THE ESSENCE of each and every term of this Assignment.

Section 3.7 Governing Law. This Assignment shall be governed by, and construed and enforced in accordance with the laws of the State of California. Assignor and all persons obligated to Assignee under this Assignment consent to the jurisdiction of the Superior Court of the State of California for the County of Orange, or the United States District Court for the Central District of California, Santa Ana Division, and waive any right to change of venue or removal of the case to another jurisdiction.

Section 3.8 Entire Agreement. This Assignment and the Development Agreement embody the final, entire agreement among the Parties hereto and supersede any and all prior commitments, agreements, representations and understandings, whether written or oral, relating to the subject matter hereof and may not be contradicted or varied by evidence of prior, contemporaneous, or subsequent oral agreements or discussions of the Parties hereto. There are no unwritten oral agreements among the Parties hereto. The Assignment shall not be modified except by written instrument executed by all Parties.

Section 3.9 Counterparts. This Assignment, and any subsequent modifications, amendments, waivers, consents or supplements thereof, if any, may be executed in any number of counterparts, each of which when executed and delivered shall be deemed to be an original and all such counterparts together, shall constitute one and the same instrument.

[Signature Page Follows]

IN WITNESS WHEREOF, Assignor has executed this Assignment as of the date written above.

HERITAGE FIELDS EL TORO, LLC,
a Delaware limited liability company

By: Heritage Fields LLC,
a Delaware limited liability company
Its: Sole Member

By: Lennar-LNR Heritage Fields, LLC,
a Delaware limited liability company
Its: Administrative Member

By: Lennar Homes of California, Inc.,
a California corporation
Its: Managing Member

By: _____
Name: _____
Title: _____

EXHIBIT "A"

METES AND BOUNDS DESCRIPTION OF TRANSFER PARCEL

[Separate metes and bounds description to be attached based upon applicable Transfer Parcel]

EXHIBIT "B"

DESCRIPTION OF LIFOC DOCUMENT

[Separate LIFOC document to be described here based upon applicable Transfer Parcel]

EXHIBIT "C"

NAVY CONSENT TO ASSIGNMENT

[To be attached based upon terms of consent granted by Navy]

CERTIFICATE OF ACCEPTANCE

This to certify that the interest in real property conveyed by the foregoing Assignment of Lease, from Heritage Fields El Toro, LLC, a Delaware limited liability company, to the City of Irvine ("City") is hereby accepted by the undersigned officer of the City, on behalf of the City, pursuant to authority conferred by Resolution No. _____ adopted by the City on _____, 20____, and City consents to the recordation thereof by its undersigned duly authorized.

CITY OF IRVINE

By: _____

Its: _____

ATTEST:

City Clerk

EXHIBIT 'N'

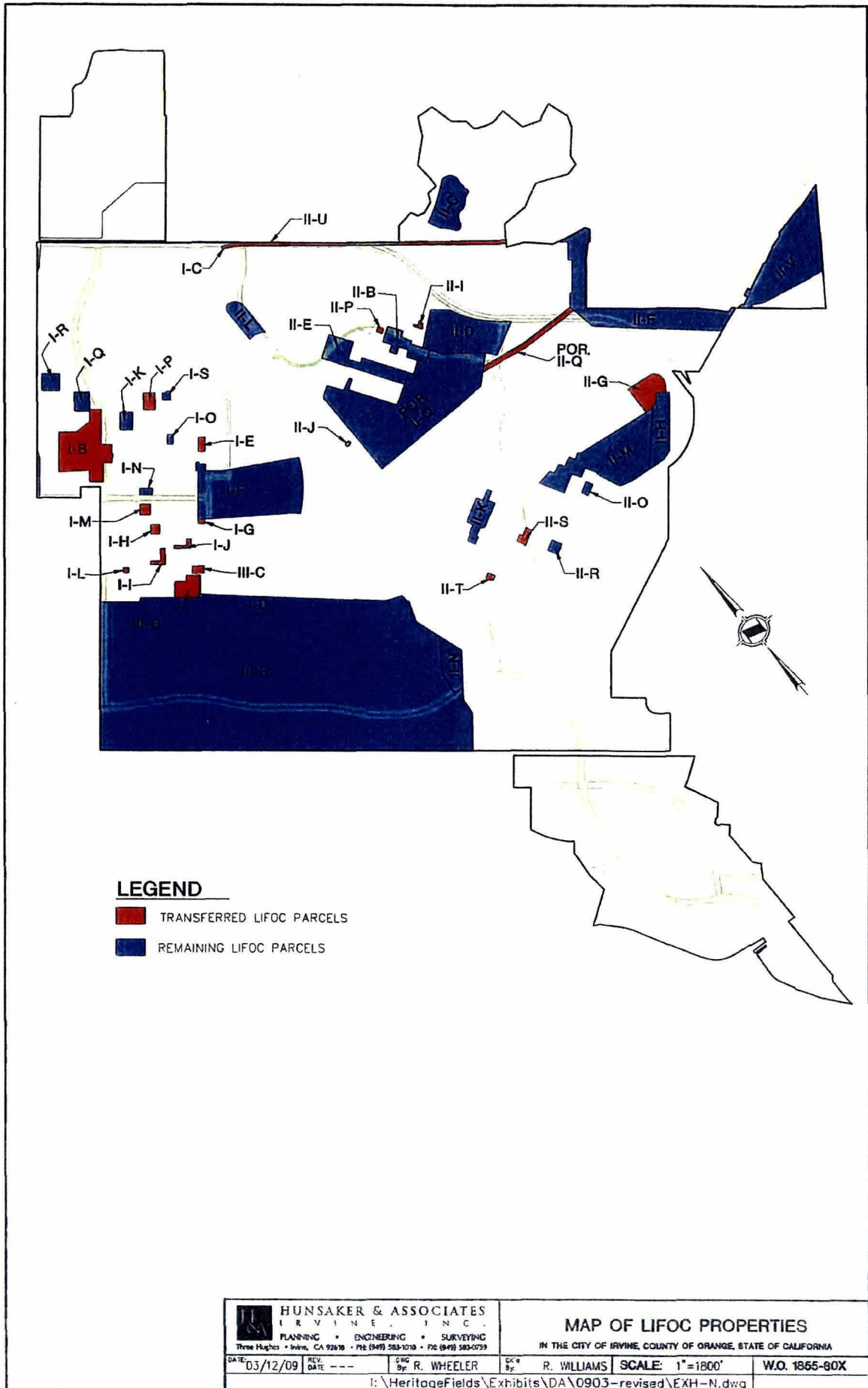


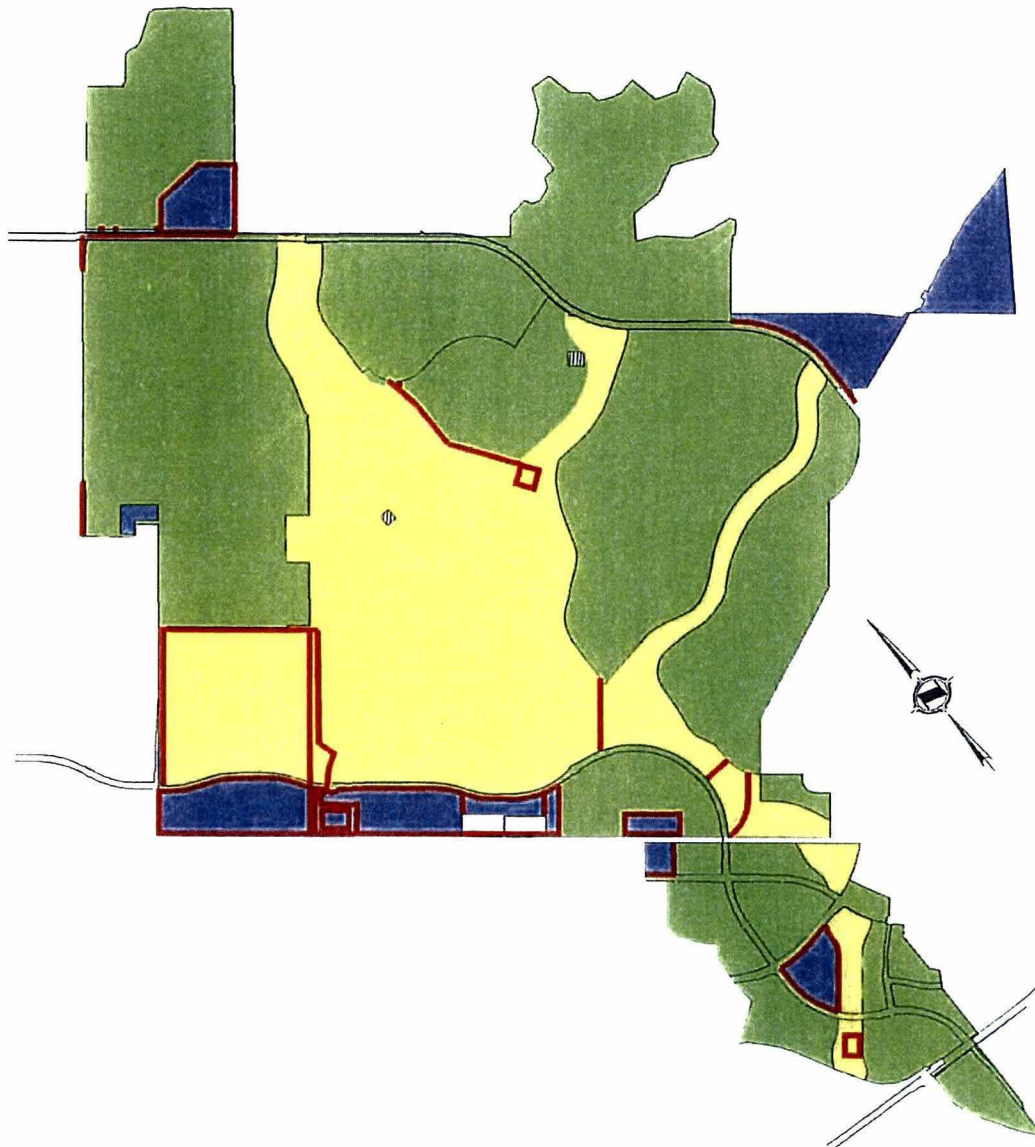
EXHIBIT 'O'

EXHIBIT EXPLANATION:
THIS EXHIBIT SHOWS EASEMENTS AND RIGHTS OF WAY FOR ACCESS AND INFRASTRUCTURE TO BE CONVEYED BY THE CITY TO OTHER AGENCIES.

NOTE:
THE LOCATIONS SHOWN HEREON ARE NOT INTENDED AS ACTUAL EASEMENT LOCATIONS BUT ARE ONLY AN INDICATION OF GENERAL AREA WHERE AN EASEMENT TO BE GRANTED BY SEPARATE INSTRUMENT OR MAP AS POTENTIALLY NEEDED.

LEGEND

- HERITAGE FIELD PROPERTY
- GREAT PARK PROPERTY
- NON-PARK CITY PROPERTY
- INDICATES FAA PARCELS
- APPROXIMATE LOCATION OF PROPOSED EASEMENT AND R/W




| | | | |
|---|--------------------|---|-----------------|
|  HUNSAKER & ASSOCIATES IRVINE, INC. PLANNING * ENGINEERING * SURVEYING Three Hughes • Irvine, CA 92618 • P: (949) 583-9070 • F: (949) 583-0759 | | PROPOSED EASEMENT AND RIGHT OF WAY IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA | |
| DATE: 3/14/08 | REV DATE: 07/08/09 | DWG BY: KML | SCALE: 1"=2000' |
| | | DATE: - | W.O. 1856-80X |
| C:\KORY\Heritage Fields\ROP+ Revised\EXH-O.dwg | | | |

EXHIBIT P

RECORDED AT THE REQUEST OF AND
WHEN RECORDED RETURN TO:

CITY OF IRVINE
One Civic Center Plaza
P.O. Box 19575
Irvine, CA 92623-9575
Attn: City Clerk

(Space Above Line for Recorder's Use)

Free recording Requested per Government Code Section
6103

In accordance with Section 11922 of the California
Revenue and Taxation Code, transfer of the property to
the City of Irvine is exempt from the payment of a
documentary transfer tax.

GRANT DEED

(Police Site)

FOR VALUABLE CONSIDERATION, the receipt of which is hereby acknowledged, Heritage Fields El Toro, LLC, a Delaware limited liability company, hereby grants to the CITY OF IRVINE, a California charter city, that certain real property located in the City of Irvine, County of Orange, State of California, described in the legal description attached hereto as Exhibit "A" and incorporated herein by this reference, subject to all matters of record (including, without limitation, that certain Amended and Restated Development Agreement dated _____, 2009 and recorded in the official records of Orange County, California on _____, 2009 as Instrument No. _____).

Dated: _____, 20__

[signature follows on next page]

[signature page to Grant Deed]

HERITAGE FIELDS EL TORO, LLC,
a Delaware limited liability company

By: Heritage Fields LLC, a Delaware limited
liability company
Its: Sole Member

By: Lennar-LNR Heritage Fields LLC, a
Delaware limited liability company
Its: Administrative Member

By: Lennar Homes of California, Inc., a
California corporation
Its: Managing Member

By: _____
Name: _____
Title: _____

CERTIFICATE OF ACCEPTANCE

This is to certify that the interest in real property conveyed by the foregoing Grant Deed, from Heritage Fields El Toro, LLC, a Delaware limited liability company, to the City of Irvine ("City") is hereby accepted by the undersigned officer of the City, on behalf of the City, pursuant to authority conferred by Resolution No. ____ adopted by the City on _____, 20 __, and City consents to the recordation thereof by its undersigned duly authorized officer.

CITY OF IRVINE

By: _____

Its: _____

ATTEST:

Deputy City Clerk

EXHIBIT Q

RECORDED AT THE REQUEST OF AND
WHEN RECORDED RETURN TO:

CITY OF IRVINE
One Civic Center Plaza
P.O. Box 19575
Irvine, CA 92623-9575
Attn: City Clerk

(Space Above Line for Recorder's Use)

Free recording Requested per Government Code Section
6103

In accordance with Section 11922 of the California
Revenue and Taxation Code, transfer of the property to
the City of Irvine is exempt from the payment of a
documentary transfer tax.

GRANT DEED

(ARDA Transfer Site)

FOR VALUABLE CONSIDERATION, the receipt of which is hereby acknowledged,
Heritage Fields El Toro, LLC, a Delaware limited liability company, hereby grants to the CITY
OF IRVINE, a California charter city, that certain real property located in the City of Irvine,
County of Orange, State of California, described in the legal description attached hereto as
Exhibit "A" and incorporated herein by this reference, subject to all matters of record (including,
without limitation, that certain Amended and Restated Development Agreement dated
_____, 2009 and recorded in the official records of Orange County, California on _____,
2009 as Instrument No. _____).

Dated: _____, 20__

[signature follows on next page]

[signature page to Grant Deed]

HERITAGE FIELDS EL TORO, LLC,
a Delaware limited liability company

By: Heritage Fields LLC, a Delaware limited
liability company
Its: Sole Member

By: Lennar-LNR Heritage Fields LLC, a
Delaware limited liability company
Its: Administrative Member

By: Lennar Homes of California, Inc., a
California corporation
Its: Managing Member

By: _____
Name: _____
Title: _____

CERTIFICATE OF ACCEPTANCE

This is to certify that the interest in real property conveyed by the foregoing Grant Deed, from Heritage Fields El Toro, LLC, a Delaware limited liability company, to the City of Irvine ("City") is hereby accepted by the undersigned officer of the City, on behalf of the City, pursuant to authority conferred by Resolution No. ____ adopted by the City on _____, 20 __, and City consents to the recordation thereof by its undersigned duly authorized officer.

CITY OF IRVINE

By: _____

Its: _____

ATTEST:

Deputy City Clerk

Exhibit R-1

Indexed GA

| <u>Fiscal Year</u> | <u>Amount</u> |
|--|--|
| 2009-2010 | \$2,000,000 |
| 2010-2011 | \$3,000,000 |
| 2011-2012 | \$4,000,000 |
| 2012-2013 | \$4,000,000 |
| 2013-2014 | \$5,000,000 |
| 2014-2015 | \$9,500,000 |
| Each Fiscal Year Thereafter, Commencing in Fiscal Year 2015-2016 | Increase Amount in Prior Fiscal Year by 3%. |

Exhibit R-2

Guaranteed Maintenance Amount Indexed by 2%

| <u>Fiscal Year</u> | <u>Amount</u> |
|--|--|
| 2009-2010 | \$2,000,000 |
| 2010-2011 | \$3,000,000 |
| 2011-2012 | \$4,000,000 |
| 2012-2013 | \$4,000,000 |
| 2013-2014 | \$5,000,000 |
| 2014-2015 | \$9,500,000 |
| Each Fiscal Year Thereafter, Commencing in Fiscal Year 2015-2016 | Increase Amount in Prior Fiscal Year by 2%. |

**RATE AND METHOD OF APPORTIONMENT FOR
CITY OF IRVINE COMMUNITY FACILITIES DISTRICT No. 2009-3
IMPROVEMENT AREA No. 1 (GREAT PARK)**

A Special Tax shall be levied on all Assessor's Parcels of Taxable Property in Improvement Area No. 1 of City of Irvine Community Facilities District No. 2009-3 (Great Park) ("CFD No. 2009-3 (IA No. 1)") and collected each Fiscal Year commencing in Fiscal Year 20XX-20XX, in an amount determined through the application of this Rate and Method of Apportionment as described below. All of the real property in CFD No. 2009-3 (IA No. 1), unless exempted by law or by the provisions hereof, shall be taxed for the purposes, to the extent and in the manner herein provided.

A. DEFINITIONS

The terms hereinafter set forth have the following meanings:

"Acre" or "Acreage" means the land area in acres of an Assessor's Parcel as shown on an Assessor's Parcel Map, or if the land area is not shown on an Assessor's Parcel Map, the land area in acres shown on the applicable final map, parcel map, condominium plan, or other map or plan recorded with the County. The square footage of an Assessor's Parcel is equal to the Acreage of such parcel multiplied by 43,560.

"Act" means, collectively, the Mello-Roos Community Facilities Act of 1982, being Chapter 2.5, Part 1, Division 2 of Title 5 of the California Government Code, the City Charter, and the City Municipal Code, codified and uncodified.

"Administrative Expenses" means the following actual or reasonably estimated costs directly related to the administration of CFD No. 2009-3 (IA No. 1), including but not limited to: the costs of computing the Special Taxes and preparing the annual Special Tax collection schedules (whether by the City or designee thereof or both); the costs of collecting the Special Taxes (whether by the City or otherwise); the costs of remitting the Special Taxes to the Trustee; the costs of the Trustee (including its legal counsel) in the discharge of the duties required of it under the Indenture; the costs to the City, CFD No. 2009-3 (IA No. 1) or any designee thereof of complying with arbitrage rebate requirements with respect to the Special Tax and CFD No. 2009-3 (IA No.1) Bonds; the costs to the City, CFD No. 2009-3 (IA No. 1) or any designee thereof of complying with disclosure requirements of the City, CFD No. 2009-3 (IA No. 1) or obligated persons associated with applicable federal and state securities laws and the Act; the costs associated with preparing Special Tax disclosure statements and responding to public inquiries regarding the Special Taxes; the costs of the City, CFD No. 2009-3 (IA No. 1) or any designee thereof related to an appeal of the Special Tax; the costs of the City, CFD No. 2009-3 (IA No. 1) or any designee thereof related to the recalculation of the Value Limitation in accordance with Section C.1 below and the Buydown of Outstanding Bonds in accordance with Section D.4 below; the costs associated with the release of funds from an escrow account; and the City's annual administration fees and third party expenses related to CFD No. 2009-3 (IA No.1) Bonds. Administrative Expenses shall also include amounts estimated by the CFD Administrator or advanced by the City or CFD No. 2009-3 (IA No. 1) for any other

administrative purposes of CFD No. 2009-3 (IA No. 1), including attorney's fees and other costs related to commencing and pursuing to completion any foreclosure of delinquent Special Taxes.

"Affordable Housing" means residential dwelling units, located on one or more Assessor's Parcels for which a building permit for new construction was issued after January 1, 2008 and on or before May 1 of the Fiscal Year preceding the Fiscal Year for which the Special Taxes are being levied, that are subject to deed restrictions, resale restrictions, and/or regulatory agreements recorded in favor of the City providing affordable housing for households with incomes below 80% of the County of Orange median income, and are therefore exempt from the Special Tax.

"Amended and Restated Development Agreement" means the Amended and Restated Development Agreement, dated MM/DD/YYYY, by and among the City, the Developer and the Irvine Redevelopment Agency.

"Assessor's Parcel" means a lot or parcel to which an assessor's parcel number is assigned as determined from an Assessor's Parcel Map or the applicable assessment roll.

"Assessor's Parcel Map" means an official map of the County Assessor of the County designating parcels by Assessor's Parcel number.

"Attached Residential Property" means Assessor's Parcels of Developed Property for which building permits have been issued for attached residential units.

"Authorized Facilities" means Group A Facilities, Group B Facilities, and Group C Facilities as identified in the Amended and Restated Development Agreement.

"Authorized Services" means those services authorized to be financed by CFD No. 2009-3.

"Auto Center Property" means all Assessor's Parcels of Developed Property for which a building permit(s) permitting the construction of one or more non-residential facilities has been issued by the City which is primarily used for: selling automobiles, or for any other uses that are consistent with auto center land use designations as determined by the City.

"Bond Costs" means for (i) any bond issue sold by any Other Improvement Area in CFD No. 2009-3 and (ii) all Subordinate CFD No. 2009-3 (IA No. 1) Bonds, all debt service payments, administrative expenses, and amounts required to establish or replenish any bond reserve funds, and any other use of Special Taxes for such bond issues required by the indenture, fiscal agent agreement, or other agreement governing the terms of such bond issue.

"Bond Index" means the national Bond Buyer Revenue Bond Index, commonly referenced as the 25-Bond Revenue Index. In the event the Bond Index ceases to be published, the index used shall be based on a comparable index for revenue bonds maturing in 30 years with an average rating equivalent to Moody's A1 and S&P's A-plus, as reasonably determined by the CFD Administrator.

"Bond Yield" means the yield of the latest series of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds issued. For purposes of this calculation, the yield on such latest series of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds shall be the yield calculated at the time such last

Non-Subordinate series of CFD No. 2009-3 (IA No. 1) Bonds were issued, pursuant to Section 148 of the Internal Revenue Code of 1986, as amended, for the purpose of the tax certificate executed in connection with the issuance of such latest series of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds.

"Buydown of Outstanding Bonds" means a mandatory buydown of Outstanding Bonds made by a property owner to compensate for a loss of Special Tax revenues resulting from the construction of fewer residential dwelling units, smaller residential dwelling units, or a modified number of Acres anticipated for the construction of Non-Residential Property, as determined in accordance with Section D below.

"CFD Administrator" means an official of the City, or designee thereof, responsible for determining the Special Tax Requirement, and providing for the levy and collection of the Special Taxes.

"CFD No. 2009-3" means City of Irvine Community Facilities District No. 2009-3 (Great Park).

"CFD No. 2009-3 (IA No. 1)" means Improvement Area No. 1 of CFD No. 2009-3 as identified on the boundary map for CFD No. 2009-3 and further set forth in the Resolution of Formation.

"CFD No. 2009-3 (IA No. 1) Bonds" means any bonds or other debt (as defined in Section 53317(d) of the Act), whether in one or more series, issued by CFD No. 2009-3 (IA No. 1) and secured by the Special Tax levy on property within the boundaries of CFD No. 2009-3 (IA No. 1) under the Act .

"City" means the City of Irvine.

"Commercial Property" means all Assessor's Parcels of Developed Property for which a building permit(s) permitting the construction of one or more non-residential facilities has been issued by the City which is primarily used for: the sale of general merchandise, hard goods, personal services, and other items directly to consumers, or other uses that are consistent with commercial land use designations as determined by the City.

"Council" means the City Council of the City which serves at the legislative body of CFD No. 2009-3.

"County" means the County of Orange.

"Debt Service Coverage" means the debt service coverage percentage identified in the additional bonds test or parity bonds test section of the Indenture for Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds.

"Detached Residential Property" means Assessor's Parcels of Developed Property for which building permits have been issued for detached residential units.

"Developed Property" means, for each Fiscal Year, all Taxable Property, exclusive of Taxable Public Property and Taxable Property Owner Association Property, for which a building permit for construction was issued after January 1, 2009 and on or before May 1 of the Fiscal Year preceding the Fiscal Year for which the Special Taxes are being levied.

"Developed Property Special Tax Requirement" means the Maximum Special Tax on Developed Property.

"Developer" means Heritage Fields El Toro LLC, a Delaware limited liability company, and its successors and assigns.

"Discount Rate" means (i) prior to the issuance of the first series of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds, the Bond Index, and (ii) subsequent to the issuance of the first series of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds, the Bond Yield.

"Final Mapped Property" means, for each Fiscal Year, all Taxable Property, exclusive of Developed Property, Taxable Property Owner Association Property and Taxable Public Property, located in a Final Subdivision as of January 1 of the Fiscal Year preceding the Fiscal Year for which the Special Taxes are being levied, but no earlier than January 1, 2009.

"Final Mapped Property/Undeveloped Property Special Tax Requirement" means that amount required, if any, in any Fiscal Year to (i) pay debt service on CFD No. 2009-3 (IA No. 1) Bonds payable in the calendar year commencing in such Fiscal Year, (ii) pay any amounts required to establish or replenish any reserve funds for all CFD No. 2009-3 (IA No. 1) Bonds, (iii) pay for Administrative Expenses, (iv) pay for reasonably anticipated Special Tax delinquencies based on the delinquency rate for the Special Tax levy in the previous Fiscal Year, (v) pay the Guaranteed Amount, and (vi) pay Bond Costs for Other Improvement Area Bonds to the extent that Special Taxes secure an issue of Other Improvement Area Bonds, less (vii) an amount equal to the Developed Property Special Tax Requirement, less (viii) a credit for funds available to reduce the annual Special Tax levy, as determined by the CFD Administrator, so long as the amount required is not less than zero.

"Final Subdivision" means a subdivision of property which occurred prior to January 1 of the Fiscal Year preceding the Fiscal Year for which the Special Taxes are being levied, by recordation of a final map, parcel map, or lot line adjustment, approved by the City pursuant to the Subdivision Map Act (California Government Code Section 66410 et seq.) or recordation of a condominium plan pursuant to California Civil Code Section 1352 that, in either case, creates individual lots for which building permits may be issued without further subdivision.

"Fiscal Year" means the period starting July 1 and ending on the following June 30.

"Floor Area Ratio" means for Non-Residential – Commercial Property – 0.317; for Non-Residential – Industrial Property – 0.325; for Non-Residential – Institutional Property – 0.361; for Non-Residential – Office Property – 0.326; for Non-Residential – Auto Center – 0.084; and for Other Non-Residential Property – 0.308.

"Future Annexation Area" means the property designated as Future Annexation Area on the boundary map for CFD No. 2009-3 (IA No. 1), as identified in Exhibit C, and anticipated to become subject to the Special Tax.

"Guaranteed Amount" means for any Fiscal Year, the lesser of (i) the Pro Rata Share for CFD No. 2009-3 (IA No. 1) of the annual amounts set forth in Exhibit B, or (ii) the sum of (a) Pro

Rata Share for CFD No. 2009-3 (IA No. 1) of the amount needed to finance Authorized Services in such Fiscal Year as determined by the City, and (b) the Bond Costs associated with any Subordinate Bonds issued on behalf of CFD No. 2009-3 (IA No. 1). Notwithstanding the above, the Guaranteed Amount may exceed the Pro Rata Share for CFD No. 2009-3 (IA No. 1) as discussed in Section E.2. The Guaranteed Amount collected in CFD No. 2009-3 (IA No. 1) may be used to finance Authorized Services and to pay Bond Costs associated with Subordinate Bonds issued on behalf of CFD No. 2009-3 (IA No. 1).

"Indenture" means the indenture, fiscal agent agreement, trust agreement, resolution or other instrument pursuant to which CFD No. 2009-3 (IA No. 1) Bonds are issued, as modified, amended and/or supplemented from time to time, and any instrument replacing or supplementing the same.

"Industrial Property" means all Assessor's Parcels of Developed Property for which a building permit(s) permitting the construction of one or more non-residential facilities has been issued by the City which is primarily used for: manufacturing, production, research and development, storage and/or processing of goods, or for any other uses that are consistent with industrial land use designations as determined by the City.

"Institutional Property" means all Assessor's Parcels of Developed Property for which a building permit(s) permitting the construction of one or more non-residential facilities has been issued by the City which is primarily used for: education, including libraries and museums, or for any other uses that are consistent with institutional land use designations as determined by the City.

"Intermediate Maximum Special Tax" means the intermediate Maximum Special Tax, determined in accordance with Section C herein, that can be levied in any Fiscal Year on any Assessor's Parcel of Final Mapped Property or Undeveloped Property.

"Land Use Class" means any of the classes listed in Table 1, Table 2 or Exhibit A, herein.

"Maximum Special Tax" means the maximum Special Tax, determined in accordance with Section C below, that can be levied in any Fiscal Year on any Assessor's Parcel of Taxable Property.

"Moderate Affordable Senior Units" means residential development that is designed for, and restricted to, persons or couples of whom one member is age 55 or older that is located on one or more Assessor's Parcels of Residential Property that are subject to deed restrictions, resale restrictions, and/or regulatory agreements recorded in favor of the City providing affordable housing for households with incomes below 120% of the County of Orange median income (but not less than 80% of the County of Orange median income).

"Moderate Affordable Units" means dwelling units, other than Moderate Affordable Senior Units, that are located on one or more Assessor's Parcels of Residential Property that are subject to deed restrictions, resale restrictions, and/or regulatory agreements recorded in favor of the

City providing affordable housing for households with incomes below 120% of the County of Orange median income (but not less than 80% of the County of Orange median income).

"Non-Residential Floor Area" means the total building square footage of the non-residential building(s) located on an Assessor's Parcel, measured from outside wall to outside wall, not including space devoted to stairwells, public restrooms, lighted courts, vehicle parking and areas incident thereto, and mechanical equipment incidental to the operation of such building. The determination of Non-Residential Floor Area shall be made by reference to the building permit(s) issued for such Assessor's Parcel and/or to the appropriate records kept by the Department of Planning and Land Use, as reasonably determined by the CFD Administrator.

"Non-Residential Property" means all Assessor's Parcels of Developed Property for which a building permit permitting the construction of one or more non-residential units or facilities has been issued by the City or other governmental agency.

"Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds" means any issue(s) of CFD No. 2009-3 (IA No. 1) Bonds that are not Subordinate CFD No. 2009-3 (IA No. 1) Bonds.

"Office Property" means all Assessor's Parcels of Developed Property for which a building permit(s) permitting the construction of one or more non-residential facilities has been issued by the City which is primarily used for: professional/medical offices, or for any other uses that are consistent with office land use designations as determined by the City.

"Other Improvement Area" means an improvement area located within CFD No. 2009-3, other than CFD No. 2009-3 (IA No.1).

"Other Improvement Area Bonds" means all bonds issued on behalf of Other Improvement Areas that are secured by the Special Taxes in the manner and for the duration set forth in one or more indentures, fiscal agent agreements, or other agreements governing the terms of such bonds.

"Other Non-Residential Property" means all Non-Residential Property, other than Auto Center Property, Commercial Property, Industrial Property, Institutional Property, and Office Property.

"Outstanding Bonds" means all Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds which are outstanding under an Indenture.

"Overlapping Liens" means projected ad valorem property taxes and all direct and overlapping assessments, taxes, special taxes, and charges on the secured tax-roll of the County for each parcel/unit of Taxable Property at the time of CFD No. 2009-1 formation, excluding however, the Special Taxes assessed or levied pursuant to this Rate and Method of Apportionment.

"Prepayable Portion of the Special Tax" shall have the meaning set forth in Section I.

"Pro Rata Share" means the ratio calculated by dividing the anticipated Maximum Special Tax to be levied at build out in CFD No. 2009-3 (IA No. 1) by the anticipated Maximum Special Tax to be levied at build out for all improvement areas within CFD No. 2009-3. So long as there are no CFD No. 2009-3 (IA No. 1) Bonds outstanding, or Special Taxes being pledged to the payment of Bond Costs for Other Improvement Area Bonds, the City may recalculate the Pro

Rata Share to reflect development assumptions which differ from those identified in Table 2 of the rate and method of apportionment for any improvement area of CFD No. 2009-3. Notwithstanding the foregoing, the City shall not recalculate the Pro Rata Share to incorporate any prepayments of the Prepayable Portion of the Special Tax.

"Property Owner Association Property" means, for each Fiscal Year, (i) any property within the boundaries of CFD No. 2009-3 (IA No. 1) for which the owner of record, as determined from the County Assessor's secured tax roll for the Fiscal Year in which the Special Tax is being levied, is a property owner's association, including any master or sub-association, (ii) any property located in a Final Subdivision and which, as determined from such Final Subdivision, is or will be open space, a common area recreation facility, or a private street, or (iii) any property which, as of the May 1 preceding the Fiscal Year for which the Special Tax is being levied, has been conveyed, irrevocably dedicated, or irrevocably offered to a property owner's association, including any master or sub-association, provided such conveyance, dedication, or offer is submitted to the CFD Administrator by May 1 preceding the Fiscal Year for which the Special Tax is being levied.

"Proportionately" means, for Developed Property, that the ratio of the actual Special Tax levy to the Maximum Special Tax is equal for all Assessor's Parcels of Developed Property. For Final Mapped Property, "Proportionately" means that the ratio of the actual Special Tax levy per acre to the Maximum Special Tax per acre is equal for all Assessor's Parcels of Final Mapped Property. For Undeveloped Property, "Proportionately" means that the ratio of the actual Special Tax levy per acre to the Maximum Special Tax per acre is equal for all Assessor's Parcels of Undeveloped Property. The term "Proportionately" may similarly be applied to other categories of Taxable Property as listed in Section E below. Notwithstanding the above, a disproportionate levy shall be permissible for any Assessor's Parcels in CFD No. 2009-3 (IA No. 1) to cover any delinquencies by a property owner and to cover any Guaranteed Amount shortfalls generated by delinquencies, as discussed in Section E.2.

"Public Property" means, for each Fiscal Year, any property within the boundaries of CFD No. 2009-3 (IA No. 1) that (i) is owned by, irrevocably offered or dedicated to, or leased to, the federal government, the State, the County, the City, or any local government or other public agency, or (ii) is encumbered by a public easement making impractical its use for any purpose other than that set forth in the easement.

"Rate and Method of Apportionment" means this Rate and Method of Apportionment for City of Irvine CFD No. 2009-3 (IA No. 1).

"Residential Floor Area" means all of the square footage of living area within the perimeter of a residential structure, not including any carport, walkway, garage, overhang, patio, enclosed patio, or similar area. The determination of Residential Floor Area for an Assessor's Parcel shall be made by reference to the building permit(s) issued for such Assessor's Parcel.

"Residential Property" means all Assessor's Parcels of Developed Property for which a building permit permitting the construction thereon of one or more residential dwelling units has been issued by the City, or other governmental agency.

"Resolution of Formation" means the resolution establishing CFD No. 2009-3.

"Senior Housing" means all residential development, other than Moderate Affordable Senior Units, that is designed for, and restricted to, persons or couples of whom one member is age 55 or older.

"Special Tax" or "Special Taxes" means the sum of the special taxes to be levied in each Fiscal Year on each Assessor's Parcel of Taxable Property within CFD No. 2009-3 (IA No. 1) to fund the Special Tax Requirement.

"Special Tax Requirement" means the sum of the Developed Property Special Tax Requirement, the Final Mapped Property/Undeveloped Property Special Tax Requirement and the Taxable Property Owner Association Property/ Taxable Public Property Special Tax Requirement.

"State" means the State of California.

"Subordinate CFD No. 2009-3 (IA No. 1) Bonds" means any CFD No. 2009-3 (IA No. 1) Bonds that are subordinate to any current or future CFD No. 2009-3 (IA No. 1) Bonds and that meet the requirements set forth in the Amended and Restated Development Agreement.

"Supplemental Improvement Area" means any Other Improvement Area that has been specifically designated as additional collateral for CFD No. 2009-3 (IA No. 1) Bonds as authorized in the Indenture. The Supplemental Improvement Area shall be retained as additional collateral and security for CFD No. 2009-3 (IA No. 1) Bonds until conditions for the release of the special taxes in the Supplemental Improvement Area, as set forth in the Indenture, are satisfied.

"Taxable Property" means all of the Assessor's Parcels within the boundaries of CFD No. 2009-3 (IA No. 1) which are not exempt from the Special Tax pursuant to applicable law or Section F below.

"Taxable Property Owner Association Property" means all Assessor's Parcels of Property Owner Association Property that are not exempt pursuant to Section F below.

"Taxable Property Owner Association Property/Taxable Public Property Special Tax Requirement" means that amount required, if any, in any Fiscal Year to (i) pay debt service on the CFD No. 2009-3 (IA No. 1) Bonds payable in the calendar year commencing in such Fiscal Year, (ii) pay any amounts required to establish or replenish any reserve funds for all CFD No. 2009-3 (IA No. 1) Bonds, (iii) pay for Administrative Expenses, (iv) pay for reasonably anticipated Special Tax delinquencies based on the delinquency rate for the Special Tax levy in the previous Fiscal Year, and (v) pay Bond Costs for Other Improvement Area Bonds to the extent that Special Taxes secure an issue of Other Improvement Area Bonds, less (vi) an amount equal to the Developed Property Special Tax Requirement, less (vii) an amount equal to the Final Mapped Property/Undeveloped Property Special Tax Requirement, less (viii) a credit for funds available to reduce the annual Special Tax levy, as determined by the CFD Administrator, so long as the amount required is not less than zero.

"Taxable Public Property" means all Assessor's Parcels of Public Property that are not exempt pursuant to Section F below.

"Trustee" means the trustee or fiscal agent under the Indenture.

"Undeveloped Property" means, for each Fiscal Year, all Taxable Property not classified as Developed Property, Final Mapped Property, Taxable Property Owner Association Property, or Taxable Public Property.

"Value Limitation" means, collectively (i) that the amount of the Maximum Special Taxes for Residential Property within each Land Use Class, when combined with all Overlapping Liens, including a sufficient amount to pay the assumed Irvine Ranch Water District assessments (subject to the limitations set forth in the Amended and Restated Development Agreement), shall collectively not exceed two percent (2%) of the expected base sales price (i.e., the base sales price without any optional upgrades included) of the lowest priced residential unit in such Land Use Class, based upon the anticipated sales prices to end users at the time of calculation; (ii) that the amount of the special taxes for each Non-Residential Property Land Use Class identified in Table 1 and expressed as an amount per square foot of Non-Residential Floor Area, shall not exceed the product of (a) one and one hundred thirty-nine thousandths percent (1.139%) and (b) the per square foot value of land (as determined by the third-party appraisal described in Section C.1) located within CFD No. 2009-3 (IA No. 1) for each Non-Residential Property Land Use Class, divided by the Floor Area Ratio for the applicable Land Use Class, and (iii) the amount of the special taxes for each Non-Residential Property Land Use Class set forth in Table 1 herein and expressed as an amount per Acre, shall not exceed the product of (a) the amount per square foot of Non-Residential Floor Area calculated in (ii) above for each Non-Residential Property Land Use Class, (b) the Floor Area Ratio for the applicable Land Use Class, and (c) 43,560.

B. ASSIGNMENT TO LAND USE CATEGORIES

Each Fiscal Year, all Taxable Property within CFD No. 2009-3 (IA No. 1) shall be classified as Developed Property, Final Mapped Property, Undeveloped Property, Taxable Property Owner Association Property, or Taxable Public Property, and shall be subject to Special Taxes in accordance with this Rate and Method of Apportionment determined pursuant to Sections C and E herein.

C. MAXIMUM SPECIAL TAX RATE

1. Special Tax

Residential Property shall be assigned to Land Use Classes 1 through 31 as listed in Table 1 herein based on the Residential Floor Area for each unit. Non-Residential Property shall be assigned to Land Use Classes 32 through 37. Prior to the issuance of the first series of CFD No. 2009-3 (IA No. 1) Bonds, the Maximum Special Taxes for Residential Property and the special taxes for Non-Residential Property (set forth in Table 1) shall be reduced in accordance with, and subject to the conditions set forth in this Section C.1, without the need for any proceedings to make changes permitted under the Act.

Upon the earlier of (i) one hundred twenty (120) calendar days before the projected execution date of a bond purchase agreement for the first series of CFD No. 2009-3 (IA No. 1) Bonds, or (ii) upon the written request of the Developer, two hundred seventy (270) calendar days before

the projected date of issuance of the first building permit permitting the construction of a non-model residential building for each Land Use Class within CFD No. 2009-3 (IA No. 1), a third-party consultant selected by the City shall be engaged to recalculate the Value Limitation for Residential Property, and, if the City determines that the Maximum Special Taxes for Residential Property for any Land Use Class (as reflected in Table 1) will cause the overall tax burden (including Overlapping Liens) on Residential Property to exceed the recalculated Value Limitation for any Residential Property Land Use Class, then the Maximum Special Tax for Residential Property for any Land Use Class (as reflected in Table 1) that exceeds its recalculated Value Limitation shall be reduced to the amount necessary to comply with its recalculated Value Limitation. The reduction shall occur within thirty (30) calendar days of the completion of the third-party consultant's report.

Upon the earlier of (i) one hundred and twenty (120) calendar days before the projected execution date of a bond purchase agreement for the first series of CFD No. 2009-3 (IA No. 1) Bonds, or (ii) upon written request of the Developer, two hundred seventy (270) calendar days before the projected date of issuance of the first building permit permitting the construction of a non-residential building for each Land Use Class within CFD No. 2009-3 (IA No. 1), a third-party appraiser selected by the City shall be engaged to recalculate the Value Limitation for Non-Residential Property within CFD No. 2009-3 (IA No. 1), and, based upon the report of the appraiser, if the City so determines that the per square foot and per Acre special taxes, as reflected in Table 1, herein, exceed the recalculated Value Limitation for Non-Residential Property for any Land Use Class, then the per square foot and per Acre special tax for each Non-Residential Property Land Use Class (as reflected in Table 1) that exceeds its recalculated Value Limitation shall be reduced to the amount necessary to comply with its recalculated Value Limitation, provided, however, that the Maximum Special Taxes for Non-Residential Property do not fall below \$0.40 per square foot of Non-Residential Floor Area. The reduction shall occur within thirty (30) calendar days of the completion of the third-party appraisal's report.

Notwithstanding the above, if, and to the extent, the recalculation of the Maximum Special Tax for Residential Property and per square foot and per Acre special taxes for Non-Residential Property is triggered by the projected issuance of a building permit, the recalculation(s) shall only be completed for those Land Use Classes for which a building permit is expected to be issued within 270 days. If, and to the extent, the recalculation of the Maximum Special Tax for Residential Property and per square foot and per Acre special taxes for Non-Residential Property is triggered by the projected execution of a bond purchase agreement within 120 days, the recalculation(s) shall be completed for all Land Use Classes within CFD No. 2009-3 (IA No. 1) that have not previously experienced a reduction in their Maximum Special Taxes (for Residential Property) or their special taxes (for Non-Residential Property).

Notwithstanding the above, the City and Developer may confer and mutually agree to reduce the Maximum Special Tax on Developed Property for Senior Housing, Moderate Affordable Senior Units, and/or Moderate Affordable Units, as identified in Table 1.

Each special tax reduction for a Land Use Class pursuant to this Section C.1., shall be calculated separately, as reasonably determined by the CFD Administrator, without regard to special tax reductions in any other Land Use Class, and it shall not be required that such reduction be proportionate to reductions among other special tax reductions. If the special taxes for a Land Use Class do not require reduction as set forth in this Section C.1., then those special taxes shall not be reduced irrespective of any reductions made to other special taxes. The reductions

required pursuant to this Section C.1 shall be reflected in an amended notice of Special Tax lien which the City shall cause to be recorded by executing a certificate in substantially the form attached herein as Exhibit A. Notwithstanding the foregoing, under no circumstances may the special taxes be reduced under this Section C.1 during the time that the Special Taxes have been pledged to the payment of Bond Costs for Other Improvement Area Bonds.

a. **Developed Property**

(1). Maximum Special Tax

The Maximum Special Tax that may be levied and escalated as explained further in Section C.1.a.(2) below in any Fiscal Year for each Assessor's Parcel classified as Developed Property is shown below in Table 1.

TABLE 1
Maximum Special Tax for Developed Property
Improvement Area No. 1 of CFD No. 2009-3
Fiscal Year 20XX-20XX

| Land Use Class | Description | Maximum Special Tax |
|----------------|---|---------------------|
| 1 | DETACHED RESIDENTIAL PROPERTY (=> 5,700 SF) | \$XX,XXX |
| 2 | DETACHED RESIDENTIAL PROPERTY (5,450 SF - 5,699 SF) | \$ XX,XXX |
| 3 | DETACHED RESIDENTIAL PROPERTY (5,200 SF - 5,449 SF) | \$ XX,XXX |
| 4 | DETACHED RESIDENTIAL PROPERTY (4,950 SF - 5,199 SF) | \$ XX,XXX |
| 5 | DETACHED RESIDENTIAL PROPERTY (4,700 SF - 4,949 SF) | \$ XX,XXX |
| 6 | DETACHED RESIDENTIAL PROPERTY (4,450 SF - 4,699 SF) | \$ XX,XXX |
| 7 | DETACHED RESIDENTIAL PROPERTY (4,200 SF - 4,449 SF) | \$ XX,XXX |
| 8 | DETACHED RESIDENTIAL PROPERTY (3,950 SF - 4,199 SF) | \$X,XXX |
| 9 | DETACHED RESIDENTIAL PROPERTY (3,700 SF - 3,949 SF) | \$ X,XXX |
| 10 | DETACHED RESIDENTIAL PROPERTY (3,450 SF - 3,699 SF) | \$ X,XXX |
| 11 | DETACHED RESIDENTIAL PROPERTY (3,200 SF - 3,449 SF) | \$ X,XXX |
| 12 | DETACHED RESIDENTIAL PROPERTY (2,950 SF - 3,199 SF) | \$ X,XXX |
| 13 | DETACHED RESIDENTIAL PROPERTY (2,700 SF - 2,949 SF) | \$ X,XXX |
| 14 | DETACHED RESIDENTIAL PROPERTY (2,450 SF - 2,699 SF) | \$ X,XXX |
| 15 | DETACHED RESIDENTIAL PROPERTY (2,200 SF - 2,449 SF) | \$ X,XXX |
| 16 | DETACHED RESIDENTIAL PROPERTY (1,950 SF - 2,199 SF) | \$ X,XXX |
| 17 | DETACHED RESIDENTIAL PROPERTY (1,700 SF - 1,949 SF) | \$ X,XXX |
| 18 | DETACHED RESIDENTIAL PROPERTY (< 1,700 SF) | \$ X,XXX |
| 19 | ATTACHED RESIDENTIAL PROPERTY (=> 2,600 SF) | \$ X,XXX |

| Land Use Class | Description | Maximum Special Tax |
|----------------|---|---|
| 20 | ATTACHED RESIDENTIAL PROPERTY (2,400 SF - 2,599 SF) | \$ X,XXX |
| 21 | ATTACHED RESIDENTIAL PROPERTY (2,200 SF - 2,399 SF) | \$ X,XXX |
| 22 | ATTACHED RESIDENTIAL PROPERTY (2,000 SF - 2,199 SF) | \$ X,XXX |
| 23 | ATTACHED RESIDENTIAL PROPERTY (1,800 SF - 1,999 SF) | \$ X,XXX |
| 24 | ATTACHED RESIDENTIAL PROPERTY (1,600 SF - 1,799 SF) | \$ X,XXX |
| 25 | ATTACHED RESIDENTIAL PROPERTY (1,400 SF - 1,599 SF) | \$ X,XXX |
| 26 | ATTACHED RESIDENTIAL PROPERTY (1,200 SF - 1,399 SF) | \$ X,XXX |
| 27 | ATTACHED RESIDENTIAL PROPERTY (< 1,200 SF) | \$ X,XXX |
| 28 | SENIOR HOUSING | \$ X,XXX |
| 29 | MODERATE AFFORDABLE UNITS | \$ X,XXX |
| 30 | MODERATE AFFORDABLE SENIOR UNITS | \$XXX |
| 31 | AFFORDABLE | \$0 |
| 32 | NON-RESIDENTIAL - COMMERCIAL PROPERTY | \$1.50 per square foot of Non-Residential Floor Area or \$20,713 per Acre, when applied, whichever is greater |
| 33 | NON-RESIDENTIAL- INDUSTRIAL PROPERTY | \$1.50 per square foot of Non-Residential Floor Area or \$21,236 per Acre, when applied, whichever is greater |
| 34 | NON-RESIDENTIAL- INSTITUTIONAL PROPERTY | \$1.50 per square foot of Non-Residential Floor Area or \$23,588 per Acre, when applied, whichever is greater |
| 35 | NON-RESIDENTIAL - OFFICE PROPERTY | \$1.50 per square foot of Non-Residential Floor Area or \$21,301 per Acre, when applied, whichever is greater |

| Land Use Class | Description | Maximum Special Tax |
|----------------|--------------------------------|---|
| 36 | NON-RESIDENTIAL – AUTO CENTER | \$5.02 per square foot of Non-Residential Floor Area or \$18,368 per Acre, when applied, whichever is greater |
| 37 | OTHER NON-RESIDENTIAL PROPERTY | \$1.50 per square foot of Non-Residential Floor Area or \$20,125 per Acre, when applied, whichever is greater |

(2). Increase in the Maximum Special Tax

The Fiscal Year 20XX-20XX Maximum Special Tax, identified in Table 1 above, as such Table may be amended and restated in full pursuant to this Rate and Method of Apportionment, shall increase thereafter (i) commencing on July 1, 20XX and on July 1 of each Fiscal Year thereafter through the Fiscal Year in which the fortieth anniversary of the date on which the first series of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds were sold occurs, by an amount equal to two percent (2%) of the amount in effect for the previous Fiscal Year; and (ii) commencing in the Fiscal Year following the fortieth anniversary of the date on which the first series of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds were sold, by an amount equal to three percent (3%) of the Maximum Special Tax as determined following the partial termination of the Special Tax as set forth in Section J, and on July 1 of each Fiscal Year thereafter by an amount equal to three percent (3%) of the amount in effect for the previous Fiscal Year.

(3). Multiple Land Use Classes

In some instances an Assessor's Parcel of Developed Property may contain more than one Land Use Class. The Maximum Special Tax levied on an Assessor's Parcel shall be the sum of the Maximum Special Tax for all Land Use Classes located on that Assessor's Parcel. The CFD Administrator's allocation to each type of property shall be final.

b. **Final Mapped Property, Undeveloped Property, Taxable Property Owner Association Property, and Taxable Public Property**

(1). Intermediate Maximum Special Tax

The Fiscal Year 20XX-20XX Intermediate Maximum Special Tax for each Assessor's Parcel of Final Mapped Property and Undeveloped Property shall be \$[] per Acre, and shall increase thereafter, commencing on July 1, 20XX and on July 1 of each Fiscal

Year thereafter, by an amount equal to two percent (2%) of the Intermediate Maximum Special Tax for the previous Fiscal Year.

(2). Maximum Special Tax

The Fiscal Year 20XX-20XX Maximum Special Tax for each Assessor's Parcel of Final Mapped Property, Undeveloped Property, Taxable Property Owner Association Property, and Taxable Public Property shall be \$[] per Acre, and shall increase thereafter, commencing on July 1, 2010 and on July 1 of each Fiscal Year thereafter, by an amount equal to two percent (2%) of the Maximum Special Tax for the previous Fiscal Year.

D. BUYDOWN OF OUTSTANDING BONDS

All of the requirements of this Section D, which describes the need for a Buydown of Outstanding Bonds ("Buydown") that may result from a change in development as determined pursuant to this Section D, shall only apply after the issuance of the first series of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds. Prior to the issuance of the first series of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds, the terms of the Buydown shall not apply. The terms of the Buydown shall not apply to any Subordinate CFD No. 2009-3 (IA No. 1) Bonds.

The following additional definitions apply to this Section D:

"Buydown Requirement" means the total amount needed to be collected to calculate and prepay Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds necessary to be prepaid in order to authorize (i) the issuance of residential building permits, or (ii) the approval of a Final Subdivision for non-residential development listed in a request for a Letter of Compliance, as calculated under this Section D.

"Certificate of Satisfaction of Buydown" means a certificate from the CFD Administrator stating that the property described in such certificate has met the Buydown Requirement for such property as calculated under this Section D.

"Letter of Compliance" means a letter from the CFD Administrator authorizing (i) the issuance of residential building permits, or (ii) the approval of a Final Subdivision for non-residential development based on the prior submittal of a request for a Letter of Compliance by a property owner.

"Update Property" means an Assessor's Parcel of Final Mapped Property or Undeveloped Property for which a building permit has been issued after May 1 of the Fiscal Year preceding the current Fiscal Year. For purposes of all calculations in this Section D, Update Property shall be taxed as if it were already Developed Property during the current Fiscal Year.

1. Request for Letter of Compliance

A. Residential Development

After the issuance of the first series of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds, a property owner shall, as a precondition to the issuance of a building permit for construction of any residential development for a specific Assessor's Parcel or lot, submit a Letter of Compliance for the construction of the development on such Assessor's Parcel or lot. If a Letter of Compliance has not yet been issued, the property owner must first request a Letter of Compliance from the CFD Administrator. The request from the property owner shall contain a list of all building permits for which the property owner is requesting a Letter of Compliance. The property owner shall also submit the Assessor's Parcels or tract and lot numbers on which the construction is to take place, and the Residential Floor Area for each residential dwelling unit associated with each prospective building permit.

B. Non-Residential Development

After the issuance of the first series of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds, a property owner shall, as a precondition to the approval of a Final Subdivision which includes development of any non-residential property, submit a Letter of Compliance for the development of the non-residential property on such Final Subdivision. If a Letter of Compliance has not yet been issued, the property owner must first request a Letter of Compliance from the CFD Administrator. The request from the property owner shall contain the final map, parcel map, or lot line adjustment for which the property owner is requesting a Letter of Compliance. The property owner shall also submit the Assessor's Parcels or tract and lot numbers on which non-residential development is to take place.

2. Issuance of Letter of Compliance

A. Residential Development

Upon the receipt of a request for a Letter of Compliance, the CFD Administrator shall assign each building permit identified in such request to Land Use Classes 1 through 31 as listed in Table 2 below based on the type of use and, if applicable, the Residential Floor Area identified for each such building permit. When using Table 2, if Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds are secured solely by Assessor's Parcels in the portion of CFD No. 2009-3 (IA No. 1) that does not include the Future Annexation Area, the column entitled "Expected Units/Acreage Without Future Annexation Area" shall be utilized for purposes of this analysis. If Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds are secured by all of CFD No. 2009-3 (IA No. 1), including the Future Annexation Area, the column entitled "Expected Units/Acreage Including Future Annexation Area" shall be utilized for this analysis. If the CFD Administrator determines (i) that the number of building permits requested for each Land Use Class, plus those building permits previously issued for each Land Use Class, will not cause the total number of residential dwelling units within any such Land Use Class to exceed the number of residential dwelling units for such Land Use Class identified in Table 2 below, and (ii) that the total number of residential dwelling units anticipated to be constructed pursuant to the current development plan for CFD No. 2009-3 (IA No. 1) shall not be less than 638, then a Letter of Compliance shall be submitted to the City and/or property owner by the CFD Administrator authorizing the issuance of the requested building permits for the subject property. This Letter of Compliance shall be submitted to the City and/or property owner by the CFD Administrator within ten days of the submittal of the request for a Letter of Compliance by the property owner. However, should (i) the building permits requested, plus those previously issued, cause the total number of

residential dwelling units within any such Land Use Class to exceed the number of residential dwelling units for such Land Use Class identified in Table 2 below, or (ii) the CFD Administrator determines that changes in the development plan may cause a decrease in the number of residential dwelling units within CFD No. 2009-3 (IA No. 1) to below 638 residential dwelling units, then a Letter of Compliance will not be issued and the CFD Administrator will be directed to determine if a Buydown shall be required. The number of residential dwelling units by Land Use Class, as listed in Table 2 below, shall be updated by the CFD Administrator prior to the issuance of the first series of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds to reflect the current development plan for CFD No. 2009-3 (IA No. 1).

B. Non-Residential Development

Upon the receipt of a request for a Letter of Compliance, the CFD Administrator shall identify the Acreage of the proposed Non-Residential Property within the Final Subdivision on which such Non-Residential Property is to be located. When using Table 2, if Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds are secured solely by Assessor's Parcels in the portion of CFD No. 2009-3 (IA No. 1) that does not include the Future Annexation Area, the column entitled "Expected Units/Acreage Without Future Annexation Area" shall be utilized for purposes of this analysis. If Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds are secured by all of CFD No. 2009-3 (IA No. 1), including the Future Annexation Area, the column entitled "Expected Units/Acreage Including Future Annexation Area" shall be utilized for this analysis. If the CFD Administrator determines that the Acreage anticipated for the development of Non-Residential Property will not cause the total number of Acres identified in Table 2 for Land Use Classes 32 through 37 to exceed the number of Acres identified in Table 2 for such Land Use Classes, then a Letter of Compliance shall be submitted to the City and/or property owner by the CFD Administrator authorizing the approval of the Final Subdivision. This Letter of Compliance shall be submitted to the City and/or property owner by the CFD Administrator within ten days of the submittal of the request for a Letter of Compliance by the property owner. However, should the CFD Administrator determine that the changes in the development plan may cause a change to the Acreage anticipated for the development of Non-Residential Property within CFD No. 2009-3 (IA No. 1) to anything other than the Acreage identified for Land Use Classes 32 through 37, then a Letter of Compliance will not be issued and the CFD Administrator will determine if a Buydown shall be required. The Acreage anticipated for the development of Non-Residential Property, as listed in Table 2 below, shall be updated by the CFD Administrator prior to the issuance of the first series of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds to reflect the current development plan for CFD No. 2009-3 (IA No. 1).

TABLE 2

Expected Residential Dwelling Units per Land Use Class and Non-Residential Acreage Improvement Area No. 1 of CFD No. 2009-3

| Land Use Class | Description | Expected Units/ Acreage without Future Annexation | Expected Units/ Acreage with Future Annexation |
|----------------|---|---|--|
| 1 | DETACHED RESIDENTIAL PROPERTY (=> 5,700 SF) | [X] | [X] |
| 2 | DETACHED RESIDENTIAL PROPERTY (5,450 SF - 5,699 SF) | [X] | [X] |
| 3 | DETACHED RESIDENTIAL PROPERTY (5,200 SF - 5,449 SF) | [X] | [X] |
| 4 | DETACHED RESIDENTIAL PROPERTY (4,950 SF - 5,199 SF) | [X] | [X] |
| 5 | DETACHED RESIDENTIAL PROPERTY (4,700 SF - 4,949 SF) | [X] | [X] |
| 6 | DETACHED RESIDENTIAL PROPERTY (4,450 SF - 4,699 SF) | [X] | [X] |
| 7 | DETACHED RESIDENTIAL PROPERTY (4,200 SF - 4,449 SF) | [X] | [X] |
| 8 | DETACHED RESIDENTIAL PROPERTY (3,950 SF - 4,199 SF) | [X] | [X] |
| 9 | DETACHED RESIDENTIAL PROPERTY (3,700 SF - 3,949 SF) | [X] | [X] |
| 10 | DETACHED RESIDENTIAL PROPERTY (3,450 SF - 3,699 SF) | [X] | [X] |
| 11 | DETACHED RESIDENTIAL PROPERTY (3,200 SF - 3,449 SF) | [X] | [X] |
| 12 | DETACHED RESIDENTIAL PROPERTY (2,950 SF - 3,199 SF) | [X] | [X] |
| 13 | DETACHED RESIDENTIAL PROPERTY (2,700 SF - 2,949 SF) | [X] | [X] |
| 14 | DETACHED RESIDENTIAL PROPERTY (2,450 SF - 2,699 SF) | [X] | [X] |
| 15 | DETACHED RESIDENTIAL PROPERTY (2,200 SF - 2,449 SF) | [X] | [X] |
| 16 | DETACHED RESIDENTIAL PROPERTY (1,950 SF - 2,199 SF) | [X] | [X] |
| 17 | DETACHED RESIDENTIAL PROPERTY (1,700 SF - 1,949 SF) | [X] | [X] |
| 18 | DETACHED RESIDENTIAL PROPERTY (< 1,700 SF) | [X] | [X] |
| 19 | ATTACHED RESIDENTIAL PROPERTY (=> 2,600 SF) | [X] | [X] |
| 20 | ATTACHED RESIDENTIAL PROPERTY (2,400 SF - 2,599 SF) | [X] | [X] |
| 21 | ATTACHED RESIDENTIAL PROPERTY (2,200 SF - 2,399 SF) | [X] | [X] |
| 22 | ATTACHED RESIDENTIAL PROPERTY (2,000 SF - 2,199 SF) | [X] | [X] |
| 23 | ATTACHED RESIDENTIAL PROPERTY (1,800 SF - 1,999 SF) | [X] | [X] |
| 24 | ATTACHED RESIDENTIAL PROPERTY (1,600 SF - 1,799 SF) | [X] | [X] |
| 25 | ATTACHED RESIDENTIAL PROPERTY (1,400 SF - 1,599 SF) | [X] | [X] |
| 26 | ATTACHED RESIDENTIAL PROPERTY (1,200 SF - 1,399 SF) | [X] | [X] |
| 27 | ATTACHED RESIDENTIAL PROPERTY (< 1,200 SF) | [X] | [X] |
| 28 | SENIOR HOUSING | [X] | [X] |
| 29 | MODERATE AFFORDABLE | [X] | [X] |
| 30 | MODERATE AFFORDABLE SENIOR UNITS | [X] | [X] |
| 31 | AFFORDABLE UNITS | [X] | [X] |

| Land Use Class | Description | Expected Units/Acreage without Future Annexation | Expected Units/Acreage with Future Annexation |
|----------------|--|--|---|
| 32 | NON-RESIDENTIAL - COMMERCIAL PROPERTY | [X] Acres | [X] Acres |
| 33 | NON-RESIDENTIAL - INDUSTRIAL PROPERTY | [X] Acres | [X] Acres |
| 34 | NON-RESIDENTIAL - INSTITUTIONAL PROPERTY | [X] Acres | [X] Acres |
| 35 | NON-RESIDENTIAL - OFFICE PROPERTY | [X] Acres | [X] Acres |
| 36 | NON-RESIDENTIAL - AUTO CENTER | [X] Acres | [X] Acres |
| 37 | OTHER NON-RESIDENTIAL PROPERTY | [X] Acre | [X] Acres |

3. Calculation of Buydown

If a Buydown calculation is required as determined by the CFD Administrator pursuant to paragraph 2 above, the CFD Administrator shall review the current development plan for CFD No. 2009-3 (IA No. 1) in consultation with the current property owners for all remaining Final Mapped Property and Undeveloped Property in CFD No. 2009-3 (IA No. 1), and shall prepare an updated version of Table 2 identifying the revised number of residential dwelling units anticipated within each Land Use Class and the revised Acreage anticipated for the development of Non-Residential Property, as applicable. The CFD Administrator shall not be responsible for any delays in preparing the updated Table 2 that result from a refusal on the part of one or more current property owners of Final Mapped Property or Undeveloped Property to provide information on their future development.

The CFD Administrator shall then review the updated Table 2 and determine the Buydown Requirement, if any, to be applied to the property identified in the request for Letter of Compliance to assure CFD No. 2009-3 (IA No. 1)'s ability to levy Special Taxes equal to at least the Debt Service Coverage times the debt service necessary to support the Outstanding Bonds. The calculations shall be undertaken by the CFD Administrator, based on the data in the updated Table 2, as follows:

- Step 1. Compute the sum of the Special Taxes authorized to be levied on all Developed Property and Update Property within CFD No. 2009-3 (IA No. 1), plus the sum of the Special Taxes authorized to be levied on all future development as identified in the current development plan assuming buildout, as determined by the CFD Administrator in consultation with the property owner(s).

- Step 2. Determine the amount of Special Taxes equal to the Debt Service Coverage times the debt service necessary to support the Outstanding Bonds.
- Step 3. If the total sum computed pursuant to Step 1 is greater than or equal to the amount computed pursuant to Step 2, then no Buydown will be required and a Letter of Compliance shall be issued by the CFD Administrator for all of the building permits and/or Final Subdivisions currently being requested. If the total sum computed pursuant to Step 1 is less than the amount computed pursuant to Step 2, then continue to step 4.
- Step 4. Determine the Special Tax shortfall by subtracting the total sum computed pursuant to Step 1 from the amount computed pursuant to Step 2. Divide this difference by the amount computed pursuant to Step 2.
- Step 5. Multiply the quotient computed pursuant to Step 4 by the Outstanding Bonds and round up to the nearest increment of \$5,000 to compute the amount of Outstanding Bonds to be retired and prepaid (the "Bond Redemption Amount").
- Step 6. Multiply the Bond Redemption Amount computed pursuant to Step 5 by the applicable redemption premium, if any, on the Outstanding Bonds to be redeemed (the "Redemption Premium").
- Step 7. Compute the amount needed to pay interest on the Bond Redemption Amount from the first bond interest and/or principal payment date following the current Fiscal Year until the redemption date for the Outstanding Bonds ("Defeasance Amount").
- Step 8. The administrative fees and expenses of CFD No. 2009-3 (IA No. 1) are as calculated by the CFD Administrator and include the costs of computation of the Buydown Requirement, the costs to invest the Buydown Requirement proceeds and the costs of redeeming Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds (the "Administrative Fees and Expenses").
- Step 9. The Buydown Requirement is equal to the sum of the amounts computed pursuant to Steps 5, 6, 7 and 8 (the "Buydown Requirement").
- Step 10. The reserve fund credit (the "Reserve Fund Credit") shall equal the lesser of: (a) the expected reduction in the reserve requirement (as specified in the Indenture), if any, associated with the redemption of Outstanding Bonds as a result of the Buydown, or (b) the amount derived by subtracting the new reserve requirement (as defined in the Indenture) in effect after the redemption of Outstanding Bonds as a result of the Buydown from the balance in the reserve fund on the Buydown date, but in no event shall such amount be less than zero. No Reserve Fund Credit shall be granted if the amount then on deposit in the reserve fund for the Outstanding Bonds is below 100% of the reserve requirement (as defined in the Indenture).

The Buydown Requirement computed under Step 9 shall be billed directly to the property owner of each Assessor's Parcel identified in the request for Letter of Compliance and shall be due

within 30 days of the billing date. If the Buydown Requirement is not paid within 45 days of the billing date, a Letter of Compliance will not be issued to the City and/or property owner by the CFD Administrator and the authorization of the requested building permits (for residential development) or Final Subdivision (for non-residential development) for the subject property will not be approved until such Buydown Requirement is paid. Upon receipt of the Buydown Requirement, the CFD Administrator shall issue a Letter of Compliance and a Certificate of Satisfaction of Buydown for the subject property. The Reserve Fund Credit calculated pursuant to Step 10 above shall be credited to the property owner of each Assessor's Parcel identified in the request for Letter of Compliance once the CFD Administrator has confirmed receipt of all Special Taxes due for such property owner(s) in the Fiscal Year the Buydown Requirement was made.

4. Costs and Expenses Related to Implementation of Buydown

The costs of the CFD Administrator or other consultants required to review the application for building permits (for residential development) or a Final Subdivision (for non-residential development) and issue Letters of Compliance, as identified in Sections D1 and D2, above, shall be paid out of the administrative expenses account as established in the Indenture. The property owner of each Assessor's Parcel identified in the request for Letter of Compliance shall pay all costs of the CFD Administrator or other consultants required to calculate the Buydown Requirement, issue Letters of Compliance and any other actions required under Section D3. Such payments shall be due 30 days after receipt of invoice by such property owner. A deposit may be required by the CFD Administrator prior to undertaking work related to the Buydown pursuant to Section D3.

E. METHOD OF APPORTIONMENT OF THE SPECIAL TAX

I. Annual Levy

Commencing with Fiscal Year 20XX-20XX and for each following Fiscal Year, the Council or its designee shall levy the Special Tax as follows:

First: The Special Tax shall be levied on each Assessor's Parcel of Developed Property in an amount equal to 100% of the applicable Maximum Special Tax for Developed Property.

Second: Determine the Final Mapped Property/Undeveloped Property Special Tax Requirement and Proportionately levy the Special Tax on each Assessor's Parcel of Final Mapped Property until the amount levied on Final Mapped Property is equal to the lesser of (i) the Final Mapped Property/Undeveloped Property Special Tax Requirement, or (ii) 100% of the Intermediate Maximum Special Tax for Final Mapped Property.

Third: If additional monies are needed to satisfy the Final Mapped Property/Undeveloped Property Special Tax Requirement after the first two steps have been completed, the Special Tax shall be levied Proportionately on each Assessor's Parcel of Undeveloped Property until the amount levied on Undeveloped Property is equal to the lesser of (i) the Final Mapped Property/Undeveloped Property Special Tax Requirement less the amount levied pursuant to the second step above, or (ii) 100% of the Intermediate Maximum Special Tax for Undeveloped Property.

Fourth: If additional monies are needed to satisfy the Final Mapped Property/Undeveloped Property Special Tax Requirement after the first three steps have been completed, then the Special Tax levy on each Assessor's Parcel of Final Mapped Property and Undeveloped Property shall be increased in equal percentages from the Intermediate Special Tax up to 100% of the Maximum Special Tax for Final Mapped Property and Undeveloped Property.

Fifth: If additional monies are needed to satisfy the Final Mapped Property/Undeveloped Property Special Tax Requirement after the first four steps have been completed, then if required to satisfy the Indenture, a special tax shall be levied on each Assessor's Parcel of taxable property located within the Supplemental Improvement Areas pledged to CFD No. 2009-3 (IA No. 1) Bonds, based on the rate and method of apportionment of special taxes for these Supplemental Improvement Areas.

Sixth: Determine the Taxable Property Owner Association Property/Taxable Public Property Special Tax Requirement and Proportionately levy the Special Tax on each Assessor's Parcel of Taxable Property Owner Association Property until the amount levied on Taxable Property Owner Association Property is equal to the lesser of (i) the Taxable Property Owner Association Property/ Taxable Public Property Special Tax Requirement or (ii) 100% of the Maximum Special Tax for Taxable Property Owner Association Property.

Seventh: If additional monies are needed to satisfy the Taxable Property Owner Association Property/Taxable Public Property Special Tax Requirement after the sixth step has been completed, then the Special Tax shall be levied Proportionately on each Assessor's Parcel of Taxable Public Property until the amount levied on Taxable Public Property is equal to the lesser of (i) the Taxable Property Owner Association Property/ Taxable Public Property Special Tax Requirement less the amount levied pursuant to the sixth step above, or (ii) 100% of the Maximum Special Tax for Taxable Public Property.

2. Supplemental Levy

On or around January 1 and June 1 of each Fiscal Year, if the CFD Administrator determines that there is a shortfall in revenues available to finance the annual amounts necessary to pay the Guaranteed Amount (the "Shortfall"), the CFD Administrator may levy additional Special Taxes Proportionately upon each Assessor's Parcel of Final Mapped Property and Undeveloped Property that are not then delinquent, or reasonably foreseen to be delinquent in the judgment of the CFD Administrator, until the amount levied is equal to the Shortfall. The supplemental levy may occur only twice each Fiscal Year, and the combined amount of the annual levy pursuant to Section E.1 and the supplemental levy pursuant to this Section E.2 on each Assessor's Parcel in any Fiscal Year shall not exceed the Maximum Special Taxes identified in Section C for such Assessor's Parcel. The Shortfall shall be collected by direct billing to owners of such Assessor's Parcels, and the levy shall be due within thirty (30) days of such supplemental levy, and shall be subject to all penalties and interest in the event of delinquency.

F. EXEMPTIONS

1. Prior to Annexation of Future Annexation Area

No Special Tax shall be levied on up to [] acres of Property Owner Association Property and up to [] acres of Public Property in CFD No. 2009-3 (IA No. 1). Tax-exempt status will be assigned by the CFD Administrator in the chronological order in which property in CFD No. 2009-3 (IA No. 1) becomes Public Property or Property Owner Association Property. However, should an Assessor's Parcel no longer be classified as Public Property or Property Owner Association Property, it will, from that point forward, be subject to the Special Tax.

Property Owner Association Property or Public Property that is not exempt from the Special Tax under this section shall be subject to the levy of the Special Tax and shall be taxed Proportionately as part of the sixth step and seventh step in Section E above, respectively, at up to 100% of the applicable Maximum Special Tax for Taxable Property Owner Association Property or Taxable Public Property.

2. After Annexation of Future Annexation Area

No Special Tax shall be levied on up to [] acres of Property Owner Association Property and up to [] acres of Public Property in CFD No. 2009-3 (IA No. 1). Tax-exempt status will be assigned by the CFD Administrator in the chronological order in which property in CFD No. 2009-3 (IA No. 1) becomes Public Property or Property Owner Association Property. However, should an Assessor's Parcel no longer be classified as Public Property or Property Owner Association Property, it will, from that point forward, be subject to the Special Tax.

Property Owner Association Property or Public Property that is not exempt from the Special Tax under this section shall be subject to the levy of the Special Tax and shall be taxed Proportionately as part of the sixth step and seventh step in Section E above, respectively, at up to 100% of the applicable Maximum Special Tax for Taxable Property Owner Association Property or Taxable Public Property.

G. MANNER OF COLLECTION

The Special Tax shall be collected in the same manner and at the same time as ordinary ad valorem property taxes; provided, however, that the City, through the CFD Administrator may (i) directly bill the Special Tax, and/or may collect Special Taxes at a different time or in a different manner if necessary to meet financial obligations, (ii) may directly bill as a result of any Shortfall as set forth in Section E.2 above, and (iii) may covenant to foreclose and may actually foreclose on delinquent Assessor's Parcels. All direct billings shall be due within 30 days of the billing date.

H. APPEALS AND INTERPRETATIONS

Any landowner who feels that the amount of the Special Tax levied on their Assessor's Parcel is in error may submit a written appeal to the CFD Administrator. The CFD Administrator shall review the appeal and if the City concurs, no refund shall be given at that time. However, the amount of the Special Tax levied shall be appropriately modified through an adjustment to the Special Tax levy in the following Fiscal Year. The CFD Administrator may interpret this Rate and Method of Apportionment for purposes of clarifying any ambiguity and make determinations relative to the annual administration of the Special Tax and any landowner appeals.

I. PREPAYMENT OF SPECIAL TAX

Under this Rate and Method of Apportionment, an Assessor's Parcel within CFD No. 2009-3 (IA No. 1) is permitted to prepay a portion of the Maximum Special Tax (the "Prepayable Portion of the Special Tax"). The obligation of the Assessor's Parcel to pay the Prepayable Portion of the Special Tax may be fully or partially prepaid and permanently satisfied as described herein, provided that a prepayment may be made only for Assessor's Parcels of Developed Property, or an Assessor's Parcel of Final Mapped Property or Undeveloped Property for which a building permit for construction has been issued after January 1, 2009, and only if there are no delinquent Special Taxes with respect to such Assessor's Parcel at the time of prepayment. An owner of an Assessor's Parcel intending to fully or partially prepay the Prepayable Portion of the Special Tax shall provide the CFD Administrator with written notice of intent to prepay. Within 30 days of receipt of such written notice, the CFD Administrator shall notify such owner of the prepayment amount for such Assessor's Parcel. The CFD Administrator may charge such owner a reasonable fee for providing this service. If there are Outstanding Bonds, prepayment must be made not less than 30 days prior to a date that notice of redemption of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds from the proceeds of such prepayment may be given by the Trustee pursuant to the Indenture. No portion of the Maximum Special Tax other than the Prepayable Portion of the Special Tax may be prepaid. Only Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds may be redeemed as the result of any prepayment in this Section I. Prior to the issuance of the first series of CFD No. 2009-3 (IA No. 1) Bonds, the percentages identified in Section I and Section J may be changed to reflect changes in development, without the need for any proceedings to make changes permitted under the Act.

1. Full Prepayment of the Prepayable Portion of the Special Tax

The full Prepayment Amount of the Prepayable Portion of the Special Tax shall be the Prepayment Amount identified in Section A below for Residential Property, and the Prepayment Amount identified in Section B below for Non-Residential Property.

A. Residential Property

As of the proposed date of prepayment, the full Prepayment Amount for Residential Property Special Taxes shall be determined by application of the following steps:

- Step 1. Determine the number of future years remaining until the Fiscal Year in which the fortieth anniversary of the date on which the first issue of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds was sold occurs, not including the current Fiscal Year. If Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds have not yet been issued, the number shall be 40.
- Step 2. Determine the Maximum Special Tax being levied in the current Fiscal Year on the Assessor's Parcel prepaying the Special Tax.
- Step 3. Multiply the Maximum Special Tax calculated pursuant to Step 2 by XX.XX% (the "Prepayable Portion of the Residential Property Special Tax").
- Step 4. Determine the amount of Special Tax levied in the current Fiscal Year on such Assessor's Parcel which has not yet been paid and multiply this amount by XX.XX%.
- Step 5. The Prepayment Amount determined under this Section A shall be computed by calculating the sum of the following: (i) the net present value of the flow of annual

revenues from the Prepayable Portion of the Residential Property Special Tax as determined under step 3, for the number of years identified in Step 1, escalated annually by 2.0%, using a discount rate equal to the Discount Rate; and (ii) the unpaid current Fiscal Year's Prepayable Portion of the Residential Property Special Tax as determined under step 4 (collectively, the "Prepayment Amount").

B. Non-Residential Property

As of the proposed date of prepayment, the full Prepayment Amount for Non-Residential Property Special Taxes shall be determined by application of the following steps:

- Step 1. Determine the number of future years remaining until the Fiscal Year in which the fortieth anniversary of the date on which the first issue of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds was sold occurs, not including the current Fiscal Year. If Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds have not yet been issued, the number shall be 40.
- Step 2. Determine the Maximum Special Tax being levied in the current Fiscal Year on the Assessor's Parcel prepaying the Special Tax.
- Step 3. Multiply the Maximum Special Tax calculated pursuant to Step 2 by XX.XX% (the "Prepayable Portion of the Non-Residential Special Tax").
- Step 4. Determine the amount of Special Tax levied in the current Fiscal Year on such Assessor's Parcel which has not yet been paid and multiply this amount by XX.XX%.
- Step 5. The Prepayment Amount determined under this Section B shall be computed by calculating the sum of the following: (i) the net present value of the flow of annual revenues from the Prepayable Portion of the Non-Residential Special Tax as determined under step 3, for the number of year identified in Step 1, escalated annually by 2.0%, using a discount rate equal to the Discount Rate; and (ii) the unpaid current Fiscal Year's Prepayable Portion of the Non-Residential Special Tax as determined under step 4, (collectively, the "Prepayment Amount").

2. Partial Prepayment of the Prepayable Portion of the Special Tax

The amount of the partial prepayment shall be calculated as in Section I.1; except that a partial prepayment shall be calculated according to the following formula:

$$PP = PE \times F$$

These terms have the following meaning:

- PP = the Partial Prepayment Amount of the Prepayable Portion of the Special Tax
PE = the Prepayment Amount of the Prepayable Portion of the Special Tax calculated according to Section I.1.A (for Residential Property) or Section I.1.B (for Non-Residential Property).
F = the percentage, expressed as a decimal, by which the owner of the Assessor's Parcel is partially prepaying the Prepayable Portion of the Special Tax.

3. General Provisions Applicable to Prepayment

a. Use of Prepayments

Subsequent to the issuance of the first series of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds, the Prepayment Amount of the Prepayable Portion of the Special Tax shall be applied in the following order of priority: (i) to be deposited into specific funds established under the Indenture, to fully or partially retire as many Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds as possible (or as many Other Improvement Area Bonds as possible, if the Special Taxes secure Other Improvement Area Bonds), and, if amounts are less than \$5,000, to make debt service payments on the Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds (or Other Improvement Area Bonds if the Special Taxes secure Other Improvement Area Bonds), (ii) to finance Group A Facilities and/or Group B Facilities, as identified in the Amended and Restated Development Agreement, and (iii) to be remitted to the City and used for any Authorized Facilities or Authorized Services in accordance with the Amended and Restated Development Agreement. Prior to the issuance of the first series of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds, the Prepayment Amount of the Prepayable Portion of the Special Tax shall be applied in the following order of priority: (i) to finance Group A and/or Group B Facilities, as identified in the Amended and Restated Development Agreement, and (ii) to be remitted to the City and used for any Authorized Facilities or Authorized Services in accordance with the Amended and Restated Development Agreement.

b. Full Prepayment of the Prepayable Portion of the Special Tax

Upon confirmation of the payment of the current Fiscal Year's entire Prepayable Portion of the Special Tax, the CFD Administrator shall remove the current Fiscal Year's Prepayable Portion of the Special Tax levy for such Assessor's Parcel from the County tax rolls. With respect to any Assessor's Parcel that is prepaid in accordance with Section I.1, the CFD Administrator shall indicate in the records of CFD No. 2009-3 (IA No. 1) that there has been a prepayment of the Prepayable Portion of the Special Tax and that a portion of the Maximum Special Tax with respect to such Assessor's Parcel, equal to XX.XX% of the Maximum Special Tax for Residential Property and XX.XX% of the Maximum Special Tax for Non-Residential Property, shall continue to be levied on such Assessor's Parcel pursuant to Section E.

c. Partial Prepayment of the Prepayable Portion of the Special Tax

Upon confirmation of the payment of a portion of the current Fiscal Year's Prepayable Portion of the Special Tax, the CFD Administrator shall remove a portion of the current Fiscal Year's Prepayable Portion of the Special Tax levy for such Assessor's Parcel from the County tax rolls equal to that amount included in the partial prepayment for such Assessor's Parcel determined in Section I.2. With respect to any Assessor's Parcel that is partially prepaid in accordance with Section I.2, the CFD Administrator shall indicate in the records of CFD No. 2009-3 (IA No. 1) that there has been a partial prepayment of the Prepayable Portion of the Special Tax and that a portion of the Maximum Special Tax with respect to such Assessor's Parcel, equal to the outstanding percentage $[1.00 - (.XXXX \times F)]$ multiplied by the Maximum Special Tax for Residential Property and $[1.00 - (.XXXX \times F)]$ multiplied by the Maximum Special Tax for Non-Residential Property shall continue to be levied on such Assessor's Parcel pursuant to Section E.

d. Debt Service Coverage

Notwithstanding the foregoing, no prepayment of the Prepayable Portion of the Special Tax shall be allowed unless, at the time of such proposed prepayment, the Special Tax that may be levied on Taxable Property within CFD No. 2009-3 (IA No. 1) in all Fiscal Years (after excluding [] acres of Property Owner Association Property and [] acres of Public Property as set forth in Section F), both prior to and after the proposed prepayment, is at least equal to the Debt Service Coverage times the debt service necessary to support the remaining Outstanding Bonds.

J. TERM OF SPECIAL TAX

XX.XX% of the Maximum Special Tax on Residential Property and XX.XX% of the Maximum Special Tax on Non-Residential Property shall terminate and no longer be levied or collected pursuant to this Rate and Method of Apportionment in the Fiscal Year immediately following the fortieth anniversary of the date on which the first series of Non-Subordinate CFD No. 2009-3 (IA No. 1) Bonds were sold. The remaining portion of the Special Tax for both Residential Property and Non-Residential Property shall be levied into perpetuity.

K. NO EXTENSION OR MODIFICATION OF AMENDED AND RESTATED DEVELOPMENT AGREEMENT

Notwithstanding any reference to the Amended and Restated Development Agreement, nothing herein shall incorporate the Amended and Restated Development Agreement in to the Rate and Method of Apportionment, extend the term of the Amended and Restated Development Agreement, as defined therein, and/or amend or modify the provisions thereof.

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Revised: 8/5/09*

EXHIBIT A

CERTIFICATE TO AMEND SPECIAL TAX

CITY OF IRVINE AND CFD No. 2009-3 (IA No. 1) CERTIFICATE

1. Pursuant to Section C of the Rate and Method of Apportionment, as attached to the Notice of Special Tax Lien, recorded in the Official Records of the County of Orange as Instrument No. XXXXXX on MM/DD/YYYY, the City of Irvine ("City") and City of Irvine Community Facilities District No. 2009-3 ("CFD No. 2009-3 (IA No. 1)") hereby agree to a reduction in the Maximum Special Tax for Residential Property or the special taxes for Non-Residential Property set forth in Table 1 of the Rate and Method of Apportionment for CFD No. 2009-3 (IA No. 1).

The information in Table 1 relating to the Fiscal Year 20XX-20XX Maximum Special Tax for Developed Property within CFD No. 2009-3 (IA No. 1) shall be amended and restated in full as follows:

| Land Use Class | Description | Maximum Special Tax |
|-----------------------|---|----------------------------|
| 1 | DETACHED RESIDENTIAL PROPERTY (=> 5,700 SF) | \$[] per unit |
| 2 | DETACHED RESIDENTIAL PROPERTY (5,450 SF - 5,699 SF) | \$[] per unit |
| 3 | DETACHED RESIDENTIAL PROPERTY (5,200 SF - 5,449 SF) | \$[] per unit |
| 4 | DETACHED RESIDENTIAL PROPERTY (4,950 SF - 5,199 SF) | \$[] per unit |
| 5 | DETACHED RESIDENTIAL PROPERTY (4,700 SF - 4,949 SF) | \$[] per unit |
| 6 | DETACHED RESIDENTIAL PROPERTY (4,450 SF - 4,699 SF) | \$[] per unit |
| 7 | DETACHED RESIDENTIAL PROPERTY (4,200 SF - 4,449 SF) | \$[] per unit |
| 8 | DETACHED RESIDENTIAL PROPERTY (3,950 SF - 4,199 SF) | \$[] per unit |
| 9 | DETACHED RESIDENTIAL PROPERTY (3,700 SF - 3,949 SF) | \$[] per unit |
| 10 | DETACHED RESIDENTIAL PROPERTY (3,450 SF - 3,699 SF) | \$[] per unit |
| 11 | DETACHED RESIDENTIAL PROPERTY (3,200 SF - 3,449 SF) | \$[] per unit |
| 12 | DETACHED RESIDENTIAL PROPERTY (2,950 SF - 3,199 SF) | \$[] per unit |
| 13 | DETACHED RESIDENTIAL PROPERTY (2,700 SF - 2,949 SF) | \$[] per unit |
| 14 | DETACHED RESIDENTIAL PROPERTY (2,450 SF - 2,699 SF) | \$[] per unit |
| 15 | DETACHED RESIDENTIAL PROPERTY (2,200 SF - 2,449 SF) | \$[] per unit |
| 16 | DETACHED RESIDENTIAL PROPERTY (1,950 SF - 2,199 SF) | \$[] per unit |
| 17 | DETACHED RESIDENTIAL PROPERTY (1,700 SF - 1,949 SF) | \$[] per unit |
| 18 | DETACHED RESIDENTIAL PROPERTY (< 1,700 SF) | \$[] per unit |
| 19 | ATTACHED RESIDENTIAL PROPERTY (=> 2,600 SF) | \$[] per unit |
| 20 | ATTACHED RESIDENTIAL PROPERTY (2,400 SF - 2,599 SF) | \$[] per unit |
| 21 | ATTACHED RESIDENTIAL PROPERTY (2,200 SF - 2,399 SF) | \$[] per unit |
| 22 | ATTACHED RESIDENTIAL PROPERTY (2,000 SF - 2,199 SF) | \$[] per unit |
| 23 | ATTACHED RESIDENTIAL PROPERTY (1,800 SF - 1,999 SF) | \$[] per unit |
| 24 | ATTACHED RESIDENTIAL PROPERTY (1,600 SF - 1,799 SF) | \$[] per unit |

| Land Use Class | Description | Maximum Special Tax |
|----------------|---|--|
| 25 | ATTACHED RESIDENTIAL PROPERTY (1,400 SF - 1,599 SF) | \$[] per unit |
| 26 | ATTACHED RESIDENTIAL PROPERTY (1,200 SF - 1,399 SF) | \$[] per unit |
| 27 | ATTACHED RESIDENTIAL PROPERTY (< 1,200 SF) | \$[] per unit |
| 28 | SENIOR HOUSING | \$[] per unit |
| 29 | MODERATE AFFORDABLE UNITS | \$[] per unit |
| 30 | MODERATE AFFORDABLE SENIOR UNITS | \$[] per unit |
| 31 | AFFORDABLE UNITS | \$[] per unit |
| 32 | NON-RESIDENTIAL - COMMERCIAL PROPERTY | \$[] per SF of Non-Residential Floor Area \$[] per Acre |
| 33 | NON-RESIDENTIAL - INDUSTRIAL PROPERTY | \$[] per SF of Non-Residential Floor Area \$[] per Acre |
| 34 | NON-RESIDENTIAL - INSTITUTIONAL PROPERTY | \$[] per SF of Non-Residential Floor Area \$[] per Acre |
| 35 | NON-RESIDENTIAL - OFFICE PROPERTY | \$[] per SF of Non-Residential Floor Area \$[] per Acre |
| 36 | NON-RESIDENTIAL - AUTO CENTER | \$[] per SF of Non-Residential Floor Area \$[] per Acre |
| 37 | OTHER NON-RESIDENTIAL PROPERTY | \$[] per SF of Non-Residential Floor Area \$[] per Acre |

2. Upon execution of the certificate by the City and CFD No. 2009-3 (IA No. 1), the City shall cause an amended notice of Special Tax lien for CFD No. 2009-3 (IA No. 1) to be recorded reflecting the modifications set forth herein.

By execution hereof, the undersigned acknowledges, on behalf of the County and CFD No. 2009-3 (IA No. 1), receipt of this certificate and modification of the Rate and Method of Apportionment as set forth in this certificate.

CITY OF IRVINE

By: _____
CFD Administrator

Date: _____

CITY OF IRVINE COMMUNITY FACILITIES DISTRICT NO. 2009-3

By: _____

Date: _____

EXHIBIT B

ANNUAL AMOUNTS FOR CFD No. 2009-3

| Fiscal Year | Amount |
|--|--|
| 2009-2010 | \$2,000,000 |
| 2010-2011 | \$3,000,000 |
| 2011-2012 | \$4,000,000 |
| 2012-2013 | \$4,000,000 |
| 2013-2014 | \$5,000,000 |
| 2014-2015 | \$9,500,000 |
| Each Fiscal Year Thereafter, Commencing in Fiscal Year 2015-2016 | Increase Amount in Prior Fiscal Year by 3%. |

EXHIBIT C

IDENTIFICATION OF FUTURE ANNEXATION AREA



Public Finance and Urban Economics

5000 Birch Street, Ste. 6000, Newport Beach, CA 92660

IMPLEMENTATION MEMORANDUM August 5, 2009

To: City of Irvine CFD No. 2009-3 Administrator
From: David Taussig and Associates, Inc.
Subject: Pro Rata Share of Guaranteed Amount and Prepayment Percentages

This Implementation Memo has been prepared to explain the methodology that will be used to recalculate the Pro Rata Share¹ and to set the prepayment percentages for any improvement areas ("IA" or "IAs") within CFD No. 2009-3.

I. Pro Rata Share of Guaranteed Amount

Pursuant to the Rate and Method of Apportionment ("RMA") for each of the 11 IAs within City of Irvine CFD No. 2009-3 (Great Park), the amount of Special Taxes levied to satisfy the Guaranteed Amount ("GA") for each IA cannot exceed that IA's Pro Rata Share of the amounts set forth in Exhibit B to the RMA (the "Indexed GA"), except for cases in which tax delinquencies have occurred. This serves as a mechanism to limit the amount of Special Taxes that can be levied on Final Mapped and Undeveloped Property. Once all of the Assessor's Parcels of Taxable Property within an IA have been classified as Developed Property, the actual amount of Special Taxes levied each year will be equal to the Maximum Special Taxes listed in Table 1 of the RMA, and the Pro Rata Share shall not impact the amount of Special Taxes levied (although it does impact the application of the Special Taxes).

In the RMA for each of the 11 IAs, the term GA will be defined as:

"Guaranteed Amount" means for any Fiscal Year, the lesser of (i) the Pro Rata Share for CFD No. 2009-3 (IA No. 1) of the annual amounts set forth in Exhibit B [of the RMA], or (ii) the sum of (a) the Pro Rata Share for CFD No. 2009-3 (IA No. 1) of the amount needed to finance Authorized Services in such Fiscal Year as determined by the City and (b) the Bond Costs associated with any Subordinate Bonds issued on behalf of CFD No. 2009-3 (IA No. 1). Notwithstanding the above, the Guaranteed Amount may exceed the Pro Rata Share for CFD No. 2009-3 (IA No. 1) as discussed in Section E.2 [of the RMA]. The Guaranteed Amount collected in CFD No. 2009-3 (IA No. 1) may be used to finance Authorized Services and to pay Bond Costs associated with Subordinate Bonds issued on behalf of CFD No. 2009-3 (IA No. 1).

¹ Please note that all capitalized terms used herein, unless otherwise indicated, shall have the meanings defined in the Rate and Method of Apportionment for all IAs.

Below is a copy of the Indexed GA, which is referred to in the GA definition above as Exhibit B of each RMA.

Table A: Copy of Exhibit B of each Rate and Method of Apportionment

| Fiscal Year | Annual Amount |
|--|---|
| 2009-10 | \$2,000,000 |
| 2010-11 | \$3,000,000 |
| 2011-12 | \$4,000,000 |
| 2012-13 | \$4,000,000 |
| 2013-14 | \$5,000,000 |
| 2014-15 | \$9,500,000 |
| Each Fiscal Year Thereafter, Commencing in Fiscal Year 2015-2016 | Increase Amount in Prior Fiscal Year by 3% |

On each July 1, commencing July 1, 2015, one year after the Indexed GA will have been increased to \$9,500,000, the Indexed GA shall be increased by an amount equal to three percent (3%) of the amount in effect for the previous Fiscal Year.

In the RMA for each of the 11 IAs, the term Pro Rata Share is defined as:

"Pro Rata Share" means the ratio calculated by dividing the anticipated Maximum Special Tax to be levied at build out in CFD No. 2009-3 (IA No. 1) by the anticipated Maximum Special Tax to be levied at build out for all improvement areas within CFD No. 2009-3. So long as there are no CFD No. 2009-3 (IA No. 1) Bonds outstanding, or Special Taxes being pledged to the payment of Bond Costs for Other Improvement Area Bonds, the City may recalculate the Pro Rata Share to reflect development assumptions which differ from those identified in Table 2 of the rate and method of apportionment for any improvement area of CFD No. 2009-3. Notwithstanding the foregoing, the City shall not recalculate the Pro Rata Share to incorporate any prepayments of the Prepayable Portion of the Special Tax.

It is currently anticipated that at the time of formation of CFD No. 2009-3, the Pro Rata Share for each IA will equal the following percentages:

Table B: Pro Rata Share

| Improvement Area | FY 2014-2015 Total Estimated Maximum Special Tax | Pro Rata Share | FY 2014-2015 Maximum GA* |
|-------------------------|---|-----------------------|---------------------------------|
| No. 1 | \$4,246,398 | 13.49% | \$1,281,133 |
| No. 2 | \$4,060,422 | 12.89% | \$1,225,025 |
| No. 3 | \$3,322,390 | 10.55% | \$1,002,361 |
| No. 4 | \$1,033,560 | 3.28% | \$311,824 |
| No. 5 | \$5,339,732 | 16.96% | \$1,610,991 |
| No. 6 | \$5,343,952 | 16.97% | \$1,612,264 |
| No. 7 | \$0 | 0.00% | \$0 |
| No. 8 | \$134,640 | 0.43% | \$40,621 |
| No. 9 | \$4,973,739 | 15.80% | \$1,500,571 |
| No. 10 | \$3,033,519 | 9.63% | \$915,209 |
| No. 11 | \$0 | 0.00% | \$0 |
| Total | \$31,488,352 | 100.00% | \$9,500,000 |

*Note. The Maximum GA identified assumes the Total Maximum Special Taxes identified are for FY 2014-2015.

Prior to bond issuance, the amounts listed in Table B above for all Non-Fixed IAs (as defined herein) shall be revised by the City whenever Table 1 in the RMA for any IA is amended and restated. All future changes to the Maximum Special Tax and Pro Rata Share (percentages and dollar amounts) reflected in Table B above will be based on the same methodology used at the time of IA formation. The calculations will be based on the formulas listed below, where Maximum Special Tax (“MST”) for each IA will be equal to the Maximum Special Tax anticipated at buildout of that IA based on the approved changes in development assumptions:

$$\begin{aligned} \text{Pro Rata Share for IA No. 1} &= \text{MST}_{\text{IA No. 1}} / \text{MST}_{\sum \text{IA No. 1...11}} \\ \text{Pro Rata Share for IA No. 2} &= \text{MST}_{\text{IA No. 2}} / \text{MST}_{\sum \text{IA No. 1...11}} \\ \text{Pro Rata Share for IA No. 3} &= \text{MST}_{\text{IA No. 3}} / \text{MST}_{\sum \text{IA No. 1...11}} \\ \text{Pro Rata Share for IA No. 4} &= \text{MST}_{\text{IA No. 4}} / \text{MST}_{\sum \text{IA No. 1...11}} \\ \text{Pro Rata Share for IA No. 5} &= \text{MST}_{\text{IA No. 5}} / \text{MST}_{\sum \text{IA No. 1...11}} \\ \text{Pro Rata Share for IA No. 6} &= \text{MST}_{\text{IA No. 6}} / \text{MST}_{\sum \text{IA No. 1...11}} \\ \text{Pro Rata Share for IA No. 7} &= \text{MST}_{\text{IA No. 7}} / \text{MST}_{\sum \text{IA No. 1...11}} \\ \text{Pro Rata Share for IA No. 8} &= \text{MST}_{\text{IA No. 8}} / \text{MST}_{\sum \text{IA No. 1...11}} \\ \text{Pro Rata Share for IA No. 9} &= \text{MST}_{\text{IA No. 9}} / \text{MST}_{\sum \text{IA No. 1...11}} \\ \text{Pro Rata Share for IA No. 10} &= \text{MST}_{\text{IA No. 10}} / \text{MST}_{\sum \text{IA No. 1...11}} \\ \text{Pro Rata Share for IA No. 11} &= \text{MST}_{\text{IA No. 11}} / \text{MST}_{\sum \text{IA No. 1...11}} \end{aligned}$$

To determine the maximum GA for each IA, the CFD administrator will multiply the Pro Rata Share percentages in Table B above, by the Indexed GA for such Fiscal Year, identified in Table A, herein.

However, notwithstanding the above, the Pro Rata Share for a specific IA shall be considered final upon the issuance of bonds for such IA (herein, a "Fixed IA"). All IAs other than the Fixed IAs shall be referred to herein as "Non-Fixed IAs"). For example, if bonds have been issued on behalf of IA No. 1, the Pro Rata Share for IA No. 1 would be finalized (according to the current Table B at 13.49%). Any revisions to the Pro Rata Share amounts for all remaining Improvement Areas would be based on the formula listed below and reflected in an updated Table B:

$$\text{Pro Rata Share for a Non-Fixed IA} = \text{MST for a Non-Fixed IA} / \text{MST} \sum_{\text{All Non-Fixed IAs}}$$

To determine the maximum GA for each Non-Fixed IA in any Fiscal Year, the CFD administrator will multiply (i) the Pro Rata Share percentages calculated pursuant to the formula above, by (ii) the difference between the Indexed GA for such Fiscal Year identified in Table A and the GA for all Fixed IAs for such Fiscal Year (calculated by multiplying the fixed Pro Rata Share of the Fixed IAs by the Indexed GA).

The new Pro Rata Share percentages for each Non-Fixed IA, as calculated by the CFD Administrator using the formula above, shall replace the amounts identified in Table B and shall be used in each Fiscal Year to determine the maximum GA for such Non-Fixed IAs. In addition, Table B shall identify the maximum Pro Rata Share of the GA for FY 2014-2015 to reflect the remaining IAs Pro Rata Share of \$9,500,000.

II. Prepayment Percentages

Two percentage amounts are required to determine the prepayment amounts for Residential Property and Non-Residential Property under Section I of the RMA. These percentage amounts are called Property Prepayment Percentages, and they shall be calculated separately for Residential Property and Non-Residential Property as follows:

Non-Residential Property

- Step 1. For such IA, determine the amount of the Maximum Special Tax identified in Table B above generated by Non-Residential Property or parcels anticipated to become Non-Residential Property ("Total Non-Residential Property MST")
- Step 2. Multiply the total Non-Residential Floor Area expected at buildout for such IA by \$0.25.
- Step 3. Subtract the amount calculated in Step 2 above from the Total Non-Residential Property MST for such IA as determined under Step 1 above and divide by 1.1 ("Prepayable Portion of the Total Non-Residential Property MST").
- Step 4. Divide the amount calculated in Step 3 by the Total Non-Residential Property MST as determined under Step 1 ("Non-Residential Property Prepayment Percentage").

Residential Property

- Step 5. For such IA, determine the Maximum Special Tax expected to be levied on Residential Property (“Total Residential Property MST”).
- Step 6. Determine the GA to be paid by Residential Property or parcels anticipated to become Residential Property for such IA by subtracting the amount calculated in Step 2 above from an amount equal to the Pro Rata Share for such IA multiplied by \$9,500,000 (if this calculation is being done in Fiscal Year 2014-2015), or for each Fiscal Year beyond Fiscal Year 2014-2015 in which this calculation is being made, \$9,500,000 escalated by 2% each Fiscal Year thereafter. . If this calculation is made prior to Fiscal Year 2014-2015, the amount calculated in Step 2 shall be subtracted from an amount equal to the Pro Rata Share for such IA multiplied by \$9,500,000 discounted 2% annually for the number of years remaining until Fiscal Year 2014-2015.
- Step 7. Subtract the amount calculated in Step 6 above from the Total Residential Property MST as determined under Step 5 and divide by 1.1 (“Prepayable Portion of the Total Residential Property MST”).
- Step 8. Divide the amount calculated in Step 7 by the Total Residential Property MST as determined under Step 5 (“Residential Property Prepayment Percentage”).

The Non-Residential Property Prepayment Percentage calculated pursuant to Step 4 above shall be utilized within the RMA as the percentage amounts required in the following places:

- Step 3 and Step 4 in Section I.1.B
- Section I.3.c

In addition, in Section I.3.b of the RMA, the percentage amount that will continue to be levied on Non-Residential Property shall equal (1.0 - Non-Residential Property Prepayment Percentage calculated in Step 4).

The Residential Property Prepayment Percentage calculated pursuant to Step 8 above shall be utilized within the RMA as the percentage amounts required in the following places:

- Step 3 and Step 4 in Section I.1.A
- Section I.3.c

In addition, in Section I.3.b of the RMA, the percentage amount that will continue to be levied on Residential Property shall equal (1.0 - Residential Property Prepayment Percentage calculated in Step 8).

Lastly, in Section J of the RMA, the percentage amount that shall terminate shall equal 1.1 x Non-Residential Property Prepayment Percentage, calculated pursuant to Step 4 above, for Non-residential Property, and for Residential Property, the percentage amount that shall terminate

City of Irvine – (Great Park Implementation Memo)

Page 6

August 5, 2009

shall equal 1.1 x Residential Property Prepayment Percentage, calculated pursuant to Step 8 above.

Example:

Step 1: Non-Res SF = 1,423,417 x 1.32 = 1,878,910.44

Step 2: 1,423,417 x 0.25 = 355,854.25

Step 3: 1,878,910.44-355,854.25=1,523,056.19/1.1=1,384,596.54

Step 4: 1,384,596.54/1,878,910.44=73.69%

Step 5: 638 units x average tax of 3,710.8 =2,367,487.56

Step 6: (Pro Rata Share: 13.49% x 9,500,000) - 355,854.25 = 925,279.20

Step 7: 2,367,487.56-925,279.20=1,442,208.36/1.1=1,311,098.51

Step 8: 1,311,098.51/2,367,487.56=55.38%

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Exhibit T

POLICE SITE TITLE EXCEPTIONS

1. General and special taxes and assessments for the fiscal year in which the conveyance of the Police Site occurs and all subsequent fiscal years.
2. Taxes, bonds and assessments not examined.
3. The lien of supplemental taxes, if any, assessed pursuant to Chapter 3.5 commencing with Section 75 of the California Revenue and Taxation Code.
4. Water rights, claims or title to water, whether or not shown by the public records.
5. An easement for right of way for road and incidental purposes, recorded March 24, 1902 as Book 123 Page 316 of Official Records in favor of The County of Orange.

As modified by that certain easement for right of way for road and incidental purposes, recorded July 1, 1944 as Book 1263 Page 136 of Official Records, that certain Resolution of Board of Supervisors, Orange County California, recorded January 6, 1960 in Book 5050 Page 577 of Official Records, and that certain Certificate of Completion recorded January 14, 2004 as Instrument No. 2004000030076 of Official Records.

6. An easement for Electrical distribution systems and incidental purposes, recorded March 4, 1918 as Book 318 Page 240 and as amended and changed by agreement recorded July 31, 1943 in Book 1204 Page 171 both of Official Records.

In Favor of: Southern California Edison Company
Affects: A portion of the land

As modified by Final Judgment and Decree of Condemnation rendered in the District Court of the United States in and for the Southern District of California, Central District in an action entitled United States of America, Plaintiff VS. 2318.833 acres of land, and others, defendants Case No. 2504-Y Civil, a certified copy of which decree was recorded July 12, 1944 in Book 1264 Page 154 and recorded November 3, 1949 in Book 1923 Page 151, both of Official Records

7. The Terms, Provisions and Easement(s) contained in the document entitled "Quitclaim Deed" recorded July 12, 2005 as Instrument No. 2005-0536288 of Official Records.

Document(s) declaring modifications thereof recorded December 22, 2005 as Instrument No. 2005001023680 of Official Records.

8. The Terms, Provisions, Restrictions (including those set forth in Section 3.9 and 9.1) and any Easement(s) (if any) contained in that certain document entitled "Amended and Restated Development Agreement" to which this Exhibit is attached;

Which amends and restates that certain "Development Agreement" recorded July 12, 2005 as Instrument No. 2005-0538136 of Official Records.

Exhibit T

The interest of Heritage Fields, LLC, a Delaware Limited Liability Company, under the Development Agreement recorded July 12, 2005 as Instrument No. 2005-0538136 of Official Records was assigned to Heritage Fields El Toro, LLC, a Delaware Limited Liability Company, by an instrument recorded December 22, 2005 as Instrument No. 05-1023682 of Official Records.

9. Covenants, conditions, restrictions and easements in the document recorded July 12, 2005 as Instrument No. 2005-0538145 of Official Records (the "Original CC&Rs"), which provide that a violation thereof shall not defeat or render invalid the lien of any first mortgage or deed of trust made in good faith and for value, but deleting any covenant, condition or restriction indicating a preference, limitation or discrimination based on race, color, religion, sex, handicap, familial status, national origin, sexual orientation, marital status, ancestry, source of income or disability, to the extent such covenants, conditions or restrictions violate Title 42, Section 3604(c), of the United States Codes or applicable state law. Lawful restrictions under state and federal law on the age of occupants in senior housing or housing for older persons shall not be construed as restrictions based on familial status.[Note: This exception will be removed upon the termination of the Original CC&Rs pursuant to the provisions of Section 12 of that certain "Amended and Restated Development Agreement" to which this Exhibit is attached.]
10. The fact that the land lies within the boundaries of the Great Park Redevelopment Project Area, as disclosed by the document recorded March 31, 2005 as Instrument No. 2005000242692 and as revised by a document recorded June 19, 2007 as Instrument No. 2007000407641 of Official Records.
11. Easements for water lines and incidental purposes, as set out in decree entered August 27, 1953 and supplemental judgment entered July 7, 1960 and upon the terms and conditions contained therein, in the matter of the United States of America vs. The Irvine Company and others in the United States District Court Southern District of California, Central Division Case No. 15821-WB civil certified copies of which decrees were respectively recorded September 1, 1953 in Book 2567 Page 100; July 13, 1960 in Book 5327 Page 139 and October 31, 1978 in Book 12904 Page 1756, all of Official Records.
12. Any and all offers of dedication, conditions, restrictions, easements, fence line/boundary discrepancies, notes and/or provisions shown or disclosed on Parcel Map 2006-271, upon the recordation of any final map.
13. Any and all offers of dedication, conditions, restrictions, easements, fence line/boundary discrepancies, notes and/or provisions shown or disclosed on Approved Tentative Tract Map 17008 (as amended), upon the recordation of any final map.
14. Any and all offers of dedication, conditions, restrictions, easements, fence line/boundary discrepancies, notes and/or provisions shown or disclosed on Approved Tentative Map 17283, upon the recordation of any final map.
15. An easement for underground power transmission facilities reserved for the benefit of Heritage Fields El Toro, LLC (which is assignable to SCE or any other applicable utility company) in the approximate location shown on Exhibit F to that certain document entitled "Amended and Restated Development Agreement" to which this Exhibit is attached.
16. A license to carry out the obligations of Heritage Fields under the Amended and Restated Master Implementation Agreement by and between the City of Irvine and Heritage Fields El Toro, LLC (the "Amended MIA"), as set forth in the Amended MIA.

Exhibit T

17. With respect to those portions of the Police Site on which The United States of America retained one or more Leases in Furtherance of Conveyance, the Terms, Provisions, Restrictions and Easement(s) contained and/or reserved in one or more Quitclaim Deed(s) to be granted by The United States of America in connection with the conveyance of the Police Site (or portions thereof) to Heritage Fields El Toro, LLC following the issuance of a Finding of Suitability to Transfer, including easements and other rights for the maintenance and exclusive use of and provision and maintenance for support of structures owned by the United States of America and incidental purposes.
18. Easement rights held (or to be contained and/or reserved in one or more Quitclaim Deed(s) to be granted by The United States of America) by the United States of America relating to access/egress, installation, maintenance and removal of monitoring wells located on the property.

Exhibit U

ARDA TRANSFER SITE TITLE EXCEPTIONS

1. General and special taxes and assessments for the fiscal year in which the conveyance of the ARDA Transfer Site occurs and all subsequent fiscal years.
2. Taxes, bonds and assessments not examined.
3. The lien of supplemental taxes, if any, assessed pursuant to Chapter 3.5 commencing with Section 75 of the California Revenue and Taxation Code.
4. Water rights, claims or title to water, whether or not shown by the public records.
5. An easement for Sanitary sewer, storm drains, pipelines, public utilities and incidental purposes, recorded March 26, 1996 as Instrument No. 199960144770 of Official Records.

In Favor of: The County of Orange
Affects: A portion of vacated Trabuco Road

6. The Terms, Provisions and Easement(s) contained in the document entitled "Quitclaim Deeds" recorded July 12, 2005 as Instrument No. 2005-0536290 of Official Records.

Said instrument was modified by deed recorded December 22, 2005 as Instrument No. 2005001023680 of Official Records.

7. An easement for Ingress, egress and the installation, operation, maintenance and repair of utilities and maintenance and exclusive use of and provision and maintenance for support of structures owned by the United States of America and incidental purposes, recorded July 12, 2005 as Instrument No. 2005-0536290 all of Official Records.

In Favor of: United States of America, acting by and through the
Department of the Navy
Affects: As provided in said instruments

8. A leasehold estate as created by that certain for the term, and upon the terms, covenants and conditions therein provided; Lessor: United States of America, acting by and through the Department of the Navy; Lessee: Heritage Fields, LLC, a Delaware Limited Liability Company; Dated: July 12, 2005; Recorded: July 12, 2005 as Instrument No. 2005-053291 of Official Records

Terms, provisions and conditions contained in an instrument entitled "Assignment and Assumption of Leases", executed by and between Heritage Fields LLC, a Delaware Limited Liability Company and Heritage Fields El Toro, LLC, a Delaware Limited Liability Company and recorded December 22, 2005 as Instrument No. 2005001023681 of Official Records.

9. The Terms, Provisions, Restrictions (including those set forth in Section 3.9) and any Easement(s) (if any) contained in that certain document entitled "Amended and Restated Development Agreement" to which this Exhibit is attached;

Exhibit U

Which amends and restates that certain "Development Agreement" recorded July 12, 2005 as Instrument No. 2005-0538136 of Official Records.

The interest of Heritage Fields LLC, a Delaware Limited Liability Company, under the Development Agreement recorded July 12, 2005 as Instrument No. 2005-0538136 of Official Records was assigned to Heritage Fields El Toro, LLC, a Delaware Limited Liability Company, by an instrument recorded December 22, 2005 as Instrument No. 05-1023682 of Official Records.

10. Covenants, conditions, restrictions and easements in the document recorded July 12, 2005 as Instrument No. 2005-0538145 of Official Records (the "Original CC&Rs"), which provide that a violation thereof shall not defeat or render invalid the lien of any first mortgage or deed of trust made in good faith and for value, but deleting any covenant, condition or restriction indicating a preference, limitation or discrimination based on race, color, religion, sex, handicap, familial status, national origin, sexual orientation, marital status, ancestry, source of income or disability, to the extent such covenants, conditions or restrictions violate Title 42, Section 3604(c), of the United States Codes or applicable state law. Lawful restrictions under state and federal law on the age of occupants in senior housing or housing for older persons shall not be construed as restrictions based on familial status. [Note: This exception will be removed upon the termination of the Original CC&Rs pursuant to the provisions of Section 12 of that certain "Amended and Restated Development Agreement" to which this Exhibit is attached.]
11. The fact that the land lies within the boundaries of the Great Park Redevelopment Project Area, as disclosed by the document recorded March 31, 2005 as Instrument No. 200500242692 and as revised by a document recorded June 19, 2007 as Instrument No. 2007000407641 of Official Records both of Official Records.
12. Any and all offers of dedication, conditions, restrictions, easements, fence line/boundary discrepancies, notes and/or provisions shown or disclosed by Tentative Tract Map. No. 17008 (as amended), upon the recordation of such final map.
13. Any and all offers of dedication, conditions, restrictions, easements, fence line/boundary discrepancies, notes and/or provisions shown or disclosed by Parcel Map No. 2006-271, upon the recordation of such final map.
14. A license to carry out the obligations of Heritage Fields under the Amended and Restated Master Implementation Agreement by and between the City of Irvine and Heritage Fields El Toro, LLC (the "Amended MIA"), as set forth in the Amended MIA.
14. With respect to those portions of the ARDA Transfer Site on which The United States of America retained one or more Leases in Furtherance of Conveyance, the Terms, Provisions, Restrictions and Easement(s) contained and/or reserved in one or more Quitclaim Deed(s) to be granted by The United States of America in connection with the conveyance of the ARDA Transfer Site (or portions thereof) to Heritage Fields El Toro, LLC following the issuance of a Finding of Suitability to Transfer, including easements and other rights for the maintenance and exclusive use of and provision and maintenance for support of structures owned by the United States of America and incidental purposes.

BINGHAM

1/12 RETURNED CC. CLARK
FILE

Edward S. Merrill
Direct Phone: 415.393.2335
Direct Fax: 415.262.9228
doc.merrill@bingham.com
Our File No.: 0000335426

January 5, 2011

Via FedEx

City of Irvine
City Hall
One Civic Center Plaza
Irvine, CA 92623-9675
Attn: Sean Joyce, City Manager

Re: Mortgage Notice

Dear Mr. Joyce:

We represent State Street Bank & Trust Co. As you may know, State Street recently closed an acquisition and restructuring of the mortgage loan encumbering the Heritage Fields Property. Enclosed is State Street's letter notifying the City of State Street's status as Mortgagee with respect to the Amended and Restated Development Agreement concerning the Heritage Fields Property.

Please have the City of Irvine acknowledge receipt of the letter by signing and dating where indicated and returning to me at the address shown on our letterhead.

Thank you for your cooperation.

Very truly yours,


Edward S. Merrill

Enclosure

cc: Rutan & Tucker, Attn: Phil Kohn, Irvine City Atty (w/encl.) (via Fed. Exp.)
Michael Alvarado (w/encl.) (via Email)
Michael Damast (w/encl.) (via Email)

Boston
Hartford
Hong Kong
London
Los Angeles
New York
Orange County
San Francisco
Santa Monica
Silicon Valley
Tokyo
Washington

Bingham McCutchen LLP
Three Embarcadero Center
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bingham.com



STATE STREET.

Global Treasury Division
State Street
Financial Center
One Lincoln Street
Boston, MA 02111-2900

January 5, 2011

City of Irvine (the "City")
City Hall
One Civic Center Plaza
Irvine, California 92623-9575
Attention: Director of Community Development

Rutan & Tucker, LLP
611 Anton Blvd., Suite 1400
Costa Mesa, California 92626
Attention: Irvine City Attorney

Re: Mortgagee Notice

Ladies and Gentlemen:

Reference is made to that certain Amended and Restated Development Agreement (the "Agreement"), dated as of December 29, 2010, by and among the City, the Irvine Redevelopment Agency and Heritage Fields El Toro, LLC, a Delaware limited liability company ("Heritage Fields"). Except as otherwise defined in this letter, defined terms herein shall have the meaning given to such terms in the Agreement.

State Street Bank and Trust Company, a Massachusetts trust company ("State Street") is now a Mortgagee with respect to the Heritage Fields Property. Pursuant to the terms of Section 16.4 of the Agreement, upon written request to the City, a Mortgagee is entitled to receive written notice from the City of the results of the Annual Review and of any default by Heritage Fields under the Agreement.

In accordance with Section 16.4 of the Agreement, State Street hereby requests to receive the notices described in Section 16.4. All such notices or communications shall be given to State Street at addresses set forth below:

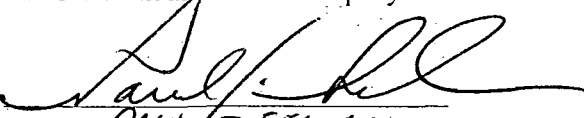
State Street Bank and Trust Company
One Lincoln Street
Boston, MA 02111
Attention: Paul J. Selian, Q. Sophie Yang, and Robert S. Emslie
Telephone: (617) 664-0374
Facsimile: (617) 664-2637

and
State Street Bank and Trust Company
Copley Place, Tower 1, Floor 2
Boston, MA 02116
Attention: Bruce M. Denneen
Telephone: (617) 662-7280
Facsimile: (617) 664-5650

Please acknowledge your receipt of this notice with your countersignature below and returning an original to Mortgagee at the address set forth above.

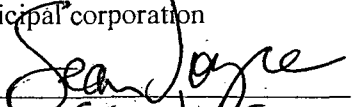
Sincerely,

State Street Bank and Trust Company

By: 
Name: PAUL J. SULLIVAN
Title: E. V. PRESIDENT

Acknowledged and agreed to
this ___ day of January, 2011:

CITY OF IRVINE,
a municipal corporation

By: 
Name: SEAN JOYCE
Title: CITY MANAGER

THIS DOCUMENT WAS PREPARED BY,
AND AFTER RECORDING RETURN TO:

O.C. Property Company, LLC
c/o Broadcom Corporation
1110 American Parkway NE
Allentown, PA 18109
Attn: Paul Bento, Esq.

(Space Above for Recorder's Use)

**PARTIAL ASSIGNMENT AND ASSUMPTION OF DEVELOPMENT AGREEMENT AND
SITE SPECIFIC APPROVALS**

THIS PARTIAL ASSIGNMENT AND ASSUMPTION OF DEVELOPMENT AGREEMENT AND SITE SPECIFIC APPROVALS ("**Assignment Agreement**") is made as of the ___ day of _____, 2017, by and between O.C. PROPERTY COMPANY, LLC, a Delaware limited liability company, doing business in California under the name Red Pipe Property Company, LLC ("**Assignor**"), and FIVE POINT OFFICE VENTURE I, LLC, a Delaware limited liability company ("**Assignee**"), with reference to the following facts:

A. HERITAGE FIELDS EL TORO, LLC, a Delaware limited liability company ("**HFET**"), as assignor, and Assignor, as assignee, entered into that certain Partial Assignment and Assumption of Development Agreement and Site Specific Approvals dated as of March 10, 2015, and recorded in the Official Records of Orange County, California, on March 10, 2015 as Instrument Number 2015000123655 (the "**DA Assignment**"), which is hereby incorporated herein by this reference. Capitalized terms used and not otherwise defined herein shall have the meaning ascribed to such terms in the DA Assignment.

B. Pursuant to the DA Assignment, HFET assigned to Assignor, and Assignor assumed from HFET, subject to the terms, conditions and restrictions set forth in the DA Assignment, the Assigned Interests and the Site Specific Approvals with respect to the Assigned Parcels, which are also described on **Exhibit A** attached hereto and incorporated herein by this reference.

C. Based on Assignee's exercise of certain repurchase option rights, Assignee has agreed to purchase, and Assignor has agreed to sell, the Assigned Parcels, in each case, upon terms and conditions ("**Purchase Agreement Terms**") more particularly set forth in that certain Agreement of Purchase and Sale and Joint Escrow Instructions dated March 10, 2017 previously executed by Assignor, as seller, and Bravo Strategies III, a Delaware limited liability company, as buyer.

D. In conjunction with the conveyance of the Assigned Parcels to Assignee, Assignor desires to assign to Assignee, and Assignee desires to assume, all of Assignor's rights, duties and obligations with respect to the Assigned Interests and the Site Specific Approvals subject to the terms, conditions and restrictions set forth in this Assignment Agreement.

NOW THEREFORE, in consideration of the foregoing facts and the mutual covenants and conditions herein below set forth, it is agreed:

1. Effective Date. This Assignment Agreement shall become effective upon the recordation in the Official Records of Orange County, California, of a grant deed conveying the Assigned Parcels from Assignor to Assignee (the "**Effective Date**").

2. Assignment of Interests. From and after the Effective Date, Assignor hereby assigns and transfers to Assignee the Assigned Interests, subject to the terms, conditions and restrictions set forth in this Assignment Agreement.

3. Assumption of Assigned Interests; Assignee to become Party. From and after the Effective Date, Assignee hereby assumes all of the Assigned Interests with respect to the Assigned Parcels, subject to the terms, conditions and restrictions set forth in this Assignment Agreement. From and after the Effective Date, and in accordance with Section 17.2 of the Development Agreement, Assignee shall become substituted for Assignor as "Heritage Fields," "Owner" and "Party" under the Development Agreement solely with respect to the Assigned Parcels and the Assigned Interests, and, subject to the City's consent to this Assignment Agreement as evidenced by the City's execution of the attached Consent, Assignor shall be unconditionally and irrevocably released, from and after the Effective Date, from the Assigned Interests.

4. Site Specific Approvals. From and after the Effective Date, Assignor hereby assigns and transfers to Assignee and Assignee hereby assumes all of the Site Specific Approvals with respect to the Assigned Parcels, subject to the terms, conditions and restrictions set forth in this Assignment Agreement.

5. NITM Fee. Consistent with Section 3 above, Assignee shall have the right to receive a Certificate of NITM Compliance with respect to the Assigned Parcels in accordance with Section 6.13 of the Development Agreement.

6. Annual Review of Development Agreement Compliance; Assignee Responsibilities. Assignee shall participate in the annual review of the Development Agreement conducted pursuant to California Government Code Section 65865.1 with respect to the Assigned Parcels and the Assigned Interests arising under or relating to the Development Agreement, and Assignor shall have no responsibility therefor.

7. Miscellaneous.

(a) Counterparts. This Assignment Agreement may be executed in counterparts which taken together shall constitute one and the same instrument.

(b) Successors and Assigns. The provisions of this instrument shall be binding upon and inure to the benefit of Assignor and Assignee and their respective successors and assigns.

(c) Further Assurances. Assignor and Assignee each hereby covenants that it will, at any time and from time to time, execute any documents and take such additional actions as the other, or its respective successors or assigns, shall reasonably require in order to more completely or perfectly carry out the transfers intended to be accomplished by this Assignment Agreement.

(d) Governing Law. This Assignment Agreement shall be construed and interpreted in accordance with the laws of the State of California.

(e) Severability. Consistent with Section 20.7 of the Development Agreement, if any term or provision of this Assignment Agreement or the application thereof to any person or circumstance is found by a court of competent jurisdiction to be invalid or unenforceable, the remainder of this Assignment Agreement, or the application of such term or provision to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected thereby, and each remaining term and provision of this Assignment Agreement shall be valid and enforceable to the full extent permitted by law; unless and to the extent the rights and obligations or the benefits of the bargain for either Assignor or Assignee as derived from this Assignment Agreement have been materially altered or abridged by such holding or action, as determined by the party who would have benefited.

(f) Notices. In accordance with Section 20.12 of the Development Agreement, from and after the Effective Date of this Assignment Agreement, the Assignee shall be considered a "Party" with respect to the Assigned Parcels and Assignee designates the following initial addresses for Notices in accordance with Section 20.12 of the Development Agreement:

If to Assignee:

Five Point Office Venture I, LLC
25 Enterprise, Suite 300
Aliso Viejo, California 92656
Attention: Legal Notices
Fax: (949) 349-1075

(g) Estoppel Certificates. From and after the Effective Date, Assignee may exercise the rights of a "Party" (as that term is defined in the Development Agreement) pursuant to Development Agreement section 20.9.

(h) No Waiver. Failure by a party to insist upon the strict performance of any of the provisions of this Assignment Agreement by any other party, or the failure by a party to exercise its rights upon the default of the other party, shall not constitute a waiver of such party's right to insist and demand strict compliance by the other parties with the terms of this Assignment Agreement thereafter.

(i) Amendments. Any amendments or modifications to this Assignment Agreement must be in writing, signed by duly authorized representatives of each of the parties hereto, and recorded in the Official Records of Orange County, California.

(e) Authority. Each party represents and warrants that the person executing this Assignment Agreement on behalf of such party has the authority to bind such party to the performance of its obligations hereunder and that all necessary board of directors', shareholders', partners', members', managers', and other approvals have been obtained.

[SIGNATURE PAGES TO FOLLOW]

IN WITNESS WHEREOF, Assignor and Assignee have executed this Assignment Agreement as of the date first set forth above.

"ASSIGNOR"

O.C. PROPERTY COMPANY, LLC, a Delaware limited liability company, doing business in California under the name Red Pipe Property Company, LLC

By: _____
Name: Thomas H. Krause, Jr.
Title: Chief Financial Officer

ALL-PURPOSE ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF _____

COUNTY OF _____

On _____ before me, _____ (here insert name and title of the officer), personally appeared _____ who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

"ASSIGNEE"

FIVE POINT OFFICE VENTURE I, LLC,
a Delaware limited liability company

By: _____
Name: _____
Title: _____

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA

COUNTY OF _____

On _____ before me, _____ (here insert name and title of the officer), personally appeared _____ who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

CONSENT AND ESTOPPEL BY CITY

The foregoing Partial Assignment and Assumption of Development Agreement and Site Specific Approvals ("Assignment Agreement") to which this Consent and Estoppel by City ("Consent and Estoppel") is attached is hereby acknowledged and agreed to by THE CITY OF IRVINE, a California charter city ("City"). By its execution hereof, the City hereby: (i) consents to the partial assignment of the Development Agreement to Assignee pursuant to this Assignment Agreement, and, accordingly, pursuant to Section 17.3 of the Development Agreement, from and after the Effective Date, Assignor shall be relieved of its legal duty to perform the Assigned Interests (except to the extent of any default by Assignor in respect of the Assigned Interests which accrued prior to the Effective Date); (ii) pursuant to Section 20.9 of the Development Agreement, certifies that, to its best knowledge, the Development Agreement is in full force and effect and a binding obligation upon the City and Assignor, and has not been modified or amended and Assignor is not in default in the performance of any of the Assigned Interests under the Development Agreement; and (iii) acknowledges that the approvals and plans referred to in the ARDA Letter Agreements are considered the Existing Land Use Regulations and the applicable ARDA Overlay Plan and are accordingly afforded the vested rights protection of the Development Agreement.

"CITY"

CITY OF IRVINE,
a California charter city

By: _____

Name: _____

Title: _____

ATTEST:

Name: _____

City Clerk

APPROVED AS TO FORM FOR CITY:



Name: Jeffrey Melching

City Attorney

City Signature Page for
Partial Assignment and
Assumption of
Development Agreement
and Site Specific Approvals

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA

COUNTY OF _____

On _____ before me, _____ (here insert name and title of the officer), personally appeared _____ who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

JOINDER BY SUCCESSOR AGENCY

The foregoing Partial Assignment and Assumption of Development Agreement and Site Specific Approvals ("Assignment Agreement") to which a Consent and Estoppel by the City is attached, is hereby acknowledged by the SUCCESSOR AGENCY OF THE IRVINE REDEVELOPMENT AGENCY (the "Successor Agency"). By its execution hereof, the Successor Agency hereby further acknowledges that in accordance with Section 3.13 no consent or action by the Successor Agency is required for any of the transactions or activities contemplated by the Assignment Agreement.

"SUCCESSOR AGENCY"

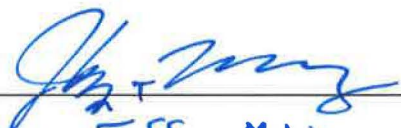
SUCCESSOR AGENCY OF THE IRVINE REDEVELOPMENT AGENCY

By: _____
Name: Sean Joyce
Title: Executive Director, Irvine Successor Agency

ATTEST:

Name: _____
[title]

APPROVED AS TO FORM FOR SUCCESSOR AGENCY:



Name: Jeffrey Meldoy
{TITLE} Agency Counsel

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA

COUNTY OF _____

On _____ before me, _____ (here insert name and title of the officer), personally appeared _____ who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

EXHIBIT A

TO

PARTIAL ASSIGNMENT AND ASSUMPTION OF DEVELOPMENT AGREEMENT

LEGAL DESCRIPTION OF ASSIGNED PARCELS

Real property in the City of Irvine, County of Orange, State of California, described as follows:

LOTS 1 THROUGH 17, INCLUSIVE, AND LOTS A THROUGH E, INCLUSIVE OF PARCEL MAP 2014-122, IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA, AS PER MAP FILED IN [BOOK 384, PAGES 1 THROUGH 10](#), INCLUSIVE, OF PARCEL MAPS IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

SUCCESSOR AGENCY RESOLUTION NO. 17-XX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY APPROVING THE ASSIGNMENT AND ASSUMPTION OF CERTAIN OBLIGATIONS UNDER THE APPROVED AMENDED AND RESTATED DEVELOPMENT AGREEMENT (00470035-PDA) BY AND BETWEEN THE CITY OF IRVINE, CITY OF IRVINE AS SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY AND O.C. PROPERTY COMPANY LLC TO FIVE POINT OFFICE VENTURE I LLC FOR THE GREAT PARK NEIGHBORHOODS DEVELOPMENT DISTRICT 3 CORPORATE CAMPUS PROJECT LOCATED IN PLANNING AREA 51

WHEREAS, on September 8, 2009, the City Council of the City of Irvine adopted Ordinance No. 09-09 approving a the Amended and Restated Development Agreement (ARDA) between the City of Irvine, City of Irvine as Successor Agency to the Dissolved Irvine Redevelopment Agency and Heritage Fields El Toro LLC; and

WHEREAS, O.C. Property Company LLC is the current holder of certain rights and obligations under the ARDA that relate to the development of the Broadcom Campus on property bisected by Marine Way in Planning Area 51, near the entrance to the Orange County Great Park (Broadcom Campus); and

WHEREAS, O.C. Property Company LLC (“Developer”) has informed the City that it intends to sell the Broadcom Campus , and in connection with that sale, desires to assign certain of the rights and obligations under the ARDA to Five Point Office Venture I LLC; and

WHEREAS, Under Section 17 of the ARDA Developer (i) has the “right to assign” its rights and obligations under the ARDA in connection with a transfer of its interest in the property, subject to City’s consent pursuant to Section 17.3, (ii) following an assignment or transfer of any of the rights and interests of the Developer, the assignee’s exercise, use, and enjoyment of the Property shall be subject to the terms of this ARDA to the same extent (iii) upon written consent of City to the partial assignment and the express written assumption in a form approved by City of such assigned obligations of the Developer under this ARDA by the assignee, the Developer shall be relieved of its legal duty to perform the assigned obligations set forth in this agreement, except to the extent the Developer is in default hereunder prior to said transfer; and

WHEREAS, Five Point Office Venture I LLC, as the assignee, possesses reasonable ownership structure, sufficient management and extensive development experience to complete the Broadcom Campus project as described in the ARDA and project site approvals; and

ATTACHMENT 3

WHEREAS, the Developer, City, and the Successor Agency have jointly prepared forms of Partial Assignment and Assumption of Development Agreement for O.C. Property Company, LLC and Five Point Office Venture I LLC, copies of which are attached hereto and incorporated herein as Exhibit 1, that are to be executed within 30 days of City Council adoption of this resolution.

NOW THEREFORE BE IT RESOLVED that the City Council does hereby resolve as follows:

SECTION 1. The above recitals are true and correct and incorporated herein.

SECTION 2. City of Irvine staff concluded that Five Point Office Venture I LLC, possess reasonable ownership structure, sufficient management and extensive development experience to complete the Broadcom Campus project as described in the ARDA and project site approvals.

SECTION 3. Section 17.3 of the ARDA releases Developer from the assigned obligations of the ARDA upon complete assignment/transfer of the ARDA. As required by Section 17.3, Developer, has obtained the City's and Successor Agency's approval of the form of Partial Assignment and Assumption of Development Agreement for Five Point Office Venture I LLC.

Pursuant to the foregoing recitals, City finds and determines that Developer has provided (i) sufficient evidence and documentation demonstrating that Five Point Office Venture I LLC has the experience and management competence to carry out development of the project described in the ARDA in accordance with the terms of the ARDA, (ii) sufficient evidence that Developer is transferring all of its interest in the Property, and (iii) assignment and assumption agreements to be executed that specifies Five Point Office Venture I LLC, along with any lawful successors, will continue to assume all of the rights and obligations under the ARDA. Therefore, the proposed assignment of the ARDA to Five Point Office Venture I LLC is hereby approved.

PASSED AND ADOPTED by the City Council of the City of Irvine, as Successor Agency to the dissolved Irvine Redevelopment Agency at a regular meeting held on the 8th day of August 2017.

CHAIR, SUCCESSOR AGENCY

ATTEST:

SECRETARY, SUCCESSOR AGENCY

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, Secretary to the Successor Agency, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine, as Successor Agency to the dissolved Irvine Redevelopment Agency, held on the 8th day of August 2017.

AYES: BOARDMEMBERS:
NOES: BOARDMEMBERS:
ABSENT: BOARDMEMBERS:
ABSTAIN: BOARDMEMBERS:

SECRETARY, SUCCESSOR AGENCY

PARTIAL ASSIGNMENT AND ASSUMPTION AGREEMENTS

FOR

O.C. PROPERTY COMPANY, LLC

AND

FIVE POINT OFFICE VENTURE I, LLC

[See following pages]

EXHIBIT 1

THIS DOCUMENT WAS PREPARED BY,
AND AFTER RECORDING RETURN TO:

O.C. Property Company, LLC
c/o Broadcom Corporation
1110 American Parkway NE
Allentown, PA 18109
Attn: Paul Bento, Esq.

(Space Above for Recorder's Use)

**PARTIAL ASSIGNMENT AND ASSUMPTION OF DEVELOPMENT AGREEMENT AND
SITE SPECIFIC APPROVALS**

THIS PARTIAL ASSIGNMENT AND ASSUMPTION OF DEVELOPMENT AGREEMENT AND SITE SPECIFIC APPROVALS ("**Assignment Agreement**") is made as of the ___ day of _____, 2017, by and between O.C. PROPERTY COMPANY, LLC, a Delaware limited liability company, doing business in California under the name Red Pipe Property Company, LLC ("**Assignor**"), and FIVE POINT OFFICE VENTURE I, LLC, a Delaware limited liability company ("**Assignee**"), with reference to the following facts:

A. HERITAGE FIELDS EL TORO, LLC, a Delaware limited liability company ("**HFET**"), as assignor, and Assignor, as assignee, entered into that certain Partial Assignment and Assumption of Development Agreement and Site Specific Approvals dated as of March 10, 2015, and recorded in the Official Records of Orange County, California, on March 10, 2015 as Instrument Number 2015000123655 (the "**DA Assignment**"), which is hereby incorporated herein by this reference. Capitalized terms used and not otherwise defined herein shall have the meaning ascribed to such terms in the DA Assignment.

B. Pursuant to the DA Assignment, HFET assigned to Assignor, and Assignor assumed from HFET, subject to the terms, conditions and restrictions set forth in the DA Assignment, the Assigned Interests and the Site Specific Approvals with respect to the Assigned Parcels, which are also described on **Exhibit A** attached hereto and incorporated herein by this reference.

C. Based on Assignee's exercise of certain repurchase option rights, Assignee has agreed to purchase, and Assignor has agreed to sell, the Assigned Parcels, in each case, upon terms and conditions ("**Purchase Agreement Terms**") more particularly set forth in that certain Agreement of Purchase and Sale and Joint Escrow Instructions dated March 10, 2017 previously executed by Assignor, as seller, and Bravo Strategies III, a Delaware limited liability company, as buyer.

D. In conjunction with the conveyance of the Assigned Parcels to Assignee, Assignor desires to assign to Assignee, and Assignee desires to assume, all of Assignor's rights, duties and obligations with respect to the Assigned Interests and the Site Specific Approvals subject to the terms, conditions and restrictions set forth in this Assignment Agreement.

NOW THEREFORE, in consideration of the foregoing facts and the mutual covenants and conditions herein below set forth, it is agreed:

1. Effective Date. This Assignment Agreement shall become effective upon the recordation in the Official Records of Orange County, California, of a grant deed conveying the Assigned Parcels from Assignor to Assignee (the "**Effective Date**").

2. Assignment of Interests. From and after the Effective Date, Assignor hereby assigns and transfers to Assignee the Assigned Interests, subject to the terms, conditions and restrictions set forth in this Assignment Agreement.

3. Assumption of Assigned Interests; Assignee to become Party. From and after the Effective Date, Assignee hereby assumes all of the Assigned Interests with respect to the Assigned Parcels, subject to the terms, conditions and restrictions set forth in this Assignment Agreement. From and after the Effective Date, and in accordance with Section 17.2 of the Development Agreement, Assignee shall become substituted for Assignor as "Heritage Fields," "Owner" and "Party" under the Development Agreement solely with respect to the Assigned Parcels and the Assigned Interests, and, subject to the City's consent to this Assignment Agreement as evidenced by the City's execution of the attached Consent, Assignor shall be unconditionally and irrevocably released, from and after the Effective Date, from the Assigned Interests.

4. Site Specific Approvals. From and after the Effective Date, Assignor hereby assigns and transfers to Assignee and Assignee hereby assumes all of the Site Specific Approvals with respect to the Assigned Parcels, subject to the terms, conditions and restrictions set forth in this Assignment Agreement.

5. NITM Fee. Consistent with Section 3 above, Assignee shall have the right to receive a Certificate of NITM Compliance with respect to the Assigned Parcels in accordance with Section 6.13 of the Development Agreement.

6. Annual Review of Development Agreement Compliance; Assignee Responsibilities. Assignee shall participate in the annual review of the Development Agreement conducted pursuant to California Government Code Section 65865.1 with respect to the Assigned Parcels and the Assigned Interests arising under or relating to the Development Agreement, and Assignor shall have no responsibility therefor.

7. Miscellaneous.

(a) Counterparts. This Assignment Agreement may be executed in counterparts which taken together shall constitute one and the same instrument.

(b) Successors and Assigns. The provisions of this instrument shall be binding upon and inure to the benefit of Assignor and Assignee and their respective successors and assigns.

(c) Further Assurances. Assignor and Assignee each hereby covenants that it will, at any time and from time to time, execute any documents and take such additional actions as the other, or its respective successors or assigns, shall reasonably require in order to more completely or perfectly carry out the transfers intended to be accomplished by this Assignment Agreement.

(d) Governing Law. This Assignment Agreement shall be construed and interpreted in accordance with the laws of the State of California.

(e) Severability. Consistent with Section 20.7 of the Development Agreement, if any term or provision of this Assignment Agreement or the application thereof to any person or circumstance is found by a court of competent jurisdiction to be invalid or unenforceable, the remainder of this Assignment Agreement, or the application of such term or provision to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected thereby, and each remaining term and provision of this Assignment Agreement shall be valid and enforceable to the full extent permitted by law; unless and to the extent the rights and obligations or the benefits of the bargain for either Assignor or Assignee as derived from this Assignment Agreement have been materially altered or abridged by such holding or action, as determined by the party who would have benefited.

(f) Notices. In accordance with Section 20.12 of the Development Agreement, from and after the Effective Date of this Assignment Agreement, the Assignee shall be considered a "Party" with respect to the Assigned Parcels and Assignee designates the following initial addresses for Notices in accordance with Section 20.12 of the Development Agreement:

If to Assignee:

Five Point Office Venture I, LLC
25 Enterprise, Suite 300
Aliso Viejo, California 92656
Attention: Legal Notices
Fax: (949) 349-1075

(g) Estoppel Certificates. From and after the Effective Date, Assignee may exercise the rights of a "Party" (as that term is defined in the Development Agreement) pursuant to Development Agreement section 20.9.

(h) No Waiver. Failure by a party to insist upon the strict performance of any of the provisions of this Assignment Agreement by any other party, or the failure by a party to exercise its rights upon the default of the other party, shall not constitute a waiver of such party's right to insist and demand strict compliance by the other parties with the terms of this Assignment Agreement thereafter.

(i) Amendments. Any amendments or modifications to this Assignment Agreement must be in writing, signed by duly authorized representatives of each of the parties hereto, and recorded in the Official Records of Orange County, California.

(e) Authority. Each party represents and warrants that the person executing this Assignment Agreement on behalf of such party has the authority to bind such party to the performance of its obligations hereunder and that all necessary board of directors', shareholders', partners', members', managers', and other approvals have been obtained.

[SIGNATURE PAGES TO FOLLOW]

IN WITNESS WHEREOF, Assignor and Assignee have executed this Assignment Agreement as of the date first set forth above.

"ASSIGNOR"

O.C. PROPERTY COMPANY, LLC, a Delaware limited liability company, doing business in California under the name Red Pipe Property Company, LLC

By: _____
Name: Thomas H. Krause, Jr.
Title: Chief Financial Officer

ALL-PURPOSE ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF _____

COUNTY OF _____

On _____ before me, _____ (here insert name and title of the officer), personally appeared _____ who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

Assignor Signature Page
for Partial Assignment and
Assumption of
Development Agreement
and Site Specific Approvals

"ASSIGNEE"

FIVE POINT OFFICE VENTURE I, LLC,
a Delaware limited liability company

By: _____
Name: _____
Title: _____

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA

COUNTY OF _____

On _____ before me, _____ (here insert name and title of the officer), personally appeared _____ who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

CONSENT AND ESTOPPEL BY CITY

The foregoing Partial Assignment and Assumption of Development Agreement and Site Specific Approvals ("Assignment Agreement") to which this Consent and Estoppel by City ("Consent and Estoppel") is attached is hereby acknowledged and agreed to by THE CITY OF IRVINE, a California charter city ("City"). By its execution hereof, the City hereby: (i) consents to the partial assignment of the Development Agreement to Assignee pursuant to this Assignment Agreement, and, accordingly, pursuant to Section 17.3 of the Development Agreement, from and after the Effective Date, Assignor shall be relieved of its legal duty to perform the Assigned Interests (except to the extent of any default by Assignor in respect of the Assigned Interests which accrued prior to the Effective Date); (ii) pursuant to Section 20.9 of the Development Agreement, certifies that, to its best knowledge, the Development Agreement is in full force and effect and a binding obligation upon the City and Assignor, and has not been modified or amended and Assignor is not in default in the performance of any of the Assigned Interests under the Development Agreement; and (iii) acknowledges that the approvals and plans referred to in the ARDA Letter Agreements are considered the Existing Land Use Regulations and the applicable ARDA Overlay Plan and are accordingly afforded the vested rights protection of the Development Agreement.

"CITY"

CITY OF IRVINE,
a California charter city

By: _____

Name: _____

Title: _____

ATTEST:

Name: _____
City Clerk

APPROVED AS TO FORM FOR CITY:

Name: _____
City Attorney

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA

COUNTY OF _____

On _____ before me, _____ (here insert name and title of the officer), personally appeared _____ who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

JOINDER BY SUCCESSOR AGENCY

The foregoing Partial Assignment and Assumption of Development Agreement and Site Specific Approvals ("Assignment Agreement") to which a Consent and Estoppel by the City is attached, is hereby acknowledged by the SUCCESSOR AGENCY OF THE IRVINE REDEVELOPMENT AGENCY (the "Successor Agency"). By its execution hereof, the Successor Agency hereby further acknowledges that in accordance with Section 3.13 no consent or action by the Successor Agency is required for any of the transactions or activities contemplated by the Assignment Agreement.

"SUCCESSOR AGENCY"

SUCCESSOR AGENCY OF THE IRVINE REDEVELOPMENT AGENCY

By: _____
Name: Sean Joyce
Title: Executive Director, Irvine Successor Agency

ATTEST:

Name: _____
[title]

APPROVED AS TO FORM FOR SUCCESSOR AGENCY:

Name: _____
[TITLE]

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA

COUNTY OF _____

On _____ before me, _____ (here insert name and title of the officer), personally appeared _____ who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

EXHIBIT A

TO

PARTIAL ASSIGNMENT AND ASSUMPTION OF DEVELOPMENT AGREEMENT

LEGAL DESCRIPTION OF ASSIGNED PARCELS

Real property in the City of Irvine, County of Orange, State of California, described as follows:

LOTS 1 THROUGH 17, INCLUSIVE, AND LOTS A THROUGH E, INCLUSIVE OF PARCEL MAP 2014-122, IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA, AS PER MAP FILED IN [BOOK 384, PAGES 1 THROUGH 10](#), INCLUSIVE, OF PARCEL MAPS IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

4.1



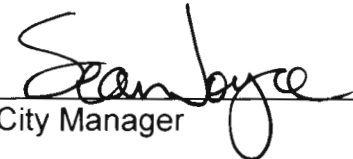
REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: AUGUST 8, 2017

TITLE: ZONE CHANGE TO AMEND IRVINE'S SIGN CODE TO ALLOW OFF-PREMISES ADVERTISING ON THE EXISTING ELECTRONIC FREEWAY SIGN LOCATED IN THE IRVINE AUTO CENTER AT 30 AUTO CENTER DRIVE IN PLANNING AREA 35 (IRVINE SPECTRUM 2)



Director of Community Development



City Manager

RECOMMENDED ACTION

- 1) Open the public hearing.
- 2) Continue the public hearing to September 26, 2017.

EXECUTIVE SUMMARY

The Auto Center Community Association requests a continuance to the City Council meeting of September 26, 2017 due to availability conflicts (Attachment 1). Staff has no objections.

FINANCIAL IMPACT

None.

ALTERNATIVES CONSIDERED

None.

REPORT PREPARED BY: Bill Rodrigues, Senior Planner
Stephen Higa, Principal Planner
Tim Gehrich, Deputy Director of Community Development

ec: Emily Benedick, Irvine Auto Center Community Association
Brad Mugg, Irvine Auto Center Community Association
George Saad, Irvine Auto Center Community Association

Irvine Auto Center
(Auto Center Community Association)

% Premier Property Management

25108 Marguerite Pkwy # A-262
Mission Viejo, CA 92692
(949) 837-2701 ♦ (714) 348-0002 cell
emlybenedick@gmail.com

July 26, 2017

City of Irvine
Mr. Bill Rodriguez
1 Civic Center Plaza
Irvine, CA 92606-5207

Re: Auto Center Community Association

Dear Mr. Rodriguez:

On behalf of the Auto Center Community Association (Irvine Auto Center), I am requesting a continuance of the Auto Center's agenda item at the City Council Meeting scheduled for August 8, 2017 to September 26, 2017.

Very Truly Yours,
On behalf of the Board of Directors,



Emily Benedick
Premier Property Management
For Irvine Auto Center

5.1



REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: AUGUST 8, 2017

TITLE: BOND ISSUANCE FOR REASSESSMENT DISTRICT NO. 05-21

Director of Administrative Services

City Manager

RECOMMENDED ACTION

Adopt A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, AUTHORIZING THE ISSUANCE AND SALE OF NOT TO EXCEED \$19,500,000 AGGREGATE PRINCIPAL AMOUNT OF CITY OF IRVINE REASSESSMENT DISTRICT NO. 05-21 LIMITED OBLIGATION IMPROVEMENT BONDS, FIXED RATE SERIES, GROUP THREE, APPROVING THE EXECUTION AND DELIVERY OF A THIRD SUPPLEMENTAL INDENTURE AND A BOND PURCHASE AGREEMENT

EXECUTIVE SUMMARY

In May 2006, the City formed Assessment District (AD) No. 05-21, also known as Orchard Hills, at the request of the Irvine Company (TIC) as landowner. This district is located north of Portola Parkway, south of the Santiago Hills, between State Route 261 and Jeffrey Road. The map in Attachment 1 shows the location within the City. TIC requested the issuance of fixed rate bonds for an amount not to exceed \$19.5 million to finance the construction of infrastructure needed for this district.

COMMISSION/BOARD/COMMITTEE RECOMMENDATION

At its regular meeting of July 17, 2017, with all members present, the Finance Commission recommended the City Council adopt the resolution of bond issuance for Reassessment District No. 05-21 by a 5-0 vote.

ANALYSIS

The City has historically used assessment district bonds to finance the construction of infrastructure in developing areas. Typically, the developer, as the landowner intending to develop a village, requests the formation of assessment districts to fund the upfront costs. When a district is formed, liens are placed and annual assessments levied on the subject properties. Bonds supported by these assessments are sold to investors to provide the capital funding. Special assessments collected annually through the

County's property tax payment process are used to support the principal, interest and administration costs of the bonds.

Orchard Hills was formed by the City on May 9, 2006 with a maximum assessment lien of \$235.3 million. On January 13, 2009, the City Council approved changes and modifications in the improvements for this district and reduced the maximum assessment lien to \$178.9 million. In 2011, the City issued \$79.3 million variable rate bonds, which has an outstanding balance of \$31.6 million. In 2014 and 2016, the City issued two fixed rate bonds, which have a total outstanding balance of \$89.7 million.

Recently, TIC requested the issuance of \$19.5 million fixed rate, private placement bonds to finance construction of infrastructure needed for this district. The proceeds from the proposed bond issuance total \$19.9 million, which consists of \$19.5 million in par amount and \$387,000 in premium. The bond proceeds will fund approximately \$17.0 million of construction improvements and the remainder will be used to fund a reserve fund of \$1.2 million, capitalized interest of \$1.5 million, and issuance costs of \$155,000. Capitalized interest is a portion of bond proceeds that is set aside to pay interest for a specified time period, which may be the longer of three years or for up to one year after completion of construction as prescribed by the Internal Revenue Service. The capitalized interest for this proposed bond issuance is calculated through September 2, 2019 and the bonds will mature over 30 years with final maturity on September 2, 2049. The City has no financial obligation for this proposed bond issuance.

If approved, the bond sale is projected to occur on or about September 27, 2017. The attached resolution contains the Third Supplemental Indenture and the Bond Purchase Agreement necessary to execute the sale and issuance of the bonds (Attachment 2).

ALTERNATIVES CONSIDERED

The City Council could choose not to adopt the resolution that will allow the sale of the fixed rate bonds; however, that would be inconsistent with the prior direction provided by the City Council in Resolution 06-32 (Attachment 3) and Resolution 06-46 (Attachment 4) ordering the improvements and acquisitions to be made by the Assessment District. Adoption of the resolution will allow the bonds to be issued and sold through private placement.

FINANCIAL IMPACT

There is no financial obligation or impact on the City's General Fund with the issuance of the assessment district bonds. The cost of issuing these bonds is approximately \$155,000 and will be funded through the bond issuance.

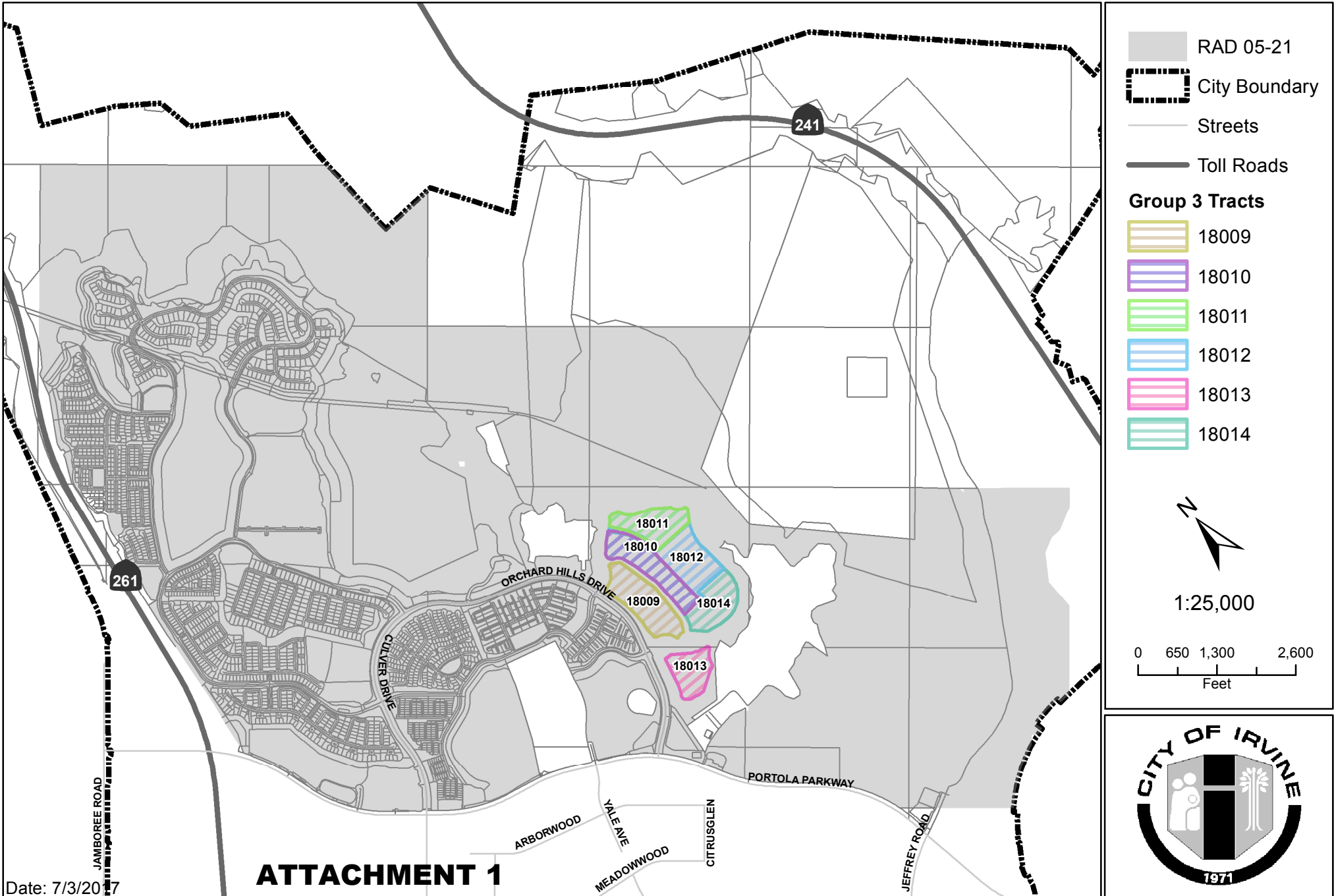
REPORT PREPARED BY Jennifer King, Finance Administrator

ATTACHMENTS

1. Reassessment District No. 05-21 (Orchard Hills) Map
2. Resolution Authorizing Bond Issuance
3. Resolution 06-32 (without exhibit)
4. Resolution 06-46

Reassessment District 05-21

PA 1 - Orchard Hills - Group 3 Tracts



CITY COUNCIL RESOLUTION NO. 17-xx

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, AUTHORIZING THE ISSUANCE AND SALE OF NOT TO EXCEED \$19,500,000 AGGREGATE PRINCIPAL AMOUNT OF CITY OF IRVINE REASSESSMENT DISTRICT NO. 05-21 LIMITED OBLIGATION IMPROVEMENT BONDS, FIXED RATE SERIES, GROUP THREE, APPROVING THE EXECUTION AND DELIVERY OF A THIRD SUPPLEMENTAL INDENTURE AND A BOND PURCHASE AGREEMENT

WHEREAS, pursuant to an Indenture, dated as of December 1, 2011, by and between the City and The Bank of New York Mellon Trust Company, N.A., as trustee (the "Original Indenture"), the City issued its Reassessment District No. 05-21 Limited Obligation Improvement Bonds, Adjustable Rate Series (the "Adjustable Rate Bonds") in the aggregate principal amount of \$79,265,000; and

WHEREAS, the Indenture provides that the City may, subject to the requirements of the Act, by Supplemental Indenture establish one or more Series of Additional Fixed Funding Series Bonds, and the City may issue and the Trustee may authenticate and deliver Bonds of any Series so established, in such principal amount as shall be determined by the City in said Supplemental Indenture, but only upon compliance by the City with the provisions of the Indenture; and

WHEREAS, the City desires pursuant to Section 3.09 of the Indenture to establish a Series of Additional Fixed Funding Series Bonds, for the purpose of funding, collectively (i) a Reserve Account established for the Group Three Bonds (defined below), (ii) the Costs of Issuance for the Group Three Bonds, (iii) interest payable on the Group Three Bonds, and (iv) costs of the Project (the "Group Three Bonds"); and

WHEREAS, in order to provide for the authentication and delivery of the Group Three Bonds to establish and declare the terms and conditions upon which the Group Three Bonds are to be issued and secured and to secure the payment of the principal thereof, premium, if any, and interest thereon, the City proposes to enter into a Third Supplemental Indenture with the Trustee (such Third Supplemental Indenture, in the form presented to this meeting, with such changes, insertions and omissions as are made pursuant to this Resolution, being referred to herein as the "Third Supplemental Indenture"); and

WHEREAS, IHC Funding I LLC, a Delaware limited liability company, or any affiliate thereof, has presented the City with a proposal, in the form of a Bond Purchase Agreement, to purchase the Group Three Bonds (such Bond Purchase Agreement, in the form presented to this meeting, with such changes, insertions and omissions as are made pursuant to this Resolution, being referred to herein as the "Bond Purchase Agreement"); and

WHEREAS, there have been prepared and submitted to this meeting forms of:

- (a) the Third Supplemental Indenture (Exhibit A);
- (b) the Bond Purchase Agreement (Exhibit B); and

WHEREAS, the City desires to proceed to issue and sell the Group Three Bonds and to authorize the execution and delivery of such documents and the performance of such acts as may be necessary or desirable to effect the offering, sale and issuance of the Group Three Bonds.

NOW, THEREFORE, the City Council of the City of Irvine DOES HEREBY RESOLVE as follows:

Section 1. Subject to the provisions of Section 2 hereof, the issuance of the Group Three Bonds in the aggregate principal amount of not to exceed \$19,500,000 on the terms and conditions set forth in, and subject to the limitations specified in, the Indenture, as amended and supplemented by the Third Supplemental Indenture (as so amended and supplemented, the "Indenture"), is hereby authorized and approved. The Group Three Bonds shall be dated, shall bear interest at the rates, shall mature on the dates, shall be issued in the form, and shall be as otherwise provided in the Indenture.

Section 2. The Third Supplemental Indenture, in substantially the form submitted to this meeting and made a part hereof as though set forth herein, be and the same is hereby approved. The Mayor of the City, or such other member of the City Council as the Mayor may designate, the City Manager of the City, or such other officer of the City as the City Manager may designate, the Director of Administrative Services, and the Manager of Fiscal Services of the City (the "Authorized Officers") are, and each of them is, hereby authorized and directed, for and in the name of the City, to execute and deliver the Third Supplemental Indenture in the form submitted to this meeting, with such changes, insertions and omissions as the Authorized Officer executing the same may require or approve, such requirement or approval to be conclusively evidenced by the execution of the Third Supplemental Indenture by such Authorized Officer; provided, however, that such changes, insertions and omissions shall not authorize an aggregate principal amount of Group Three Bonds in excess of \$19,500,000, shall not result in a final maturity date of the Group Three Bonds later than September 2, 2049, and shall not result in a true interest cost on the Group Three Bonds in excess of 6.50%. The City Treasurer is hereby authorized and directed, for and in the name of the City, to execute and deliver the Group Three Bonds in accordance with the Third Supplemental Indenture.

Section 3. The Bond Purchase Agreement, in substantially the form submitted to this meeting and made a part hereof as though set forth in full herein, be and the same is hereby approved. The Authorized Officers are, and each of them is, hereby authorized and directed, for and in the name of the City, to execute and deliver the Bond Purchase Agreement in the form presented to this meeting, with such changes, insertions and omissions as the Authorized Officer executing the same may require or approve, such requirement or approval to be conclusively evidenced by the execution of the Bond

Purchase Agreement by such Authorized Officer; provided, however, that such changes insertions and omissions shall not result in an aggregate underwriter's discount (not including any original issue discount) from the principal amount of the Group Three Bonds, or an underwriter's fee, in excess of 0% of the aggregate principal amount of the Group Three Bonds.

Section 4. The Authorized Officers are, and each of them hereby is, authorized and directed to execute and deliver any and all documents and instruments and to do and cause to be done any and all acts and things necessary or proper for carrying out the issuance of the Group Three Bonds and the transactions contemplated by the Indenture and the Bond Purchase Agreement, and this resolution.

Section 5. All actions heretofore taken by the officers and employees of the City with respect to the issuance and sale of the Group Three Bonds, or in connection with or related to any of the agreements or documents referenced herein, are hereby approved, confirmed and ratified.

Section 6. The County Auditor is hereby authorized and directed, in accordance with the provisions of Section 8682 of the Streets and Highways Code of the State of California, to enter into the assessment roll on which property taxes will next become due, opposite each lot or parcel of land affected, in a space marked "public improvement assessment" or by other suitable designation, the next and several installments of such assessment coming due during the ensuing fiscal year covered by the assessment roll and that said entry then shall be made each year during the life of the bonds for the proceedings for the above-referenced Assessment District. This authorization is continual until all assessment obligations have been discharged and the bonds terminated.

As an alternative, and when determined to be in the best interests for bondholders of the Assessment District, this legislative body may, by resolution, designate an official other than the County Tax Collector to collect and maintain records of the collection of the assessments, including a procedure other than the normal property tax collection procedure.

In accordance with the provisions of Section 8685 of the Streets and Highways Code, if any lot or parcel of land affected by any assessments is not separately assessed on the tax roll so that the installment of the assessment to be collected can be conveniently entered thereon, then the Auditor shall enter on the roll a description of the lot or parcel affected, with the name of the owners, if known, but otherwise the owners may be described as "unknown owners," and extend the proper installment opposite the same.

Section 7. This Resolution shall take effect immediately upon its adoption.

Section 8. The City Clerk shall certify to the passage and adoption of this resolution and enter it into the book of original resolutions.

PASSED and ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 8th day of August, 2017.

MAYOR OF THE CITY OF IRVINE

ATTEST:

CITY CLERK OF THE CITY OF IRVINE

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, City Clerk of the City of Irvine, California, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine, held at the 8th day of August, 2017.

AYES:

NOES:

ABSENT:

ABSTAIN:

CITY CLERK OF THE CITY OF IRVINE

**THIRD SUPPLEMENTAL
INDENTURE
by and between the
CITY OF IRVINE
and
THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A.
as Trustee
Dated as of August 1, 2017**

**RELATING TO
\$19,500,000
CITY OF IRVINE
REASSESSMENT DISTRICT NO. 05-21
LIMITED OBLIGATION IMPROVEMENT BONDS,
FIXED RATE SERIES, GROUP THREE**

TABLE OF CONTENTS

| | <u>Page</u> |
|--|--------------------|
| ARTICLE XV GROUP THREE BONDS | 1 |
| Section 15.01 Definitions..... | 1 |
| Section 15.02 Authorization and Issuance of Group Three Bonds..... | 4 |
| Section 15.03 Terms of Group Three Bonds | 4 |
| Section 15.04 Form of Group Three Bonds..... | 6 |
| Section 15.05 Application of Amounts..... | 6 |
| Section 15.06 Group Three Costs Account..... | 7 |
| Section 15.07 Redemption of Group Three Bonds | 7 |
| Section 15.08 Selection of Group Three Bonds for Redemption | 9 |
| Section 15.09 Limitations on Transfer..... | 9 |
| Section 15.10 Transfer and Exchange of Group Three Bonds | 11 |
| Section 15.11 Group Three Accounts | 11 |
| Section 15.12 Group Three Tax Covenants..... | 12 |
| Section 15.13 Group Three Rebate Fund..... | 12 |
| Section 15.14 Group Three Bonds Continuing Disclosure..... | 13 |
| Section 15.15 Group Three Bonds Original Issue Discount..... | 13 |
| Section 15.16 Reserve Facility Covenant | 13 |
| Section 15.17 Effect of Third Supplemental Indenture | 13 |
| Section 15.18 Execution in Several Counterparts..... | 14 |
| Section 15.19 Effective Date of Third Supplemental Indenture..... | 14 |
| EXHIBIT L FORM OF BOND | |
| EXHIBIT M GROUP THREE DESIGNATED PARCELS | |
| EXHIBIT N LOCKOUT PERIOD QUALIFIED TRANSFEREE INVESTOR LETTER | |
| EXHIBIT O QUALIFIED INSTITUTIONAL BUYER INVESTOR LETTER | |
| EXHIBIT P LOCKOUT PERIOD CONTINUING DISCLOSURE AGREEMENT | |

THIRD SUPPLEMENTAL INDENTURE

THIS THIRD SUPPLEMENTAL INDENTURE (this “Third Supplemental Indenture”) is made and entered into as of August 1, 2017, by and between the CITY OF IRVINE, a chartered city and municipal corporation organized and existing under and by virtue of the Constitution and laws of the State of California and its Charter (the “City”), and THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A., a national banking association organized and existing under the laws of the United States of America (the “Trustee”).

W I T N E S S E T H:

WHEREAS, pursuant to an Indenture, dated as of December 1, 2011, by and between the City and The Bank of New York Mellon Trust Company, N.A. as trustee, (the “Original Indenture”), the City issued its Reassessment District No. 05-21, Limited Obligation Improvement Bonds, Adjustable Rate Series (the “Adjustable Rate Bonds”) in the aggregate principal amount of \$79,265,000;

WHEREAS, the Indenture provides that the City may, subject to the requirements of the Act, by Supplemental Indenture establish one or more Series of Additional Fixed Funding Series Bonds, and the City may issue and the Trustee may authenticate and deliver Bonds of any Series so established, in such principal amount as shall be determined by the City in said Supplemental Indenture, but only upon compliance by the City with the provisions of the Indenture;

WHEREAS, the City desires to establish a Series of Additional Fixed Funding Series Bonds (the “Group Three Bonds”) for the purpose of funding (i) a Reserve Account established for the Group Three Bonds as defined below, (ii) the Costs of Issuance of the Group Three Bonds, (iii) interest payable on the Group Three Bonds and (iv) costs of the Project;

WHEREAS, the Group Three Bonds are to be issued in an aggregate principal amount of \$19,500,000;

WHEREAS, the City has determined that all things necessary to cause the authorization, execution and delivery of this Third Supplemental Indenture have in all respects been duly authorized;

NOW, THEREFORE, in consideration of the covenants and provisions herein set forth and for other valuable consideration the receipt and sufficiency of which is hereby acknowledged, the parties hereto do hereby agree that the Indenture is hereby amended by adding thereto an additional Article as follows:

ARTICLE XV

GROUP THREE BONDS

Section 15.01 Definitions.

Unless the context otherwise requires, the terms defined in this Section shall for all purposes of the Amended Indenture, of any Supplemental Indenture and of any certificate, opinion or other document herein or therein mentioned, have the meanings herein specified.

“Affiliate” of another Person or entity means (a) a Person directly or indirectly owning, controlling or holding with power to vote, 5% or more of the outstanding voting securities of such other Person, (b) any Person 5% of whose outstanding voting securities are directly or indirectly owned, controlled, or held with power to vote, by such other Person, and (c) any Person directly or indirectly controlling, controlled by, or under common control with, such other Person; for purposes hereof, control means the power to exercise a controlling influence over the management or policies of a Person, unless such power is solely the result of an official position with such Person.

“Amended Indenture” means the Indenture as supplemented by the Third Supplemental Indenture.

“Anniversary Date” means the date that is one year after the Closing Date.

“Assessment District” means Reassessment District No. 05-21.

“Authorized Denominations” means \$100,000 and any integral multiple of \$1,000 in excess thereof.

“Group Three Bonds” or **“Bonds”** means the \$19,500,000 aggregate principal amount of Additional Fixed Funding Series Bonds.

“Group Three Closing Date” means the date upon which the Group Three Bonds are delivered to the Group Three Original Purchaser, being September 27, 2017.

“Group Three Costs” means all items of expense directly or indirectly payable by or reimbursable to the City relating to the authorization, issuance, conversion, remarketing, sale and delivery of the Group Three Bonds, including but not limited to printing expenses, rating agency fees, filing and recording fees, fees, expenses and charges of the Trustee and its counsel, fees, charges and disbursements of underwriters, remarketing agents, attorneys, financial advisors, accounting firms, consultants, and other professionals, and fees and charges for preparation, execution and safekeeping of the Group Three Bonds.

“Group Three Costs Account” means the account within the Cost of Issuance Fund by that name established and held by the Trustee pursuant to Section 15.05(b).

“Group Three Designated Parcels” means the parcels of real property within the Assessment District designated by the City, pursuant to Section 7.01(e) of the Indenture, to represent the Group Three Bonds, set forth in Exhibit M hereto.

“Group Three Original Purchaser” means IHC Funding I LLC, a Delaware limited liability company, or an affiliate thereof.

“Group Three Original Purchaser Affiliate” means, at any time, and with respect to any Person, the Ultimate Parent Entity of such Person and any other Person that is Owned by the same Ultimate Parent Entity. “Owned” means ownership, directly or indirectly, of 100% of the outstanding voting securities of such Person or, if such Person has no outstanding voting securities, the right to 100% of the profits of such Person. “Ultimate Parent Entity” means an entity that Controls a specified Person and is not itself controlled by another entity. “Control” means the

possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a Person, whether through the ownership of voting securities, by contract or otherwise.

“Group Three Rebate Fund” means the fund by that name established and held by the Trustee pursuant to Section 15.13.

“Group Three Rebate Requirement” has the meaning ascribed thereto in the Group Three Tax Certificate.

“Group Three Tax Certificate” means the Tax Certificate executed by the City at the time of issuance of the Group Three Bonds relating to the requirements of Section 148 of the Code, as originally executed and as it may from time to time be amended in accordance with the provisions thereof.

“Indenture” means the Indenture of Trust, dated as of December 1, 2011, by and between the City and The Bank of New York Mellon Trust Company, N.A., as supplemented.

“Lockout Date” means the date on which (a) the amount of the Assessments levied on the Group Three Designated Parcels owned by the Group Three Original Purchaser or a Group Three Original Purchaser Affiliate thereof is less than 20% of the aggregate amount of the Assessments levied on all Group Three Designated Parcels, and (b) the amount of the Assessments levied on the Group Three Designated Parcels owned by any single owner of Group Three Designated Parcels or an Affiliate of such owner is less than 20% of the aggregate amount of the Assessments levied on all Group Three Designated Parcels.

“Lockout Date Certificate” means a Certificate executed by an Authorized Representative of the City addressed to the Trustee setting forth the Lockout Date.

“Lockout Period Continuing Disclosure Agreement” means a Continuing Disclosure Agreement, substantially in the form attached hereto as Exhibit P, to be entered into by the Group Three Original Purchaser and the Trustee as a condition precedent to Group Three Bonds being transferred by the Group Three Original Purchaser to a Lockout Period Qualified Transferee pursuant to subsection (b) of Section 15.09 hereof.

“Lockout Period Qualified Transferee” means a Qualified Institutional Buyer that is either (a) a national banking association that (i) has total assets in excess of \$3 billion, and (ii) owns \$350 million or more of municipal securities; (b) a registered investment company that (i) has total assets in excess of \$4 billion, and (ii) owns or holds \$2 billion or more of municipal securities; (c) a regulated insurance company that (i) has total assets in excess of \$4 billion, and (ii) owns \$2 billion or more of municipal securities.

“Lockout Period Qualified Transferee Investor Letter” means an Investor Letter, substantially in the form of Exhibit N attached hereto, to be delivered to the Trustee and the City in connection with the transfer of Group Three Bonds in accordance with the provisions of subsection (b) of Section 15.09 hereof.

“Permitted Investments” means the following, which at the time of investment are determined by the City to be legal investments under the laws of the State of California for the funds to be invested therein:

- (a) Federal Securities;
- (b) any of the following direct or indirect obligations of the following agencies of the United States of America: (i) direct obligations of the Export-Import Bank; (ii) certificates of beneficial ownership issued by the Farmers Home Administration; (iii) participation certificates issued by the General Services Administration; (iv) mortgage-backed bonds or pass-through obligations issued and guaranteed by the Government National Mortgage Association, the Federal National Mortgage Association, the Federal Home Loan Mortgage Corporation or the Federal Housing Administration; (v) project notes issued by the United States Department of Housing and Urban Development; and (vi) public housing notes and bonds guaranteed by the United States of America;
- (c) interest-bearing demand or time deposits (including certificates of deposit) or deposit accounts in federal or state chartered savings and loan associations or in federal or State of California banks (including the Trustee and its affiliates), provided that (i) the unsecured short-term obligations of such commercial bank or savings and loan association shall have at least two of the three following ratings: A1 or better by Moody’s, A+ or better by Fitch, A+ or better by Standard & Poor’s or (ii) such demand or time deposits shall be fully insured by the Federal Deposit Insurance Corporation;
- (d) commercial paper rated at the time of purchase in the highest letter and number rating category by two of the three rating agencies (Fitch, Moody’s and Standard & Poor’s), issued by corporations which are organized and operating within the United States of America, and which matures not more than 270 days following the date of investment therein;
- (e) bankers acceptances, consisting of bills of exchange or time drafts drawn on and accepted by a commercial bank which may include the Trustee and its affiliates, which mature not more than 180 days following the date of investment therein;
- (f) obligations the interest on which is excludable from gross income pursuant to Section 103 of the Code and which have two of the three following ratings: A or better by Fitch, A or better from Standard & Poor’s, A2 or better from Moody’s;
- (g) obligations issued by any corporation organized and operating within the United States of America having assets in excess of \$500,000,000, which obligations have two of the three following ratings: A or better by Fitch, A or better from Standard & Poor’s, A2 or better from Moody’s;
- (h) money market funds which carry the highest short-term rating category by two of the three rating agencies (Fitch, Moody’s and Standard & Poor’s), including those for which the Trustee or an affiliate receives compensation with respect to such money market fund;
- (i) any investment agreement with a provider whose long-term rating is in the highest two categories by two of the three rating agencies (Standard & Poor’s, Fitch, or Moody’s), and with respect to any investment agreement in which amounts held in a fund or account securing

Fixed Funding Series Bonds are invested, is approved in writing by the Bank, prior to the time of initial investment; and

(j) the Local Agency Investment Fund (the “LAIF”) established pursuant to Section 16429.1 of the California Government Code to the extent the Trustee may deposit and withdraw funds directly.

“**Person**” means an individual, corporation, limited liability company, firm, association, partnership, trust, or other legal entity or group of entities, including a governmental entity or any agency or political subdivision thereof.

“**Qualified Bank**” means a state or national bank or trust company or savings and loan association or a foreign bank with a domestic branch or agency which is organized and in good standing under the laws of the United States or any state thereof or any foreign country, which has a capital and surplus of \$50,000,000 or more and which has a short term debt rating of the highest ranking or of the highest letter and numerical rating as provided by Moody’s or by Fitch.

“**Qualified Institutional Buyer**” means a “Qualified Institutional Buyer” within the meaning of Rule 144A promulgated under the Securities Act.

“**Qualified Institutional Buyer Investor Letter**” means an Investor Letter, substantially in the form of Exhibit O attached hereto, to be delivered to the Trustee and the City in connection with the transfer of Group Three Bonds in accordance with the provisions of subsection (c) of Section 15.09 hereof.

“**Reserve Requirement-Group Three**” means, with respect to the Group Three Bonds, as of the date of any calculation, the least of (a) 10% of the original aggregate principal amount of the Group Three Bonds, (b) maximum annual debt service on the Group Three Bonds, and (c) 125% of average annual debt service on the Group Three Bonds.

“**Third Supplemental Indenture**” means this Third Supplemental Indenture, dated as of August 1, 2017, by and between the City and The Bank of New York Mellon Trust Company, N.A.

“**Securities Act**” means the Securities Act of 1933, as amended, and the rules, regulations and published interpretations of the Securities and Exchange Commission promulgated thereunder from time to time.

Section 15.02 Authorization and Issuance of Group Three Bonds.

The Group Three Bonds shall be designated “City of Irvine Reassessment District No. 05-21 Limited Obligation Improvement Bonds, Group Three”, and shall be secured by and payable from the Assessments and other assets pledged hereunder, as provided herein. The aggregate principal amount of Group Three Bonds that may be issued and Outstanding under this Third Supplemental Indenture shall not exceed \$19,500,000 except as may be otherwise provided in Section 2.14. On the Group Three Closing Date, the City shall execute and the Trustee shall authenticate the Group Three Bonds and deliver the Group Three Bonds to the Group Three Original Purchaser in the aggregate principal amount of \$19,500,000.

Section 15.03

Terms of Group Three Bonds.

(a) The Group Three Bonds shall be issued in fully registered form without coupons in Authorized Denominations, so long as no Group Three Bond shall have more than one maturity date. The Group Three Bonds shall be issued as individual original Bonds to the purchaser(s) from time to time, and not in DTC form. The Group Three Bonds shall be dated as of September 27, 2017, shall be in the aggregate principal amount of \$19,500,000 shall mature on September 2 of each year and shall bear interest (calculated on the basis of a 360-day year comprised of twelve 30-day months) at the rates per annum as follows:

| <u>Maturity (September 2)</u> | <u>Principal Amount</u> | <u>Interest Rate</u> | <u>Price</u> |
|-----------------------------------|-----------------------------|--------------------------|--------------|
|-----------------------------------|-----------------------------|--------------------------|--------------|

(b) The Interest Payment Dates for the Group Three Bonds shall commence on March 2, 2018. Interest on the Group Three Bonds shall be payable from the Interest Payment Date next preceding the date of authentication thereof unless (i) a Group Three Bond is authenticated on or before an Interest Payment Date and after the close of business on the preceding Record Date, in which event it shall bear interest from such Interest Payment Date, (ii) a Group Three Bond is authenticated on or before the first Record Date, in which event interest thereon shall be payable from September 27, 2017, or (iii) interest on any Group Three Bond is in default as of the date of authentication thereof, in which event interest thereon shall be payable from the date to which interest has been paid in full or made available for such payment, payable on each Interest Payment Date. Interest shall be paid in lawful money of the United States on each Interest Payment Date to the Persons in whose names the ownership of the Group Three Bonds is registered on the Registration Books at the close of business on the immediately preceding Record Date, except as provided below. Interest on any Group Three Bond which is not punctually paid or duly provided for on any Interest Payment Date shall be payable to the Person in whose name the ownership of such Group Three Bond is registered on the Registration Books at the close of

business on a special Record Date to be established by the Trustee for the payment of such defaulted interest, notice of which shall be given to such Owner not less than ten days prior to such special Record Date. Interest shall be paid by check of the Paying Agent mailed by First class mail, postage prepaid, on each Interest Payment Date to the Group Three Bond Owners at their respective addresses shown on the Registration Books as of the close of business on the preceding Record Date, except that in the case of an Owner of \$1,000,000 or more in aggregate principal amount of Group Three Bonds, upon the written request of such Owner to the Paying Agent, received at least ten days prior to a Record Date, specifying the account or accounts to which such payment shall be made, payment of interest shall be made by wire transfer of immediately available funds on the following Interest Payment Date. Any such request shall remain in effect until revoked or revised by such Owner by an instrument in writing delivered to the Paying Agent.

(c) The principal of and premium, if any, on the Group Three Bonds shall be payable in lawful money of the United States of America upon presentation and surrender thereof upon maturity or earlier redemption at the Office of the Paying Agent or such other place as designated by the Paying Agent. Payment of principal of and premium, if any, on any Group Three Bond shall be made only upon presentation and surrender of such Group Three Bond at the Office of the Paying Agent.

(d) The Group Three Bonds shall be subject to redemption as provided in Section 15.07.

Section 15.04 Form of Group Three Bonds.

The Group Three Bonds shall be in substantially the form set forth in Exhibit L hereto, with appropriate or necessary insertions, omissions and variations as permitted or required hereby. Only such of the Group Three Bonds as shall bear thereon a certificate of authentication substantially in the form set forth in Exhibit L hereto, manually executed by the Trustee, shall be valid or obligatory for any purpose or entitled to the benefits of this Indenture, and such certificate of or on behalf of the Trustee shall be conclusive evidence that the Group Three Bonds so authenticated have been duly executed, authenticated and delivered hereunder and are entitled to the benefits of this Indenture.

Section 15.05 Application of Amounts.

On the Group Three Closing Date, the proceeds of the sale of the Group Three Bonds (\$19,500,000.00) shall be paid to the Trustee and shall be transferred or deposited by the Trustee as follows:

(a) The Trustee shall, from the proceeds of the sale of the Group Three Bonds, deposit the amount of \$_____ in the Group Three Reserve Account, constituting the full amount of the Reserve Requirement-Group Three.

(b) The Trustee shall, from the proceeds of the sale of the Group Three Bonds, deposit the amount of \$_____ in the Group Three Costs Account.

(c) The Trustee shall, from the proceeds of the sale of the Group Three Bonds, deposit the amount of \$_____ into the Group Three Capitalized Payments Account.

(d) The Trustee shall, from the proceeds of the Group Three Bonds, deposit the amount of \$_____ into the Group Three Account of the Improvement Fund.

Section 15.06 Group Three Costs Account.

There is hereby established an account to be known as the “Group Three Costs Account”, which shall be held by the Trustee in trust. On the Group Three Closing Date, there shall be deposited in the Group Three Costs Account the amount specified in Section 15.05(b).

The moneys in the Group Three Costs Account shall be used from time to time to pay the Group Three Costs. All moneys in the Group Three Costs Account shall be invested by the City solely in Permitted Investments. All interest, profits and other income received from the investment of moneys in the Group Three Costs Account shall be retained therein. On December 31, 2017, all amounts remaining in the Group Three Costs Account shall be deposited in the Group Three Continuing Costs Account.

Section 15.07 Redemption of Group Three Bonds.

(a) Optional Redemption. The Group Three Bonds shall be subject to optional redemption, in whole, or in part in Authorized Denominations, on any Interest Payment Date, at the following respective Redemption Prices (expressed as percentages of the principal amount of the Group Three Bonds to be redeemed), plus accrued interest thereon to the date of redemption:

| <u>Redemption Dates</u> | <u>Redemption Price</u> |
|-------------------------------------|-------------------------|
| March 2, 2018 through March 2, 2025 | 103% |
| September 2, 2025 and March 2, 2026 | 102 |
| September 2, 2026 and March 2, 2027 | 101 |
| September 2, 2027 and thereafter | 100 |

The reference in Section 7.01(d) to Section 4.01(e) shall be deemed to also refer to this Section 15.07(a).

(b) Mandatory Redemption From Assessment Prepayments. The Group Three Bonds shall be subject to mandatory redemption, in whole, or in part in Authorized Denominations, on any Interest Payment Date, from and to the extent of any prepayment of Assessments on parcels of real property within the area constituting the Group Three Designated Parcels, at the following respective Redemption Prices (expressed as percentages of the principal amount of the Group Three Bonds to be redeemed), plus accrued interest thereon to the date of redemption:

| <u>Redemption Dates</u> | <u>Redemption Price</u> |
|-------------------------------------|-------------------------|
| March 2, 2018 through March 2, 2025 | 103% |
| September 2, 2025 and March 2, 2026 | 102 |
| September 2, 2026 and March 2, 2027 | 101 |
| September 2, 2027 and thereafter | 100 |

The City shall notify the Trustee of Group Three Bonds to be called for redemption upon prepayment of such Assessments in amounts sufficient therefor, or whenever sufficient surplus funds are available therefor in the Group Three Redemption Account.

(c) Mandatory Sinking Fund Redemption. The Group Three Bonds maturing on September 2, 20__ shall be subject to mandatory sinking fund redemption, in part, on September 2 in each year, commencing September 2, 20__ at a Redemption Price equal to the principal amount of the Group Three Bonds to be redeemed, without premium, plus accrued interest thereon to the date of redemption, in the aggregate respective principal amounts in the respective years as follows:

| Sinking Fund Redemption Date (September 2) | Principal Amount to be Redeemed |
|---|--|
|---|--|

If some but not all of the Group Three Bonds maturing on September 2, 20__ are redeemed pursuant to Section 15.07(a), the principal amount of Group Three Bonds maturing on September 2, 20__, to be redeemed pursuant to Section 15.07(d) on any subsequent September 2 shall be reduced, by \$5,000 or an integral multiple thereof, as designated by the City in a Written Certificate of the City filed with the Trustee at least 45 days prior to such redemption date; provided, however, that the aggregate amount of such reductions shall not exceed the aggregate amount of Group Three Bonds maturing on September 2, 20__, redeemed pursuant to Section 15.07(a). If some but not all of the Group Three Bonds maturing on September 2, 20__, are redeemed pursuant to Section 15.07(b), the principal amount of Group Three Bonds maturing on September 2, 20__, to be subsequently redeemed pursuant to Section 15.07(c) shall be reduced by the aggregate principal amount of the Group Three Bonds maturing on September 2, 20__, so redeemed pursuant to Section 15.07(b), such reduction to be allocated as nearly as practicable on a pro rata basis in amounts of \$5,000 or integral multiples thereof, as designated by the City in a Written Certificate of the City filed with the Trustee at least 45 days prior to such redemption date.

(d) Mandatory Sinking Fund Redemption. The Group Three Bonds maturing on September 2, 20__, shall be subject to mandatory sinking fund redemption, in part, on September 2 in each year, commencing September 2, 20__, at a Redemption Price equal to the principal amount of the Group Three Bonds to be redeemed, without premium, plus accrued interest thereon to the date of redemption, in the aggregate respective principal amounts in the respective years as follows:

| Sinking Fund Redemption Date (September 2) | Principal Amount to be Redeemed |
|---|--|
|---|--|

If some but not all of the Group Three Bonds maturing on September 2, 20__, are redeemed pursuant to Section 15.07(a), the principal amount of Group Three Bonds maturing on September 2, 20__, to be redeemed pursuant to Section 15.07(c) on any subsequent September 2 shall be reduced, by \$5,000 or an integral multiple thereof, as designated by the City in a Written Certificate of the City filed with the Trustee at least 45 days prior to such redemption date; provided, however, that the aggregate amount of such reductions shall not exceed the aggregate amount of Group Three Bonds maturing on September 2, 20__, redeemed pursuant to Section 15.07(a). If some but not all of the Group Three Bonds maturing on September 2, 20__, are redeemed pursuant to Section 15.07(b), the principal amount of Group Three Bonds maturing on September 2, 20__, to be subsequently redeemed pursuant to Section 15.07(c) shall be reduced by the aggregate principal amount of the Group Three Bonds maturing on September 2, 20__, so redeemed pursuant to Section 15.07(b), such reduction to be allocated as nearly as practicable on a pro rata basis in amounts of \$5,000 or integral multiples thereof, as designated by the City in a Written Certificate of the City filed with the Trustee at least 45 days prior to such redemption date.

Section 15.08 Selection of Group Three Bonds for Redemption.

Whenever provision is made in this Indenture for the redemption of less than all of the Group Three Bonds, the Trustee shall select the Group Three Bonds to be redeemed from all Group Three Bonds not previously called for redemption (a) with respect to any redemption pursuant to Section 15.07(a), among maturities as directed in a Written Request of the City, and (b) with respect to any redemption pursuant to Section 15.07(b), among maturities on a pro rata basis as nearly as practicable, and by lot among Group Three Bonds with the same maturity in such manner as shall be determined by the Trustee. For purposes of such selection each Group Three Bond shall be deemed to be comprised of separate denominations equal to the minimum Authorized Denomination for such Group Three Bond and such separate denominations shall be treated as separate Group Three Bonds which may be separately redeemed.

Section 15.09 Limitations on Transfer.

(a) No transfer, sale or other disposition of any Group Three Bond may be made prior to the Anniversary Date except to a Group Three Original Purchaser Affiliate in accordance with Section 15.09(f) below.

(b) On and after the Anniversary Date and prior to the Lockout Date, as set forth in the Lockout Date Certificate, the Group Three Original Purchaser, as the Owner of the Group Three Bonds, may on one, but on only one, occasion transfer all or a portion (such portion to be in Authorized Denominations) of the Group Three Bonds to a Person that is a Lockout Period Qualified Transferee that is purchasing such Group Three Bonds for not more than one account for investment purposes and not with a view to distributing such Group Three Bonds; provided, however, that no such transfer shall be made unless, prior to the date of transfer, the Group Three Original Purchaser and the Trustee have entered into a Lockout Period Continuing Disclosure Agreement substantially in the form attached hereto as Exhibit N. No additional transfers of Group Three Bonds may be made by the Group Three Original Purchaser prior to the Lockout Date except to a Group Three Original Purchaser Affiliate in accordance with Section 15.09(f) below. On and after the Anniversary Date and prior to the Lockout Date, the Group Three Original Purchaser, as the Owner of the Group Three Bonds, shall not transfer ownership of the Group Three Bonds, unless the Group Three Original Purchaser reasonably believes that the transferee is a Lockout

Period Qualified Transferee that is purchasing such Group Three Bonds for not more than one account for investment purposes and not with a view to distributing such Group Three Bonds. Each Lockout Period Qualified Transferee to which the Group Three Original Purchaser intends to transfer ownership of a Group Three Bond after the Anniversary Date and prior to the Lockout Date shall deliver to the Trustee a completed and duly executed Lockout Period Qualified Transferee Investor Letter substantially in the form attached hereto as Exhibit N prior to transfer of any Group Three Bond. The City and the Trustee may rely conclusively upon the information contained in any Lockout Period Qualified Transferee Investor Letter in the absence of becoming aware of information to the contrary. Each transferee of a Group Three Bond after the Anniversary Date and prior to the Lockout Date, by its purchase thereof, shall be deemed to have represented that such transferee is a Lockout Period Qualified Transferee that is purchasing such Group Three Bond for not more than one account for investment purposes and not with a view to distributing such Group Three Bond, and shall be deemed to have made each of the certifications, representations, warranties, acknowledgements and covenants set forth in the Lockout Period Qualified Transferee Investor Letter. Prior to the Lockout Date, a Lockout Period Qualified Transferee to which Group Three Bonds were transferred as provided in this subsection may, from time to time transfer all or a portion (such portion to be in Authorized Denominations) of such Group Three Bonds to the Group Three Original Purchaser. No other transfer, sale or other disposition of any Group Three Bond shall be made by such Lockout Period Qualified Transferee prior to the Lockout Date.

(c) On and after the Lockout Date, no transfer, sale or other disposition of any Group Three Bond may be made except to (1) a Person that is a Qualified Institutional Buyer that is purchasing such Group Three Bond for not more than one account for investment purposes and not with a view to distributing such Group Three Bond or (2) a Group Three Original Purchaser Affiliate in accordance with Section 15.09(f) below. On and after the Lockout Date, no Owner of a Group Three Bond shall transfer ownership of such Group Three Bond, unless such Transferor Owner reasonably believes that the transferee is a Qualified Institutional Buyer that is purchasing such Group Three Bond for not more than one account for investment purposes and not with a view to distributing such Group Three Bond. Each transferee of a Group Three Bond shall deliver to the Trustee a completed and duly executed Qualified Institutional Buyer Investor Letter substantially in the form attached hereto as Exhibit O prior to transfer of any Group Three Bond. The City and the Trustee may rely conclusively upon the information contained in any Qualified Institutional Buyer Investor Letter in the absence of becoming aware of information to the contrary. Each transferee of a Group Three Bond by its purchase thereof, shall be deemed to have represented that such transferee is a Qualified Institutional Buyer that is purchasing such Group Three Bond for not more than one account for investment purposes and not with a view to distributing such Group Three Bond, and shall be deemed to have made each of the certifications, representations, warranties, acknowledgements and covenants set forth in the Qualified Institutional Buyer Investor Letter.

(d) The Group Three Bonds shall bear a legend describing or referencing the restrictions on transferability set forth in this Section.

(e) Each Person who is or who becomes an Owner of a Group Three Bond shall be deemed by the acceptance or acquisition of such ownership to have agreed to be bound by the provisions of this Section. The transferor of ownership of a Group Three Bond agrees to provide notice to any proposed transferee of such Group Three Bond of the restrictions on transfer

described herein. Any Owner attempting a transfer, sale or other disposition of a Group Three Bond shall, and does hereby agree to, indemnify the City and the Trustee against any liability that may result if such transfer, sale or other disposition is not made in accordance with this Section.

(f) The Group Three Original Purchaser may at any time transfer all, but not less than all, of the Group Three Bonds to a Group Three Original Purchaser Affiliate, subject to the prior written approval of the Authorized Representative, which approval shall not be unreasonably withheld. No such transfer shall impair or otherwise negatively affect the federal or state tax treatment of the interest or original issue discount on the Group Three Bonds. Upon such transfer, the Group Three Original Purchaser Affiliate shall be subject to the same limitations on transfer of the Group Three Bonds as applicable to the Group Three Original Purchaser.

Section 15.10 Transfer and Exchange of Group Three Bonds

Group Three Bonds may not be transferred on the Registration Books prior to the Anniversary Date except to a Group Three Original Purchaser Affiliate in accordance with Section 15.09(f) above. On and after the Anniversary Date and prior to the Lockout Date, other than a transfer to a Group Three Original Purchaser Affiliate, all or a portion (such portion to be in Authorized Denominations) of the Group Three Bonds may be transferred one time, and one time only, on the Registration Books by the Group Three Original Purchaser, as the Owner of the Group Three Bonds, in person or by the Group Three Original Purchaser's duly authorized attorney, upon (i) surrender of such Group Three Bonds to the Trustee for cancellation, accompanied by delivery of a written instrument of transfer, duly executed in a form acceptable to the Trustee, (ii) delivery to the City and the Trustee of a completed and duly executed Lockout Period Qualified Transferee Investor Letter substantially in the form attached hereto as Exhibit N, and (iii) the execution and delivery by the Group Three Original Purchaser and the Trustee of a Lockout Period Continuing Disclosure Agreement substantially in the form attached hereto as Exhibit P. Prior to the Lockout Date, all or a portion (such portion to be in Authorized Denominations) of the Group Three Bonds registered on the Registration Books in the name of a Lockout Period Qualified Transferee to which Group Three Bonds were transferred as provided in the preceding sentence may be transferred on the Registration Books from time to time to the Group Three Original Purchaser, but only to the Group Three Original Purchaser, on the Registration Books by such Lockout Period Qualified Transferee, in person or by the Lockout Period Qualified Transferee's duly authorized attorney, upon surrender of such Group Three Bonds to the Trustee for cancellation, accompanied by delivery of a written instrument of transfer, duly executed in a form acceptable to the Trustee. On or after the Lockout Date, any Group Three Bond may be transferred upon the Registration Books by the Person in whose name it is registered, in person or by such Person's duly authorized attorney, upon (i) surrender of such Group Three Bond to the Trustee for cancellation, accompanied by delivery of a written instrument of transfer, duly executed in a form acceptable to the Trustee, and, unless the transferee is an approved Group Three Original Purchaser Affiliate, (ii) delivery to the City and the Trustee of a completed and duly executed Qualified Institutional Buyer Investor Letter substantially in the form attached hereto as Exhibit O.

Section 15.11 Group Three Accounts.

In accordance with Section 6.02, the Trustee shall establish and maintain within the Redemption Fund a separate account designated the "Group Three Redemption Account." In accordance with Section 6.03, the Trustee shall establish and maintain within the Prepayment

Account a separate account designated the “Group Three Prepayment Subaccount.” In accordance with Section 15.05(a), the Trustee shall establish and maintain within the Reserve Fund a separate account designated the “Group Three Reserve Account.” In accordance with Section 15.05(d), the Trustee shall establish and maintain within the Improvement Fund a separate account designated the “Group Three Improvement Account.”

Notwithstanding anything to the contrary contained herein, so long as no Event of Default shall have occurred and be continuing, any amount in the Group Three Reserve Account in excess of the Reserve Requirement - Group Three on February 15 and August 15 of each year shall be withdrawn from the Group Three Reserve Account by the Trustee and deposited in the Group Three Redemption Account.

Section 15.12 Group Three Tax Covenants.

(a) The City shall not take any action, or fail to take any action, if such action or failure to take such action would adversely affect the exclusion from gross income of interest on the Group Three Bonds under Section 103 of the Code. Without limiting the generality of the foregoing, the City shall comply with the requirements of the Group Three Tax Certificate, which is incorporated herein as if fully set forth herein. This covenant shall survive payment in full or defeasance of the Group Three Bonds.

(b) In the event that at any time the City is of the opinion that for purposes of this Section it is necessary or helpful to restrict or limit the yield on the investment of any moneys held by the Trustee in any of the funds or accounts established hereunder, the City shall instruct the Trustee in writing as to the specific investment to be made in order to so restrict or limit the yield, and the Trustee shall take such action as may be necessary in accordance with such instructions.

(c) Notwithstanding any provisions of this Section, if the City shall provide to the Trustee an opinion of Bond Counsel to the effect that any specified action required under this Section is no longer required or that some further or different action is required to maintain the exclusion from federal income tax of interest on the Group Three Bonds, the Trustee may conclusively rely on such opinion in complying with the requirements of this Section and of the Group Three Tax Certificate, and the covenants hereunder shall be deemed to be modified to that extent.

(d) Certain agreements, requirements and procedures contained or referred to in this Third Supplemental Indenture, the Group Three Tax Certificate and other relevant documents may be changed and certain actions (including, without limitation, defeasance of the Group Three Bonds) may be taken or omitted under the circumstances and subject to the terms and conditions set forth in such documents. Any such change may occur or action may be taken or omitted upon the advice or approval of Bond Counsel other than the Bond Counsel that rendered a final opinion with respect to the Group Three Bonds upon their original issuance, only if the City obtains from such other Bond Counsel an opinion substantially to the effect that interest on the Group Three Bonds is excluded from gross income for federal income tax purposes.

Section 15.13 **Group Three Rebate Fund.**

(a) The Trustee shall establish and maintain a special fund designated the “Group Three Rebate Fund.” There shall be deposited in the Group Three Rebate Fund such amounts as are required to be deposited therein pursuant to the Group Three Tax Certificate. All money at any time deposited in the Group Three Rebate Fund shall be held by the Trustee in trust, to the extent required to satisfy the Group Three Rebate Requirement, for payment to the United States of America. Notwithstanding defeasance of the Group Three Bonds pursuant to Article XV hereof or anything to the contrary contained herein, all amounts required to be deposited into or on deposit in the Group Three Rebate Fund shall be governed exclusively by this Section and by the Group Three Tax Certificate (which is incorporated herein by reference). The Trustee shall be deemed conclusively to have complied with such provisions if it follows the written directions of the City, and shall have no liability or responsibility to enforce compliance by the City with the terms of the Group Three Tax Certificate. The Trustee may conclusively rely upon the City’s determinations, calculations and certifications required by the Group Three Tax Certificate. The Trustee shall have no responsibility to independently make any calculation or determination or to review the City’s calculations.

(b) Any funds remaining in the Group Three Rebate Fund after payment in full of all of the Group Three Bonds and after payment of any amounts described in this Section, shall be withdrawn by the Trustee and remitted to the City.

Section 15.14 **Group Three Bonds Continuing Disclosure.**

The City and the Trustee hereby covenant and agree that they will comply with and carry out all of the provisions of the Group Three Continuing Disclosure Agreement. Notwithstanding any other provision of this Indenture, failure of the City or the Trustee to comply with the Group Three Continuing Disclosure Agreement shall not be considered an Event of Default; however, the Trustee may (and, at the written direction of any Group Three Participating Underwriter or the holders of at least 25% aggregate principal amount of Outstanding Group Three Bonds, shall) or any holder or beneficial owner of the Group Three Bonds may, take such actions as may be necessary and appropriate to compel performance, including seeking mandate or specific performance by court order; provided, however, that the Trustee shall be entitled to adequate assurance of indemnification and reimbursement for its costs and expenses as provided herein prior to taking such action.

Section 15.15 **Group Three Bonds Original Issue Discount.**

The Group Three Bonds may be purchased by the Group Three Original Purchaser on the Group Three Closing Date at such purchase price, which may include original issue discount, as may be agreed to by the City and the Group Three Original Purchaser.

Section 15.16 **Reserve Facility Covenant.**

With respect to the Group Three Bonds only, the City hereby covenants to the Owners of the Group Three Bonds that it will not substitute a Reserve Facility into the Group Three Reserve Account in lieu of the cash deposited pursuant to Section 15.05 hereof, as would otherwise be permissible pursuant to Section 6.06(a).

Section 15.17 **Effect of Third Supplemental Indenture.**

This Third Supplemental Indenture and all of the terms and provisions contained herein shall form part of the Indenture as fully and with the same effect as if all such terms and provisions had been set forth in the Indenture. The Indenture is ratified and confirmed by this Third Supplemental Indenture and shall continue in full force and effect in accordance with the terms and provisions hereof, and as amended and supplemented by this Third Supplemental Indenture. If there shall be any conflict between the terms of this Third Supplemental Indenture and the terms of the Indenture (as in effect on the day prior to the effective date of this Third Supplemental Indenture), the terms of this Third Supplemental Indenture shall prevail.

Section 15.18 **Execution in Several Counterparts.**

This Third Supplemental Indenture may be executed in any number of counterparts and each of such counterparts shall for all purposes be deemed to be an original; and all such counterparts, or as many of them as the City and the Trustee shall preserve undestroyed, shall together constitute but one and the same instrument.

Section 15.19 **Effective Date of Third Supplemental Indenture.**

This Third Supplemental Indenture shall take effect upon the Group Three Closing Date.

IN WITNESS WHEREOF, the City has caused this Third Supplemental Indenture to be signed in its name by its officer thereunto duly authorized, and the Trustee has caused this Third Supplemental Indenture to be signed in its corporate name by its officer thereunto duly authorized, all as of the day and year first above written.

CITY OF IRVINE

By: _____
Sean Joyce, City Manager

**THE BANK OF NEW YORK MELLON
TRUST COMPANY, N.A., as Trustee**

By: _____
Authorized Officer

EXHIBIT L

FORM OF GROUP THREE BOND

No. _____

\$ _____

**CITY OF IRVINE
REASSESSMENT DISTRICT NO. 05-21
LIMITED OBLIGATION IMPROVEMENT BONDS,
GROUP THREE**

| INTEREST RATE | MATURITY DATE | DATED DATE | CUSIP |
|----------------------|----------------------|--------------------|--------------|
| % | September 2, _____ | September 27, 2017 | |

REGISTERED OWNER: IHC FUNDING I LLC

PRINCIPAL AMOUNT: THOUSAND DOLLARS

Under and by virtue of the Municipal Improvement Act of 1913 (Division 12 of the California Streets and Highways Code), as amended, the Improvement Bond Act of 1915 (Division 10 of the California Streets and Highways Code), as amended, and Chapter 5 of Division 7 of Title 2 of the City of Irvine Municipal Code (collectively, the "Act"), the City of Irvine, County of Orange, State of California (the "City"), will, out of the redemption fund for the payment of the bonds issued upon the unpaid portion of assessments made for the construction of improvements more fully described in proceedings taken pursuant to Resolution No. _____ adopted by the City Council of the City on August 8, 2017 pay to the Registered Owner identified above or registered assigns (the "Registered Owner"), on the Maturity Date identified above or on any earlier redemption date, the Principal Amount identified above in lawful money of the United States of America; and to pay interest thereon at, except as provided below, the Rate of Interest identified above in like lawful money from the date hereof payable semiannually on March 2 and September 2 in each year, commencing _____, (the "Interest Payment Dates") until payment of such Principal Amount in full. This Group Three Bond shall bear interest from the Interest Payment Date next preceding the date of authentication of this Group Three Bond, unless this Group Three Bond is authenticated on or before an Interest Payment Date and after the fifteenth calendar day of the month preceding such Interest Payment Date (the "Record Date"), in which event it shall bear interest from such Interest Payment Date, or unless this Group Three Bond is authenticated on or prior to _____, in which event it shall bear interest from the Dated Date identified above; provided, however, that if, at the time of authentication of this Group Three Bond, interest is in default on this Group Three Bond, this Group Three Bond shall bear interest from the Interest Payment Date to which interest hereon has previously been paid or made available for payment. The Principal Amount hereof is payable upon surrender hereof upon maturity or earlier redemption at the designated corporate trust office (the "Trust Office") of The Bank of New York Mellon Trust Company, N.A., as trustee and paying agent (the "Trustee" and "Paying Agent", respectively). Interest hereon is payable by check of the Paying Agent mailed by First class mail, postage prepaid, on each Interest Payment Date to the Registered Owner hereof at the address of the Registered Owner as it appears on the Registration Books of the Paying Agent as of the close of business on the Record Date. In the case of an Owner of \$1,000,000 or more in

aggregate principal amount of Group Three Bonds, upon the written request of such Owner to the Paying Agent, received at least ten days prior to a Record Date, specifying the account or accounts to which such payment shall be made, payment of interest shall be made by wire transfer of immediately available funds on the following Interest Payment Date. Any such request shall remain in effect until revoked or revised by such Owner by an instrument in writing delivered to the Paying Agent.

This Group Three Bond shall not be entitled to any benefit under the Act, the Resolution authorizing the issuance of the bonds, adopted by the City Council of the City on August 8, 2017 (the "Resolution of Issuance") or the Indenture, dated as of December 1, 2011, (the "Original Indenture") by and between the City and the Trustee, as amended and supplemented by the First Supplemental Indenture, dated as of February 1, 2014, (the "First Supplemental Indenture") by and between the City and the Trustee, a Second Supplemental Indenture, dated as of March 1, 2016 (the "Second Supplemental Indenture") by and between the City and the Trustee, and a Third Supplemental Indenture, dated as of August 1, 2017, by and between the City and Trustee (the "Third Supplemental Indenture") (as so amended and supplemented, the "Indenture"), executed pursuant to the Resolution of Issuance, or become valid or obligatory for any purpose, until the certificate of authentication hereon shall have been dated and signed by the Trustee. Capitalized undefined terms used in this Group Three Bond shall have the meanings ascribed thereto in the Indenture.

This Group Three Bond is one of several series of Reassessment District No. 05-21 Limited Obligation Improvement Bonds, Group Three (the "Group Three Bonds") of like date, tenor and effect, but differing in amounts, maturities and interest rates, issued by said City under the Act and the Indenture for the purpose of providing means for paying for the construction of improvements as more particularly described in said proceedings, and is secured by the moneys in the redemption fund (as may be limited by the Indenture) and by the unpaid portion of the Assessments made for the payment of said construction of improvements, and, including principal and interest, is payable exclusively out of said fund. Notwithstanding the foregoing, the Group Three Bonds shall be payable solely from and secured solely by the Assessments (including prepayments thereof) on the parcels of real property within the Assessment District designated by the City, pursuant to the Indenture, to be represented by the Group Three Bonds (the "Group Three Designated Parcels"), together with interest and any penalties on such Assessments, and any other amounts (including proceeds of the sale of the Group Three Bonds) held in any account established under the Indenture for the Group Three Bonds. Assessments (including prepayments thereof) on parcels of real property within the Assessment District other than the Group Three Designated Parcels, together with interest and any penalties on such Assessments, and any amounts held in any fund or account established under the Indenture other than such accounts established specifically for the Group Three Bonds, secure certain other Bonds issued or to be issued under the Indenture and shall not constitute a source of payment for the Group Three Bonds.

Reference is hereby made to the Indenture and all agreements supplemental thereto for a description of the rights thereunder of the owners of the Group Three Bonds, of the nature and extent of the Assessments, of the rights, duties and immunities of the Trustee and the Paying Agent and of the rights and obligations of the City thereunder; and all of the terms of the Indenture are hereby incorporated herein and constitute a contract between the City and the Registered Owner

hereof, and to all of the provisions of which Indenture the Registered Owner hereof, by acceptance hereof, assents and agrees.

The Group Three Bonds shall be subject to optional redemption, in whole or in part, on any Interest Payment Date, at the following respective redemption prices (expressed as percentages of the principal amount of the Group Three Bonds to be redeemed), plus accrued interest thereon to the date of redemption:

| Redemption Dates | Redemption Price |
|-------------------------------------|-------------------------|
| March 2, 2018 through March 2, 2025 | 103% |
| September 2, 2025 and March 2, 2026 | 102 |
| September 2, 2026 and March 2, 2027 | 101 |
| September 2, 2027 and thereafter | 100 |

The Group Three Bonds shall be subject to mandatory redemption, in whole or in part, on any Interest Payment Date, from and to the extent of any prepayments of principal of the Assessments on Group Three Designated Parcels, as more particularly set forth in the Indenture, at the following respective redemption prices (expressed as percentages of the principal amount of the Group Three Bonds to be redeemed), plus accrued interest thereon to the date of redemption.

| Redemption Dates | Redemption Price |
|-------------------------------------|-------------------------|
| March 2, 2018 through March 2, 2025 | 103% |
| September 2, 2025 and March 2, 2026 | 102 |
| September 2, 2026 and March 2, 2027 | 101 |
| September 2, 2027 and thereafter | 100 |

The Group Three Bonds maturing on September 2, 20__ shall be subject to mandatory sinking fund redemption, in part, on September 2 in each year, commencing September 2, 20__, at a redemption price equal to the principal amount of the Group Three Bonds to be redeemed, without premium, plus accrued interest thereon to the date of redemption, in the aggregate respective principal amounts specified in the Indenture.

The Group Three Bonds maturing on September 2, 20__ shall be subject to mandatory sinking fund redemption, in part, on September 2 in each year, commencing September 2, 20__ at a redemption price equal to the principal amount of the Group Three Bonds to be redeemed, without premium, plus accrued interest thereon to the date of redemption, in the aggregate respective principal amounts specified in the Indenture.

The Trustee on behalf and at the expense of the City shall mail (by First class mail) notice of any redemption to the respective owners of any Group Three Bonds designated for redemption, at their respective addresses appearing on the Registration Books, at least 30 but not more than 60 days prior to the redemption date; provided, however, that neither failure to receive any such notice so mailed nor any defect therein shall affect the validity of the proceedings for the redemption of such Group Three Bonds or the cessation of the accrual of interest thereon. The redemption price of the Group Three Bonds to be redeemed shall be paid only upon presentation and surrender thereof at the Trust Office of the Paying Agent or such other place as designated by the Paying

Agent. From and after the date fixed for redemption of any Group Three Bonds, interest on such Group Three Bonds will cease to accrue.

THIS BOND IS SUBJECT TO RESTRICTIONS ON TRANSFERABILITY AND MAY ONLY BE TRANSFERRED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 15.09 OF THE INDENTURE.

The Group Three Bonds are issuable as fully registered Bonds without coupons in denominations of \$5,000 or any integral multiple thereof. Subject to the limitations and upon payment of the charges, if any, provided in the Indenture, Group Three Bonds may be exchanged at the Trust Office of the Paying Agent or such other place as designated by the Paying Agent for a like aggregate principal amount and maturity of fully registered Group Three Bonds of other authorized denominations.

This Group Three Bond is transferable by the Registered Owner hereof, in person or by his attorney duly authorized in writing, at the Trust Office of the Paying Agent or such other place as designated by the Paying Agent, but only in the manner, subject to the limitations and upon payment of the charges provided in the Indenture, and upon surrender and cancellation of this Group Three Bond. Upon such transfer a new fully registered Group Three Bond or Group Three Bonds, of authorized denomination or denominations, for the same aggregate principal amount and of the same maturity will be issued to the transferee in exchange herefor. The City, the Trustee and the Paying Agent may treat the Registered Owner hereof as the absolute owner hereof for all purposes, and the City, the Trustee and the Paying Agent shall not be affected by any notice to the contrary.

The Indenture and the rights and obligations of the City and of the owners of the Bonds and of the Trustee may be modified or amended from time to time and at any time in the manner, to the extent, and upon the terms provided in the Indenture.

The Bonds (including the Group Three Bonds) are Limited Obligation Bonds because, under the Indenture, the City is not obligated to advance funds from the City treasury to cure any deficiency which may occur in the redemption fund for the Bonds; provided, however, the City is not prevented, in its sole discretion, from so advancing funds.

Unless this Group Three Bond is presented by an authorized representative of The Depository Trust Company to the Paying Agent for registration, transfer, exchange or payment, and any Group Three Bond issued is registered in the name of Cede & Co. or such other name as requested by an authorized representative of The Depository Trust Company and any payment is made to Cede & Co., ANY TRANSFER, PLEDGE OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL since the registered owner hereof, Cede & Co., has an interest herein.

IN WITNESS WHEREOF, said City has caused this Group Three Bond to be signed in its name and on its behalf by the manual signatures of its City Treasurer and City Clerk, and has caused its corporate seal to be affixed hereon all as of the Dated Date identified above.

CITY OF IRVINE

By: _____
City Treasurer

(S E A L)

ATTEST:

By: _____
City Clerk

CERTIFICATE OF AUTHENTICATION

This is one of the Group Three Bonds described in the within-mentioned Indenture and registered on the Registration Books.

Date: _____, 2017

**THE BANK OF NEW YORK MELLON
TRUST COMPANY, N.A., as Trustee**

By: _____
Authorized Signatory

ASSIGNMENT

For value received the undersigned hereby sells, assigns and transfers unto _____ whose address and social security or other tax identifying number is _____, the within-mentioned Group Three Bond and hereby irrevocably constitute(s) and appoint(s) _____ attorney, to transfer the same on the registration books of the Paying Agent with full power of substitution in the premises.

Dated:

Signature Guaranteed:

Note: Signature(s) guarantee should be made by a guarantor institution participating in the Securities Transfer Agents Medallion Program or such other guarantee program acceptable to the Trustee.

Note: The signature(s) on this Assignment must correspond with the name(s) as written on the face of the within Group Three Bond in every particular without alteration or enlargement or any change whatsoever.

EXHIBIT M

GROUP THREE DESIGNATED PARCELS

The described parcels of real property within the Assessment District designated by the City, pursuant to Section 7.01(e) of the Indenture, to represent the Group Three Bonds are as follows:

ALL THAT CERTAIN PROPERTY IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

EXHIBIT N

**LOCKOUT PERIOD QUALIFIED TRANSFEREE
INVESTOR LETTER**

City of Irvine
One Civic Center Plaza
Irvine, CA 92606-5207
Attention: Director of Administrative Services

The Bank of New York Mellon Trust Company, N.A.
400 South Hope Street, Suite 500
Los Angeles, CA 90071

Re: City of Irvine Reassessment District No. 05-21
Limited Obligation Improvement Bonds, Group Three

Ladies and Gentlemen:

The undersigned (the “Transferee”) understands that the City of Irvine (the “City”) has issued the City of Irvine Reassessment District No. 05-21 Limited Obligation Improvement Bonds, Group Three, in the aggregate initial principal amount of \$19,500,000. The Transferee intends to purchase certain of said Bonds (for purposes of this Investor Letter, the “Bonds”) from IHC Funding I LLC (the “Original Purchaser”). The Bonds are issued pursuant to the Indenture, dated as of December 1, 2011, as amended and supplemented by the First Supplemental Indenture, dated as of February 1, 2014, the Second Supplemental Indenture, dated as of March 1, 2016 and the Third Supplemental Indenture, dated as of August 1, 2017, all by and between the City and The Bank of New York Mellon Trust Company, N.A., as trustee, (said Indenture, as amended and supplemented, the “Indenture”). Capitalized undefined terms used herein shall have the meanings ascribed thereto in the Indenture.

In connection with such purchase of the Bonds, the Transferee makes the certifications, representations, warranties, acknowledgements and covenants contained in this Investor Letter to each of the addressees hereof, with the express understanding that such certifications, representations, warranties, acknowledgements and covenants will be relied upon by such addressees.

The Transferee hereby certifies, represents, warrants, acknowledges and covenants as follows:

(a) The Transferee is duly organized, validly existing and in good standing under the laws of the jurisdiction in which it was incorporated or formed and is authorized to invest in the Bonds being purchased hereby. The person executing this letter on behalf of the Transferee is duly authorized to do so on the Transferee’s behalf.

(b) The Transferee understands and acknowledges that no transfer, sale or other disposition of any Bond may be made prior to the Anniversary Date and the Transferee has confirmed that the Anniversary Date has occurred prior to the date of this Investor Letter.

(c) The Transferee is (i) a “qualified institutional buyer” within the meaning of Rule 144A promulgated under the Securities Act of 1933, as amended (a “Qualified Institutional Buyer”), and (ii) one of the following: (A) a national banking association that (1) has total assets in excess of \$3 billion, and (2) owns \$350 million or more of municipal securities, (B) a registered investment company that (1) has total assets in excess of \$4 billion, and (2) owns or holds \$2 billion or more of municipal securities, or (C) a regulated insurance company that (1) has total assets in excess of \$4 billion, and (2) owns \$2 billion or more of municipal securities.

(d) The Transferee is not purchasing the Bonds for more than one account, is purchasing the Bonds for investment purposes and is not purchasing the Bonds with a view to distributing the Bonds.

(e) The Transferee has sufficient knowledge and experience in financial and business matters, including the purchase and ownership of municipal bonds and other tax-exempt obligations similar to the Bonds, to be capable of evaluating the merits and risks of an investment in the Bonds; and the Transferee is able to bear the economic risks of such an investment.

(f) The Transferee recognizes that an investment in the Bonds involves significant risks, that the transferability of the Bonds is restricted, that there is no established market for the Bonds and that none is likely to develop and, accordingly, that the Transferee must bear the economic risk of an investment in the Bonds for an indefinite period of time.

(g) The Transferee understands and agrees that, prior to the Lockout Date, it may resell or otherwise transfer all or any part of the Bonds only to the Original Purchaser.

(h) The Transferee understands and agrees that, on and after the Lockout Date, it may resell or otherwise transfer all or any part of the Bonds only to an institution that is a Qualified Institutional Buyer that is purchasing such Bonds for not more than one account for investment purposes and not with a view to distributing such Bonds, and that delivers to the City and the Trustee an executed Qualified Institutional Buyer Investor Letter substantially in the form of Exhibit O attached to the Third Supplemental Indenture and otherwise complies in all respects with the provisions of the Indenture regarding such sale or transfer.

(i) The Transferee is not relying on the City, the Trustee or any of their affiliates or employees for advice as to the merits and risks of investment in the Bonds. The Transferee has sought such accounting, legal and tax advice as it has considered necessary to make an informed investment decision.

(j) The Transferee has conducted its own independent examination of the City, the District, the Group Three Designated Parcels, the Trustee, the Indenture, the Bonds and the security therefor, and the transactions and documents related to or contemplated by the foregoing.

(k) The Transferee has obtained all documents and information regarding the City, the District, the Trustee, the Indenture, the Bonds and the security therefor, and the transactions and documents related to or contemplated by the foregoing, and all matters related thereto, that it considers necessary to make an informed investment decision.

(l) The Transferee understands and agrees that the offering and sale of the Bonds are exempt from Rule 15c2-12(b)(5) adopted by the Securities and Exchange Commission under the Securities Exchange Act of 1934, pursuant to Section (d) of said Rule.

(m) The Transferee acknowledges that it has received a copy of the Lockout Period Continuing Disclosure Agreement, by and between the Original Purchaser and the Trustee, and acknowledges and agrees that, unless the Transferee has made other arrangements with the Original Purchaser, the Transferee will receive no information regarding the District, the Group Three Designated Parcels or the development thereof, the Bonds or the security therefor or the Original Purchaser on a continuing or regular basis, except such as is provided pursuant to the Lockout Period Continuing Disclosure Agreement.

(n) The Transferee understands that the Bonds will carry no rating from any rating service.

(o) The undersigned is the chief financial officer, a person fulfilling an equivalent function or other authorized executive officer of the Transferee.

IN WITNESS WHEREOF, the Transferee has executed this Investor Letter as of the date set forth below.

Dated: _____

Very truly yours,

[Printed Name of Transferee]

By: _____

Name: _____

Title: _____

EXHIBIT O

FORM OF QUALIFIED INSTITUTIONAL BUYER INVESTOR LETTER

City of Irvine
One Civic Center Plaza
Irvine, CA 92606-5207
Attention: Director of Administrative Services

The Bank of New York Mellon Trust Company, N.A.
400 South Hope Street, Suite 500
Los Angeles, CA 90071

Re: City of Irvine Reassessment District No. 05-21
Limited Obligation Improvement Bonds, Group Three

Ladies and Gentlemen:

The undersigned (the “Transferee”) understands that the City of Irvine (the “City”) has issued the City of Irvine Reassessment District No. 05-21 Limited Obligation Improvement Bonds, Group Three, in the aggregate initial principal amount of \$19,500,000. The Transferee intends to purchase certain of said Bonds, or a beneficial interest therein (in either case, for purposes of this Investor Letter, the “Bonds”). The Bonds are issued pursuant to the Indenture, dated as of December 1, 2011, as amended and supplemented by the First Supplemental Indenture, dated as of February 1, 2014, the Second Supplemental Indenture, dated as of March 1, 2016, and the Third Supplemental Indenture, dated as of August 1, 2017 all by and between the City and The Bank of New York Mellon Trust Company, N.A., as trustee (said Indenture, as so amended and supplemented, the “Indenture”). Capitalized undefined terms used herein shall have the meanings ascribed thereto in the Indenture.

In connection with such purchase of the Bonds, the Transferee makes the certifications, representations, warranties, acknowledgements and covenants contained in this Investor Letter to each of the addressees hereof, with the express understanding that such certifications, representations, warranties, acknowledgements and covenants will be relied upon by such addressees.

The Transferee hereby certifies, represents, warrants, acknowledges and covenants as follows:

(a) The Transferee is duly organized, validly existing and in good standing under the laws of the jurisdiction in which it was incorporated or formed and is authorized to invest in the Bonds being purchased hereby. The person executing this letter on behalf of the Transferee is duly authorized to do so on the Transferee’s behalf.

(b) The Transferee understands and acknowledges that no transfer, sale or other disposition of any Bond may be made prior to the Lockout Date and the Transferee has continued that the Lockout Date has occurred prior to the date of this Investor Letter.

(c) The Transferee is a “qualified institutional buyer” within the meaning of Rule 144A promulgated under the Securities Act of 1933, as amended (a “Qualified Institutional Buyer.”)

(d) The Transferee is not purchasing the Bonds for more than one account, is purchasing the Bonds for investment purposes and is not purchasing the Bonds with a view to distributing the Bonds.

(e) The Transferee has sufficient knowledge and experience in financial and business matters, including the purchase and ownership of municipal bonds and other tax exempt obligations similar to the Bonds, to be capable of evaluating the merits and risks of an investment in the Bonds; and the Transferee is able to bear the economic risks of such an investment.

(f) The Transferee recognizes that an investment in the Bonds involves significant risks, and there is no established market for the Bonds and that none is likely to develop and, accordingly, that the Transferee must bear the economic risk of an investment in the Bonds for an indefinite period of time.

(g) The Transferee understands and agrees that it may resell or otherwise transfer all or any part of the Bonds only to an institution that is a Qualified Institutional Buyer that is purchasing such Bonds for no more than one account for investment purposes and not with a view to distributing such Bonds, and that delivers to the City and the Trustee an executed Investor Letter substantially in the form of Exhibit O attached to the Third Supplemental Indenture and otherwise complies in all respects with the provisions of the Indenture regarding such sale or transfer.

(h) The Transferee is not relying on the City, the Trustee or any of their affiliates or employees for advice as to the merits and risks of investment in the Bonds. The Transferee has sought such accounting, legal and tax advice as it has considered necessary to make an informed investment decision.

(i) The Transferee has conducted its own independent examination of the City, the District, the Group Three Designated Parcels, the Trustee, the Indenture, the Bonds and the security therefor, and the transactions and documents related to or contemplated by the foregoing.

(j) The Transferee has obtained all documents and information regarding the City, the District, the Trustee, the Indenture, the Bonds and the security therefor, and the transactions and documents related to or contemplated by the foregoing, and all matters related thereto, that it considers necessary to make an informed investment decision.

(k) The Transferee understands and agrees that the offering and sale of the Bonds are exempt from Rule 15c2(b)(5) adopted by the Securities and Exchange Commission under the Securities Exchange Act of 1934, pursuant to section (d) of said Rule.

(l) The Transferee understands that the Bonds will carry no rating from any rating service.

(m) The undersigned is the chief financial officer, a person fulfilling an equivalent function or other authorized executive officer of the Transferee.

IN WITNESS WHEREOF, the Transferee has executed this Investor Letter as of the date set forth below.

Very truly yours,

Dated: _____

[Printed Name of Transferee]

By: _____

Name: _____

Title: _____

EXHIBIT P

LOCKOUT PERIOD CONTINUING DISCLOSURE AGREEMENT

CONTINUING DISCLOSURE AGREEMENT

by and between

IHC FUNDING I LLC

and

**THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A.,
AS TRUSTEE**

Dated as of _____

**\$19,500,000
CITY OF IRVINE
REASSESSMENT DISTRICT NO. 05-21
LIMITED OBLIGATION IMPROVEMENT BONDS, GROUP THREE**

CONTINUING DISCLOSURE AGREEMENT

THIS CONTINUING DISCLOSURE AGREEMENT (this “Disclosure Agreement”), dated as of _____, is by and between IHC FUNDING I LLC, a limited liability company organized and existing under the laws of the State of Delaware (“IHC”), and THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A., a national banking association organized and existing under the laws of the United States of America, as Trustee (the “Trustee”).

WITNESSETH:

WHEREAS, pursuant to the Indenture, dated as of December 1, 2011, by and between the City and The Bank of New York Mellon Trust Company, N.A., as trustee, as amended and supplemented by the First Supplemental Indenture, dated as of February 1, 2014, the Second Supplemental Indenture, dated as of March 1, 2016, and the Third Supplemental Indenture dated as of August 1, 2017, all by and between the City of Irvine (the “City”), and the Trustee, (the “Indenture”) the City has issued its City of Irvine Reassessment District No. 05-21 Limited Obligation Improvement Bonds, Group Three (the “Group Three Bonds”) in the aggregate principal amount of \$19,500,000;

WHEREAS, the Group Three Bonds are payable from and secured by assessments levied on certain of the property within the City of Irvine Reassessment District No. 05-21 (the “District”);

WHEREAS, property within the District owned by affiliates of IHC is responsible for a substantial portion of such assessments;

WHEREAS, IHC is the owner of all of the Group Three Bonds;

WHEREAS, IHC is transferring all or a portion of the Group Three Bonds to a Lockout Period Qualified Transferee (as defined in the Indenture); and

WHEREAS, this Disclosure Agreement is being executed and delivered by IHC and the Trustee in connection with such transfer in accordance with the Indenture for the benefit of such Lockout Period Qualified Transferee;

NOW, THEREFORE, for and in consideration of the mutual promises and covenants herein contained, the parties hereto agree as follows:

Section 1. Definitions. Unless the context otherwise requires, the terms defined in this Section shall for all purposes of this Disclosure Agreement have the meanings herein specified. Capitalized undefined terms used herein shall have the meanings ascribed thereto in the Indenture.

“**Affiliate**” of another Person means (a) a Person directly or indirectly owning, controlling, or holding with power to vote, 5% or more of the outstanding voting securities of such other Person, (b) any Person 5% or more of whose outstanding voting securities are directly or indirectly owned, controlled, or held with power to vote, by such other Person, and (c) any Person directly or indirectly controlling, controlled by, or under common control with, such other Person;

for purposes hereof, control means the power to exercise a controlling influence over the management or policies of a Person, unless such power is solely the result of an official position with such Person.

“**City**” means the City of Irvine, a chartered city and municipal corporation organized and existing under and by virtue of the Constitution and laws of the State of California and its Charter, and any successor thereto.

“**Disclosure Agreement**” means this Continuing Disclosure Agreement, dated as of _____, by and between IHC and The Bank of New York Mellon Trust Company, N.A., as Trustee, as originally executed and as it may be amended from time to time in accordance with the terms hereof

“**IHC**” means IHC Funding I LLC, a limited liability company organized and existing under the laws of the State of Delaware, and any successor thereto.

“**Event of Bankruptcy**” means, with respect to a Person, that such Person files a petition or institutes a proceeding under any act or acts, state or federal, dealing with or relating to the subject or subjects of bankruptcy or insolvency, or under any amendment of such act or acts, either as a bankrupt or as an insolvent, or as a debtor, or in any similar capacity, wherein or whereby such Person asks or seeks or prays to be adjudicated a bankrupt, or is to be discharged from any or all of such Person’s debts or obligations, or offers to such Person’s creditors to effect a composition or extension of time to pay such Person’s debts or asks, seeks or prays for reorganization or to effect a plan of reorganization, or for a readjustment of such Person’s debts, or for any other similar relief, or if any such petition or any such proceedings of the same or similar kind or character is filed or instituted or taken against such Person and the same shall remain undismissed for a period of 60 days, or if a receiver of the business or of the property or assets of such Person is appointed by any court, or if such Person makes a general assignment for the benefit of such Person’s creditors.

“**Indenture**” means the Indenture, dated as of December 1, 2011, by and between the City and The Bank of New York Mellon Trust Company, N.A., as trustee, as amended and supplemented by the First Supplemental Indenture, dated as of February 1, 2014 and the Second Supplemental Indenture, dated as of March 1, 2016, and the Third Supplemental Indenture dated as of August 1, 2017, all by and between the City and the Trustee, pursuant to which the Group Three Bonds are issued, as originally executed and as it may be amended or supplemented from time to time in accordance with the terms thereof.

“**Information Date**” means, with respect to a Quarterly Report, the last day of the calendar quarter immediately preceding the Quarterly-Report Date for such Quarterly Report.

“**Listed Events**” means any of the events listed in subsection (a) of Section 4 hereof.

“**Lockout Period Qualified Transferee**” means the Person to which IHC transfers, in accordance with the Indenture, Group Three Bonds prior to the Lockout Date, which results in such Group Three Bonds being registered on the Registration Books in the name of such Lockout Period Qualified Transferee.

“**Person**” means an individual, corporation, limited liability company, firm, association, partnership, trust, or other legal entity or group of entities, including a governmental entity or any agency or political subdivision thereof.

“**Quarterly Report**” means any Quarterly Report provided by IHC pursuant to, and as described in, Sections 2 and 3 hereof.

“**Quarterly Report Dates**” means _____, _____, _____ and _____ of each year.

“**Trustee**” means The Bank of New York Mellon Trust Company, N.A., a national banking association organized and existing under the laws of the United States of America, or any successor thereto as Trustee under the Indenture substituted in its place as provided therein.

Section 2. Provision of Quarterly Reports.

(a) Not later than each Quarterly Report Date, commencing with the first Quarterly Report Date that occurs after the transfer of Group Three Bonds to the Lockout Period Qualified Transferee, IHC shall deliver to the Trustee a Quarterly Report which is consistent with the requirements of Section 3 hereof. The Trustee shall have no duty to review, analyze or verify such Quarterly Report.

(b) The Trustee shall, within 15 days of the receipt of each Quarterly Report, mail by first class mail, postage prepaid, a copy of such Quarterly Report to the Lockout Period Qualified Transferee at its address shown on the Registration Books as of the date of such mailing.

Section 3. Content of Quarterly Reports. Each Quarterly Report shall contain or incorporate by reference the following information:

(a) the number of homes within the Group Three Designated Parcels sold by IHC or any Affiliate thereof to homeowners during the calendar quarter most recently ended prior to the Quarterly Report Date for such Quarterly Report Date;

(b) the number of acres of property within the Group Three Designated Parcels sold by IHC or any Affiliate thereof to Persons other than homeowners during the calendar quarter most recently ended prior to the Quarterly Report Date for such Quarterly Report Date, and the identity of each such purchaser;

(c) a statement as to whether or not IHC and all of its Affiliates paid, prior to their becoming delinquent, all Assessments levied on the Group Three Designated Parcels owned by IHC and such Affiliates payable during the calendar quarter most recently ended prior to the Quarterly Report Date for such Quarterly Report Date, and if IHC or any of such Affiliates is delinquent in the payment of such Assessments, a statement identifying each Person that is so delinquent, specifying the amount of each such delinquency and describing any plans to resolve such delinquency; and

(d) an update of the status of any previously reported Listed Event described in Section 4 hereof; and

Section 4. Reporting of Significant Events. (a) Pursuant to the provisions of this Section, IHC shall give, or cause to be given, notice of the occurrence of any of the following events:

(i) any failure of IHC, or any Affiliate thereof, to pay, prior to their becoming delinquent, general property taxes, Assessments or special taxes with respect to Group Three Designated Parcels owned by IHC or such Affiliate;

(ii) the entry of a final judgment against IHC or any Affiliate thereof which, if not successfully discharged, could have a significant impact on the ability of IHC or such Affiliate to pay Assessments when due;

(iii) the occurrence of an Event of Bankruptcy with respect to IHC, or any Affiliate of IHC that owns any portion of the Group Three Designated Parcels, and the occurrence of an Event of Bankruptcy with respect to any other Affiliate of IHC, if material;

(iv) the institution of foreclosure proceedings under a deed of trust or mortgage on the Group Three Designated Parcels owned by IHC or an Affiliate thereof; and

(v) Any conveyance of any portion of the Group Three Designated Parcels by IHC or any Affiliate thereof to an unaffiliated entity, the result of which conveyance is to cause the transferee to own property that is subject to 20% of more of the total Assessments levied on all Group Three Designated Parcels;

(b) IHC shall, in a timely manner no later than ten Business Days after the occurrence of a Listed Event, notify the Trustee of such Listed Event and instruct the Trustee to report the occurrence pursuant to subsection (c) of this Section. IHC shall provide the Trustee with a form of notice of such Listed Event in a format suitable for the Trustee to report such Listed Event pursuant to subsection (c) of this Section.

(c) If the Trustee has been instructed by IHC to report the occurrence of a Listed Event, the Trustee shall mail by first class mail, postage prepaid, a copy of the notice of such Listed Event to the Lockout Period Qualified Transferee at its address shown on the Registration Books as of the date of such mailing.

Section 5. Termination of Reporting Obligation. All the obligations of IHC under this Disclosure Agreement shall terminate upon the earliest to occur of (a) the date on which IHC becomes the Owner of all of the Outstanding Group Three Bonds, (b) the Lockout Date, or (c) the date on which all of the Group Three Bonds have been legally defeased, redeemed, or paid in full; upon such termination, IHC shall have no obligation to provide any Quarterly Report or notice of occurrence of a Listed Event that it would otherwise have been obligated to provide after the date of such termination.

Section 6. Amendment; Waiver. No provision of this Disclosure Agreement may be amended or waived without the prior written consent of the Lockout Period Qualified Transferee.

Section 7. Default. In the event of a failure of IHC or the Trustee to comply with any provision of this Disclosure Agreement, the Trustee may (and, at the written direction of the Lockout Period Qualified Transferee, shall, upon receipt of indemnification reasonably satisfactory to the Trustee), or the Lockout Period Qualified Transferee may, take such actions as may be necessary and appropriate, including seeking mandate or specific performance by court order, to cause IHC or the Trustee, as the case may be, to comply with its obligations under this Disclosure Agreement. A default under this Disclosure Agreement shall not be deemed an Event of Default under the Indenture, and the sole remedy under this Disclosure Agreement in the event of any failure of IHC or the Trustee to comply with this Disclosure Agreement shall be an action to compel performance.

Section 8. Duties, Immunities and Liabilities of Trustee. The Trustee shall not be responsible for the form or content of any Quarterly Report or notice of Listed Event. The Trustee shall have only such duties with respect to this Disclosure Agreement as are specifically set forth herein, and IHC agrees to indemnify and save the Trustee, and its officers, directors, employees and agents, harmless against any loss, expense and liabilities which it may incur arising out of or in the exercise or performance of its powers and duties hereunder, including the costs and expenses (including attorneys' fees and expenses) of defending against any claim of liability, but excluding liabilities due to the its negligence or willful misconduct. The obligations of IHC under this Section shall survive the termination of this Disclosure Agreement and the earlier removal or resignation of the Trustee. The Trustee shall have the same rights and protections hereunder as afforded to it under the Indenture.

Section 9. Beneficiaries. This Disclosure Agreement shall inure solely to the benefit of IHC, the Trustee and the Lockout Period Qualified Transferee, and shall create no rights in any other person or entity.

Section 10. Counterparts. This Disclosure Agreement may be executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

Section 11. Governing Law. This Disclosure Agreement shall be governed by the laws of the State of California.

IN WITNESS WHEREOF, the parties hereto have executed this Disclosure Agreement as of the date first above written.

**IHC FUNDING I LLC,
a Delaware limited liability company**

By: _____

By: _____

**THE BANK OF NEW YORK MELLON
TRUST COMPANY, N.A., AS TRUSTEE**

By: _____
Authorized Signatory

**CITY OF IRVINE
REASSESSMENT DISTRICT NO. 05-21
LIMITED OBLIGATION IMPROVEMENT BONDS
FIXED RATE SERIES (GROUP THREE)**

BOND PURCHASE AGREEMENT

September __, 2017

City Council
City of Irvine
One Civic Center Plaza
Irvine, California 92606-5207

Ladies and Gentlemen:

IHC Funding I LLC (the "Purchaser") offers to enter into this Bond Purchase Agreement (this "Purchase Agreement") with the City of Irvine (the "City") with regard to the purchase and sale of the City of Irvine Reassessment District No. 05-21 Limited Obligation Bonds, Fixed Rate Series (Group Three) (the "Bonds"), which will be binding upon the City and the Purchaser upon the City's acceptance hereof.

1. Purchase, Sale and Delivery of the Bonds.

a. Upon the terms and conditions and upon the basis of the representations, warranties and agreements hereinafter set forth, the Purchaser hereby agrees to purchase from the City, and the City agrees to sell to the Purchaser, all (but not less than all) of the \$[19,500,000] aggregate principal amount of the Bonds, at the aggregate purchase price of \$[19,500,000] (being the principal amount of the Bonds). The Bonds shall have the maturities and shall bear interest as set forth in Exhibit B hereto. The Bonds will be subject to redemption and such other terms as set forth in the Indenture of Trust, dated as of December 1, 2011 (the "Original Indenture"), as amended and supplemented pursuant to a First Supplemental Indenture, dated as of February 1, 2014 (the "First Supplemental Indenture"), a Second Supplemental Indenture, dated as of March 1, 2016 (the "Second Supplemental Indenture"), and a Third Supplemental Indenture, dated as of August 1, 2017 (the "Third Supplemental Indenture"), each by and between the City and The Bank of New York Mellon Trust Company, N.A., as trustee (the "Trustee"). The Original Indenture, as amended and supplemented, including by the Third Supplemental Indenture is referred to as the Indenture. Capitalized undefined terms used herein shall have the meanings ascribed thereto in the Indenture.

b. The Bonds shall be issued and secured under the provisions of the Indenture, and shall be as described in the Indenture. Pursuant to a Resolution of the City Council of the City adopted on [August 8, 2017] (the "Bond Resolution"), the City has authorized (i) the issuance of the Bonds, and (ii) the execution and delivery of the Indenture and this Purchase Agreement. In connection with the establishment of City of Irvine Reassessment District No. 05-21 (the "District") and the assessments to be imposed in connection therewith, the City has adopted a resolution of intention to form the District and a resolution approving an engineer's report and confirming the assessments (the "Procedural Resolutions"). The Bond Resolution and the Procedural Resolutions are herein collectively referred to as the "Resolutions." The Bonds, the Indenture and this Purchase Agreement are collectively referred to as the "City Documents."

The proceeds of the Bonds shall be applied (i) to finance additional improvements within the District (ii) to fund a reserve account for the Bonds, (iii) to pay capitalized interest on the Bonds through September 2, 2019 or such shorter period as determined by the City and (iv) to pay the costs of issuance of the Bonds.

c. At 9:00 A.M., California time, on September [27], 2017, or at such other time or on such earlier or later business day as shall have been mutually agreed upon by the City and the Purchaser (the "Closing Date"), the City shall deliver (i) the Bonds to the Purchaser at the offices of Rutan & Tucker, LLP ("Bond Counsel"), or such other place to be mutually agreed upon by the City and the Purchaser, and (ii) the closing documents hereinafter mentioned at the offices of Bond Counsel, or such other place to be mutually agreed upon by the City and the Purchaser. Subject to the provisions of this Purchase Agreement, the Purchaser shall accept such delivery from the City. The Purchaser shall pay the purchase price of the Bonds as set forth in Section 1(a) hereof by wire transfer of immediately available funds. The date of this payment and delivery, together with the delivery of the aforementioned documents, is herein called the "Closing."

2. Representations, Warranties and Agreements of the City. The City hereby represents and warrants to and agrees with the Purchaser that:

a. The City is a charter city and municipal corporation of the State of California (the "State"), duly organized and validly existing pursuant to the Constitution and laws of the State;

b. The City had full legal right, power and authority to adopt the Resolutions, and the City has, and at the Closing Date will have, full legal right, power and authority (i) to execute and deliver the City Documents and to perform its obligations under the City Documents, (ii) to issue, sell and deliver the Bonds to the Purchaser as provided herein, and (iii) to carry out, give effect to and consummate the transactions contemplated by the City Documents and the Resolutions;

c. The City is, and at the Closing Date will be, in compliance, in all respects, with the City Documents;

d. The City Council has duly and validly adopted the Resolutions and approved the execution and delivery of the Bonds and the other City Documents, and the performance by the City of its obligations contained therein, and the taking of any and all action as may be necessary to carry out, give effect to and consummate the transactions contemplated by each of said documents. The Bonds and the other City Documents have been, on or before the Closing Date will be, duly executed and delivered by the City, and, on the Closing Date, the Bonds, when authenticated and delivered to the Purchaser in accordance with the Indenture, and the other City Documents will constitute legally valid and binding obligations, enforceable against the City in accordance with their respective terms, except as such enforcement may be limited by bankruptcy, insolvency, reorganization, moratorium, or similar laws or equitable principles relating to or limiting creditors' rights generally;

e. The City is not, and at the Closing Date will not be, in breach of or in default under any applicable law or administrative rule or regulation of the State or the United States of America, or of any department, division, agency or instrumentality of either thereof, or under any applicable court or administrative decree or order, or under any loan agreement, note, resolution, indenture, contract, agreement or other instrument to which the City is a party or is otherwise subject or bound, including the City Documents, a consequence of which could be to materially and adversely affect the ability of the City to perform its obligations under the Bonds or any other City Document, or

which, with the passage of time or the giving of notice or both, would constitute an event of default thereunder;

f. The adoption of the Resolutions and the execution and delivery of the Bonds and the other City Documents and compliance with the provisions of each, did not and will not conflict with or constitute a breach of or default under any applicable law or administrative rule or regulation of the State or the United States of America, or of any department, division, agency or instrumentality of either thereof, or under any applicable court or administrative decree or order, or under any loan agreement, note, resolution, indenture, contract, agreement or other instrument to which the City is a party or is otherwise subject or bound, a consequence of which could be to materially and adversely affect the ability of the City to perform its obligations under the Bonds or any other City Document;

g. Except as may be required under the “blue sky” laws of any state, all approvals, consents, authorizations, elections and orders of or filings or registrations with any governmental authority, board, agency or commission having jurisdiction which would constitute conditions precedent to, or the absence of which would materially adversely affect, the ability of the City to perform its obligations under the Bonds or any other City Document has been obtained and are in full force and effect;

h. When delivered to and paid for by the Purchaser on the Closing Date as provided herein, the Bonds will be validly issued and outstanding;

i. The assessments levied on certain parcels within the District (the “Group Three Designated Parcels”) constituting the security for the Bonds (the “Assessments”) have been duly and lawfully levied under and pursuant to the Municipal Improvement Act of 1913 (Sections 10000 and following of the Streets and Highways Code of the State), as amended, the Improvement Bond Act of 1915 (Division 10 of the Streets and Highways Code of the State), as amended, Chapter 5 of Division 7 of Title 2 of the City of Irvine Municipal Code and Article XIID of the Constitution of the State and the Proposition 218 Omnibus Implementation Act (Statutes of 1997, Chapter 38), and such Assessments on the Group Three Designated Parcels constitute valid and legally binding liens on the Group Three Designated Parcels on which they have been levied;

j. There are no outstanding assessment liens levied by the City against any of the properties within the District which are senior to the assessment liens referred to in paragraph (i) hereof, and the City has no present intention of conducting further proceedings leading to the levying of additional assessments against any of the properties within the District;

k. In order to secure the payment of the Bonds, the Indenture will create a valid pledge of and lien upon all of the Assessments together with interest thereon and any penalties received with respect thereto, and any and all other amounts (including proceeds of the sale of Bonds) held in any fund or account established for the Bonds pursuant to the Indenture (other than the Group Three Rebate Fund established for the Bonds and the Group Three Costs Account), subject in all cases to the provisions permitting the application thereof for the purposes and on the terms and conditions set forth in the Indenture;

l. No action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, regulatory agency, public board or body is pending, or to the knowledge of the City is threatened in any way, affecting the existence of the City or the titles of its officers to their respective offices or seeking to restrain or to enjoin the issuance, sale or delivery of the Bonds, the application of the proceeds thereof, or the collection or application of the Assessments pledged or

to be pledged to pay the principal of and interest on the Bonds, or the pledge thereof, or in any way contesting or affecting the validity or enforceability of the Resolutions, the Bonds or the other City Documents, or any action on the part of the City contemplated by any of said documents, or in any way contesting the powers of the City or its authority with respect to the Resolutions, the Bonds or the other City Documents, or any action of the City contemplated by any of said documents, or which would adversely affect the exemption of interest paid on the Bonds from federal income taxation or State personal income taxation, nor to the knowledge of the City is there any basis therefor;

m. Any certificate signed by any authorized official of the City authorized to do so shall be deemed a representation and warranty by the City to the Purchaser as to the statements made therein;

n. During the period from the date hereof until the Closing Date, the City agrees to furnish the Purchaser with copies of any documents it files relating to the District or the Bonds with any regulatory authority which are reasonably requested by the Purchaser;

o. The City is not in material default, nor has the City been in material default at any time, as to the payment of principal or interest with respect to a material obligation issued by the City or with respect to a material obligation guaranteed by the City as guarantor; and

p. The City will apply the proceeds from the sale of the Bonds as set forth in and for the purposes specified in the Indenture.

3. Representations, Warranties and Agreements of the Purchaser. The Purchaser hereby represents and warrants to and agrees with the City that:

a. The Purchaser is a limited liability company, duly organized and validly existing pursuant to the laws of the State of Delaware;

b. The Purchaser has, and at the Closing Date will have, full legal right, power and authority (i) to execute and deliver this Purchase Agreement and to perform its obligations under this Purchase Agreement, and (ii) to carry out, give effect to and consummate the transactions contemplated by this Purchase Agreement to be carried out, given effect to or consummated by the Purchaser;

c. The Purchaser is, and at the Closing Date will be, in compliance, in all respects, with this Purchase Agreement;

d. This Purchase Agreement has been duly executed and delivered by the Purchaser and (assuming due authorization, execution and delivery by the City) constitutes a legally valid and binding obligation of the Purchaser, enforceable against the Purchaser in accordance with its terms, except as such enforcement may be limited by bankruptcy, insolvency, reorganization, moratorium, or similar laws or equitable principles relating to or limiting creditors' rights generally;

e. The Purchaser is not, and at the Closing Date will not be, in breach of or in default under any applicable law or administrative rule or regulation of the State or the United States of America, or of any department, division, agency or instrumentality of either thereof, or under any applicable court or administrative decree or order, or under any loan agreement, note, resolution, indenture, contract, agreement or other instrument to which the Purchaser is a party or is otherwise subject or bound, including this Purchase Agreement, a consequence of which could be to

materially and adversely affect the ability of the Purchaser to perform its obligations under this Purchase Agreement, or which, with the passage of time or the giving of notice or both, would constitute an event of default thereunder;

f. The execution and delivery of this Purchase Agreement and compliance with the provisions hereof, did not and will not conflict with or constitute a breach of or default under any applicable law or administrative rule or regulation of the State or the United States of America, or of any department, division, agency or instrumentality of either thereof, or under any applicable court or administrative decree or order, or under any loan agreement, note, resolution, indenture, contract, agreement or other instrument to which the Purchaser is a party or is otherwise subject or bound, a consequence of which could be to materially and adversely affect the ability of the Purchaser to perform its obligations under this Purchase Agreement;

g. All approvals, consents, authorizations, elections and orders of or filings or registrations with any governmental authority, board, agency or commission having jurisdiction which would constitute conditions precedent to, or the absence of which would materially adversely affect, the ability of the Purchaser to perform its obligations under this Purchase Agreement have been obtained and are in full force and effect;

h. The Purchaser understands and acknowledges that it is the only purchaser of the Bonds and, therefore, the Bonds are being sold to no more than 35 purchasers;

i. The Purchaser is not purchasing the Bonds for more than one account, is purchasing the Bonds for investment purposes and is not purchasing the Bonds with a view to distributing the Bonds;

j. The Purchaser has sufficient knowledge and experience in financial and business matters, including the purchase and ownership of municipal bonds and other tax-exempt obligations similar to the Bonds, to be capable of evaluating the merits and risks of an investment in the Bonds; and the Purchaser is able to bear the economic risks of such an investment;

k. The Purchaser recognizes that an investment in the Bonds involves significant risks, that there is no established market for the Bonds and that none is likely to develop and, accordingly, that the Purchaser must bear the economic risk of an investment in the Bonds for an indefinite period of time;

l. The Purchaser understands and agrees that it may resell or otherwise transfer all or any part of the Bonds only in accordance with Sections 15.09 and 15.10 of the Indenture;

m. The Purchaser is not relying on the City, the Trustee or any of their affiliates or employees for advice as to the merits and risks of investment in the Bonds. The Purchaser has sought such accounting, legal and tax advice as it has considered necessary to make an informed investment decision;

n. The Purchaser, or a related entity, or both, was, at one time, the owner of all of the property in the District. The Purchaser, or such related entity, or both, petitioned the City to establish the District and levy assessments therein. The Purchaser, or a related entity, was actively involved in the proceedings for the establishment of the District and the levy of the assessments therein and the Purchaser, or a related entity, has been actively involved in the structuring and implementation of the Bonds. The Purchaser, or a related entity, or both, is now the [owner of all] of the Group Three Designated Parcels. The Purchaser, or a related entity, was the master developer

of the property in the District that has been developed to date and the Purchaser, or a related entity, has been and is developing the Group Three Designated Parcels in anticipation of selling the same. Consequently, the Purchaser is intimately familiar with the District, the Group Three Designated Parcels, the Assessments, the Indenture, the Bonds, and the security therefor, the property within the District, including the Group Three Designated Parcels, and the development thereof, and the transactions and documents related to or contemplated by the foregoing;

o. The Purchaser has conducted its own independent examination of the City, the District, the Group Three Designated Parcels, the Trustee, the Indenture, the Bonds and the security therefor, and the transactions and documents related to or contemplated by the foregoing;

p. The Purchaser previously possessed, has obtained or has been provided with all documents and information regarding the City, the District, the Trustee, the Indenture, the Bonds and the security therefor, and the transactions and documents related to or contemplated by the foregoing, and all matters related thereto, that it considers necessary to make an informed investment decision;

q. The Purchaser understands and agrees that the offering and sale of the Bonds to the Purchaser are exempt from Rule 15c2-12(b)(5) adopted by the Securities and Exchange Commission under the Securities Exchange Act of 1934, pursuant to Section (d) of said Rule;

r. The Purchaser understands that the Bonds will carry no rating from any rating service; and

s. Any certificate signed by any authorized official of the Purchaser authorized to do so shall be deemed a representation and warranty by the Purchaser to the City as to the statements made therein.

4. Conditions to the Obligations of the Purchaser. The obligations of the Purchaser to accept delivery of and pay for the Bonds on the Closing Date shall be subject, at the option of the Purchaser, to the accuracy in all material respects of the representations and warranties on the part of the City contained herein, as of the date hereof and as of the Closing Date, to the accuracy in all material respects of the statements of the officers and other officials of the City and other persons and entities made in any certificates or other documents furnished pursuant to the provisions hereof, to the performance by the City of its obligations to be performed hereunder at or prior to the Closing Date and to the following additional conditions:

a. At the Closing Date, the City Documents, the Resolutions and any other applicable agreements shall be in full force and effect, and shall not have been amended, modified or supplemented, except as may have been agreed to in writing by the Purchaser, and there shall have been taken in connection therewith, with the issuance of the Bonds and with the transactions contemplated thereby, all such actions as, in the opinion of Bond Counsel, shall be necessary and appropriate;

b. At the time of the Closing Date, the Assessments on the Group Three Designated Parcels shall have been approved and confirmed by the City and recorded in the office of the Orange County Recorder;

c. On or prior to the Closing Date, the Purchaser shall have received counterpart originals or certified copies of the following documents, in each case satisfactory in form and

substance to the Purchaser, or shall have waived the receipt of such documents as a condition to the Purchaser's purchase of the Bonds:

(1) fully executed copies of the City Documents and certified copies of the Resolutions;

(2) an approving opinion of Bond Counsel, dated the Closing Date and substantially in the form attached hereto as Exhibit A, together with a letter or letters from such counsel, dated the Closing Date and addressed to the Trustee and the Purchaser, to the effect that the foregoing opinion may be relied upon by the Trustee and the Purchaser to the same extent as if such opinion were addressed to it;

(3) a supplemental opinion of Bond Counsel, dated the Closing Date and addressed to the Purchaser, in form and substance satisfactory to the Purchaser and its counsel, to the effect that:

(a) this Purchase Agreement has been duly authorized, executed and delivered by the City and (assuming due authorization, execution and delivery by, and validity against, the other respective parties thereto) is a valid and binding agreement of the City;

(b) the Bonds are not subject to the registration requirements of the Securities Act of 1933, as amended, and the Indenture is exempt from qualification pursuant to the Trust Indenture Act of 1939, as amended;

(4) An opinion, dated the Closing Date and addressed to the Purchaser and the City, of Rutan & Tucker, as City Attorney, in form and substance acceptable to the Trustee, the Purchaser and its counsel, to the effect that:

(a) the City is a charter city and municipal corporation, duly organized and validly existing pursuant to the Constitution and the laws of the State with full legal right, power and authority to adopt the Resolutions, to issue the Bonds and to perform all of its obligations under the Bonds and the other City Documents;

(b) the execution and delivery by the City of the Bonds and the other City Documents have been duly authorized by all requisite action of the City Council of the City, all conditions precedent to the execution and delivery by the City of the Bonds and the other City Documents have been fulfilled and the Bonds and the other City Documents constitute the legal, valid and binding agreements of the City enforceable against the City in accordance with their respective terms, subject to bankruptcy, insolvency, reorganization, moratorium and other laws affecting the enforcement of creditors' rights in general and to the application of equitable principles if equitable remedies are sought;

(c) to such firm's knowledge, no action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, regulatory agency, public board or body is pending or threatened in any way affecting the existence of the City or the titles of its officers to their respective offices, or seeking to restrain or to enjoin the execution and delivery of the City Documents, or the issuance, sale or delivery of the Bonds or the application of the proceeds thereof, or the collection

or application of the Assessments to pay the principal of and interest on the Bonds, or in any way contesting or affecting the validity or enforceability of the Bonds, this Purchase Agreement or any other City Document or any action of the City contemplated by any of said documents, or the powers of the City or its authority with respect to this Purchase Agreement, or any action on the part of the City contemplated by any of said documents;

(d) the City is not in breach of or in default under any applicable law or administrative rule or regulation of the State or the United States of America, or of any department, division, agency or instrumentality of either thereof, or under any applicable court or administrative decree or order, or under any loan agreement, note, resolution, indenture, contract, agreement or other instrument to which the City is a party or is otherwise subject or bound, including the City Documents, a consequence of which could be to materially and adversely affect the ability of the City to perform its obligations under the Bonds or any other City Document or which, with the passage of time or the giving of notice or both, would constitute an event of default thereunder;

(e) the adoption of the Resolutions, and the execution and delivery of the Bonds and the other City Documents, and compliance with the provisions of each, did not and will not conflict with or constitute a breach of or default under any applicable law or administrative rule or regulation of the State or the United States of America, or of any department, division, agency or instrumentality of either thereof, or under any applicable court or administrative decree or order, or under any loan agreement, note, ordinance, resolution, indenture, contract, agreement or other instrument to which the City is a party or is otherwise subject or bound, a consequence of which could be to materially and adversely affect the ability of the City to perform its obligations under the Bonds or any other City Document; and

(f) all approvals, consents, authorizations, elections and orders of or filings or registrations with any governmental authority, board, agency or commission having jurisdiction which would constitute a condition precedent to, or the absence of which would materially adversely affect, the ability of the City to execute, deliver and perform its obligations under the Bonds or any other City Document has been obtained or made, as the case may be, and are in full force and effect;

(5) a certificate, dated the Closing Date and signed by a duly authorized official of the City, certifying that (i) the representations and warranties of the City contained herein are true and correct in all material respects on and as of the Closing Date with the same effect as if made on the Closing Date, and (ii) the City has complied with all the agreements and has satisfied all the conditions on its part to be performed or satisfied under this Purchase Agreement at and prior to the Closing Date;

(6) the opinion of counsel to The Bank of New York Mellon Trust Company, N.A. (“BNYM”), dated the Closing Date, addressed to the Purchaser and the City, in form and substance acceptable to counsel for the City and counsel for the Purchaser substantially to the following effect:

(a) BNYM is a national banking association duly organized and validly existing under the laws of the jurisdiction of its organization and has the corporate power to execute and deliver the Third Supplemental Indenture and any other documentation relating to the Indenture, and to perform its obligations under the Indenture;

(b) the execution and delivery by BNYM of the Third Supplemental Indenture and any other documentation relating to the Indenture, and its performance of its obligations under the Agreements, have been and are as of the date hereof duly authorized by all necessary corporate action;

(c) no approval, authorization or other action by, or filing with, any governmental body or regulatory authority (which has not been obtained) is required in connection with the due execution, delivery and performance by BNYM of the Third Supplemental Indenture; and

(d) the Indenture has been duly executed and delivered by BNYM and constitute the valid and legally binding obligations of BNYM enforceable against it in accordance with their terms except as such enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting the enforcement of creditors' rights generally and by general principles of equity (regardless of whether enforcement is sought as a proceeding in equity or at law);

(7) a certificate of BNYM, dated the Closing Date, in form and substance acceptable to counsel for the City and counsel for the Purchaser, to the following effect:

(a) BNYM is a national banking association duly organized and validly existing under and by virtue of the laws of the United States of America, and has the full power and authority to accept and perform its duties under the Indenture;

(b) subject to the provisions of the Indenture, BNYM will apply the proceeds from the Bonds to the purposes specified in the Indenture;

(c) the Bonds have been duly authenticated by the Trustee;

(d) to the knowledge of BNYM, no action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, regulatory agency, public board or body is pending or threatened in any way affecting the existence of BNYM, or seeking to restrain or to enjoin the execution and delivery of the Indenture, or the authentication of the Bonds, by BNYM, or in any way contesting or affecting the validity or enforceability, as against BNYM, of the Indenture or any action of BNYM contemplated thereby, or in which an adverse outcome would materially and adversely affect the ability of BNYM to perform its obligations under the Indenture;

(e) to the knowledge of BNYM, BNYM is not in breach of or in default under any applicable law or administrative rule or regulation of the State or the United States of America, or of any department, division, agency or instrumentality of either thereof, or under any applicable court or administrative

decree or order, or under any material agreement or material instrument to which BNYM is a party or is otherwise subject or bound, a consequence of which could be to materially and adversely affect the ability of BNYM to perform its obligations under the Indenture;

(f) to the knowledge of BNYM, the authentication of the Bonds, and the execution and delivery of the Indenture by BNYM, and compliance with the provisions thereof, will not conflict with or constitute a breach of or default under any applicable law or administrative rule or regulation of the State or the United States of America, or of any department, division, agency or instrumentality of either thereof, or under any applicable court or administrative decree or order, or under any material agreement or material instrument to which BNYM is a party or is otherwise subject or bound, a consequence of which could be to materially and adversely affect the ability of BNYM to perform its obligations under the Indenture;

(8) a copy of the appraisal report dated June 12, 2017 (the "Appraisal Report") of the Group Three Designated Parcels prepared by Gary L. Vogt & Associates, Inc. (the "Appraiser");

(9) the no-arbitrage or tax certificate of the City, in form and substance acceptable to the Bond Counsel;

(10) evidence that the federal tax information Form 8038-G with respect to the Bonds has been prepared for filing and mailed; and

(11) such additional legal opinions, certificates, instruments and other documents as the Purchaser may reasonably request to evidence the truth and accuracy, as of the date hereof and as of the Closing Date, of the City's representations and warranties contained herein and the due performance or satisfaction by the City at or prior to the Closing Date of all agreements then to be performed and all conditions then to be satisfied by the City in connection with the transactions contemplated hereby and by the other City Documents.

If any of the conditions to the obligations of the Purchaser contained in this section or elsewhere in this Purchase Agreement shall not have been satisfied when and as required herein, all obligations of the Purchaser hereunder may be terminated by the Purchaser at, or at any time prior to, the Closing Date by written notice to the City.

5. Conditions to the Obligations of the City. The obligations of the City to issue and sell the Bonds on the Closing Date shall be subject, at the option of the City, to the accuracy in all material respects of the representations and warranties on the part of the Purchaser contained herein, as of the date hereof and as of the Closing Date, to the accuracy in all material respects of the statements of the officers and other officials of the Purchaser and other persons and entities made in any certificates or other documents furnished pursuant to the provisions hereof, to the performance by the Purchaser of its obligations to be performed hereunder at or prior to the Closing Date and to the following additional conditions:

a. At the Closing Date, the Purchase Agreement and any other applicable agreements shall be in full force and effect, and shall not have been amended, modified or supplemented, except as may have been agreed to in writing by the City, and there shall have been taken in connection

therewith, with the issuance of the Bonds and with the transactions contemplated thereby, all such actions as, in the opinion of Bond Counsel, shall be necessary and appropriate;

b. On or prior to the Closing Date, the City shall have received counterpart originals or certified copies of the following documents, in each case satisfactory in form and substance to the City, or shall have waived the receipt of such documents as a condition to the City's issuance and sale of the Bonds:

(1) each of the documents specified in paragraphs (1), (2), (3), (6), (7), (8) and (9) of Section 4.c hereof;

(2) An opinion, dated the Closing Date and addressed to the City, of counsel to the Purchaser, in form and substance acceptable to the City and its counsel, to the effect that:

(a) the Purchaser is a limited liability company, duly organized and validly existing under the laws of the State of Delaware;

(b) the Purchaser has the power and authority to execute and deliver, and to perform its obligations under, the Purchase Agreement;

(c) the execution and delivery by the Purchaser of the Purchase Agreement have been duly authorized by all requisite action on the part of the Purchaser or its members and all conditions precedent to the execution and delivery by the Purchaser of the Purchase Agreement have been fulfilled; and

(d) the Purchase Agreement constitutes the legal, valid and binding obligation of the Purchaser, enforceable against the Purchaser in accordance with its terms, subject to bankruptcy, insolvency, reorganization, moratorium and other laws affecting the enforcement of creditors' rights in general and to the application of equitable principles if equitable remedies are sought;

(3) a certificate, dated the Closing Date and signed by a duly authorized official of the Purchaser, certifying that (i) the representations and warranties of the Purchaser contained herein are true and correct in all material respects on and as of the Closing Date with the same effect as if made on the Closing Date, and (ii) the Purchaser has complied with all the agreements and has satisfied all the conditions on its part to be performed or satisfied under this Purchase Agreement at and prior to the Closing Date; and

(4) such additional legal opinions, certificates, instruments and other documents as the City may reasonably request to evidence the truth and accuracy, as of the date hereof and as of the Closing Date, of the Purchaser's representations and warranties contained herein and the due performance or satisfaction by the Purchaser at or prior to the Closing Date of all agreements then to be performed and all conditions then to be satisfied by the Purchaser in connection with the transactions contemplated hereby.

If any of the conditions to the obligations of the City contained in this section or elsewhere in this Purchase Agreement shall not have been satisfied when and as required herein, all obligations of the City hereunder may be terminated by the City at, or at any time prior to, the Closing Date by written notice to the Purchaser.

6. Indemnification. To the extent permitted by law, the Purchaser agrees to, and does hereby, release and indemnify the City and any persons controlled by or under common control or affiliated with the City, and the Council members, officers, employees and agents of the City and/or such persons (each, an “Indemnified Party”), hold each Indemnified Party harmless from and against, and defend each Indemnified Party by counsel reasonably approved by such Indemnified Party, from and against, any and all liabilities, obligations, damages, losses, demands, penalties, fines, claims, actions, suits, judgments, settlements, costs, expenses and disbursements (including, reasonable, actually incurred legal fees, expenses and costs of investigation) of any kind and nature whatsoever (“Claims”) directly or indirectly arising out of or resulting from the issuance or sale of the Bonds or the resale or transfer of the Bonds by the Purchaser. The agreements and indemnifications contained in this section shall apply to Claims arising both before and after the issuance of the Bonds and shall survive the termination of this Purchase Agreement. Upon demand by an Indemnified Party, the Purchaser shall diligently defend any Claim that is threatened or commenced against such Indemnified Party, all at the Purchaser’s own cost and expense and by counsel to be approved by such Indemnified Party in the exercise of its reasonable judgment. Each Indemnified Party shall have the right to retain separate counsel in any such action and to participate in the defense thereof but shall bear the fees and expenses of such counsel unless (i) the Purchaser shall have specifically authorized the retaining of such counsel, or (ii) the parties to such suit include such Indemnified Party, and the Purchaser and such Indemnified Party have been advised by such counsel that one or more legal defenses may be available to such Indemnified Party which may not be available to the Purchaser, in which case the Purchaser shall not be entitled to assume the defense of such suit notwithstanding its obligation to bear the fees and expenses of such counsel. Notwithstanding the foregoing, in no event shall the Purchaser be required to release, indemnify or hold harmless an Indemnified Party for any Claims to the extent resulting from such Indemnified Party’s gross negligence or willful misconduct.

7. Expenses.

a. The Purchaser shall be under no obligation to pay, and the City shall pay or cause to be paid, whether out of the proceeds of the Bonds or otherwise, all expenses incident to the performance of the City’s obligations hereunder, including, but not limited to, the cost of printing and delivering the Bonds to the Purchaser, the cost of preparation, word processing and reproduction of the City Documents and all other agreements and documents contemplated hereby (and drafts of any thereof), the fees and disbursements of Bond Counsel, City Attorney, BNYM, any accountants, financial advisors, engineers, legal counsel or other experts or consultants the City has retained in connection with the Bonds and any out-of-pocket disbursements of the City to be paid from the proceeds of the Bonds.

b. Whether or not the Bonds are delivered to the Purchaser as set forth herein, the City shall be under no obligation to pay, and the Purchaser shall pay, all expenses incident to the performance of the Purchaser’s obligations hereunder, including, but not limited to, the fees and disbursements of any accountants, legal counsel or other experts or consultants the Purchaser has retained in connection with the Bonds and any out-of-pocket disbursements of the Purchaser.

8. Lockout Date Certification. If the Purchaser delivers to the City written evidence that (i) the amount of the Assessments levied on the Group Three Designated Parcels owned by the Purchaser or an affiliate of the Purchaser is less than 20% of the aggregate amount of the Assessments levied on all Group Three Designated Parcels, and (ii) the amount of the Assessments levied on the Group Three Designated Parcels owned by any single owner of Group Three Designated Parcels or an affiliate of such owner is less than 20% of the aggregate amount of the Assessments levied on all Group Three Designated Parcels, which written evidence shall be in form and substance reasonably satisfactory to the City and which written evidence may include, but need not be limited to, title policies, title guaranties and copies or

adequate descriptions of grant deeds recorded, the City shall, within ten business days of the receipt thereof, deliver to the Trustee a Written Certificate of the City certifying that the Lockout Date has occurred.

9. Notices. Any notices, requests, directions, instruments or other communications required or permitted to be given hereunder shall be in writing and shall be given when delivered, against a receipt, or mailed certified or registered, postage prepaid, to the City and the Purchaser at the respective addresses below.

If to the City:

City of Irvine
One Civic Center Plaza
Irvine, California 92606-5207
Attention: Director of Administrative Services

If to the Purchaser:

IHC Funding I LLC
550 Newport Center Drive
Newport Beach, California 92660-7011
Attention: General Counsel

and to:

IHC Funding I LLC
550 Newport Center Drive
Newport Beach, California 92660-7011
Attention: Chief Financial Officer

with a copy to:

O'Neil LLP
1990 MacArthur Blvd., Suite 1050
Irvine, California 92612
Attention: John Yeager, Esq.

provided, however, that all such notices, requests or other communications may be made by telephone and promptly confirmed by writing. The City and the Purchaser may, by notice given as aforesaid, specify a different address for any such notices, requests or other communications.

10. Parties in Interest. This Purchase Agreement is made solely for the benefit of the City and the Purchaser and no other person shall acquire or have any right hereunder or by virtue hereof.

11. Survival of Representation and Warranties. The representations and warranties of the City set forth in or made pursuant to this Purchase Agreement shall not be deemed to have been discharged, satisfied or otherwise rendered void by reason of the Closing or termination of this Purchase Agreement and regardless of any investigations made by or on behalf of the Purchaser (or statements as to the results of such investigations) concerning such representations and statements of the City and regardless of delivery of and payment for the Bonds. The representations and warranties of the Purchaser set forth in or made pursuant to this Purchase Agreement shall not be deemed to have been discharged, satisfied or otherwise rendered void by reason of the Closing or termination of this Purchase Agreement and regardless

of any investigations made by or on behalf of the City (or statements as to the results of such investigations) concerning such representations and statements of the Purchaser and regardless of issuance and sale of the Bonds.

12. Effective. This Purchase Agreement shall become effective and binding upon the respective parties hereto upon the execution of the acceptance hereof by the City and shall be valid and enforceable as of the time of such acceptance.

13. Applicable Law; Nonassignability. This Purchase Agreement shall be governed by the laws of the State. This Purchase Agreement shall not be assigned by the City or the Purchaser.

14. Execution of Counterparts. This Purchase Agreement may be executed in several counterparts, each of which shall be regarded as an original and all of which shall constitute one and the same.

15. No Prior Agreements. This Purchase Agreement supersedes and replaces all prior negotiations, agreements and understandings between the parties hereto in relation to the sale of Bonds by the City and the purchase thereof by the Purchaser and represents the entire agreement of the parties as to the subject matter herein.

16. Partial Unenforceability. Any provision of this Purchase Agreement which is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions of this Purchase Agreement or affecting the validity or enforceability of such provision in any other jurisdiction.

Very truly yours,

IHC FUNDING I LLC, a Delaware limited liability company

By: _____
Marc D. Ley
Group Executive Vice President and
Chief Investment Officer

By: _____
Robert M. Lang
Senior Vice President & Deputy Chief
Investment Officer

ACCEPTED:

CITY OF IRVINE

By: _____
Kristin Griffith
Director of Administrative Services

EXHIBIT A

FORM OF OPINION OF BOND COUNSEL

September [27], 2017

City of Irvine
One Civic Center Plaza
Irvine, California 92606-5207

Re: City of Irvine, Reassessment District No. 05-21
Limited Obligation Improvement Bonds,
Fixed Rate Series (Group Three) (Final Opinion)

Ladies and Gentlemen:

We have acted as bond counsel in connection with the issuance by the City of Irvine (the “City”) of \$[19,500,000] aggregate principal amount of City of Irvine Reassessment District No. 05-21 Limited Obligation Improvement Bonds, Fixed Rate Series (Group Three) (the “Bonds”) pursuant to the Municipal Improvement Act of 1913 (Division 12 of the California Streets and Highways Code), the Improvement Bond Act of 1915 (Division 10 of the California Streets and Highways Code), Chapter 5 of Division 7 of Title 2 of the City of Irvine Municipal Code and an Indenture of Trust, dated as of December 1, 2011 (the “Original Indenture”), as amended and supplemented pursuant to a First Supplemental Indenture, dated as of February 1, 2014 (the “First Supplemental Indenture”), a Second Supplemental Indenture, dated as of March 1, 2016 (the “Second Supplemental Indenture”), and a Third Supplemental Indenture, dated as of August 1, 2017 (the “Third Supplemental Indenture”), each by and between the City and The Bank of New York Mellon Trust Company, N.A., as trustee (the “Trustee”). The Original Indenture, as amended and supplemented, including by the Third Supplemental Indenture is referred to as the Indenture.

In such connection, we have reviewed the Indenture, the Tax Certificate of the City, dated the date hereof (the “Tax Certificate”), opinions of counsel to the City and the Trustee, certifications of the City, the Trustee and others and such other documents, opinions and matters to the extent we deemed necessary to render the opinions set forth herein.

Certain agreements, requirements and procedures contained or referred to in the Indenture, the Tax Certificate and other relevant documents may be changed and certain actions (including, without limitation, defeasance of Bonds) may be taken or omitted under the circumstances and subject to the terms and conditions set forth in such documents. No opinion is expressed herein as to any Bond or the interest thereon if any such change occurs or action is taken or omitted upon the advice or approval of counsel other than ourselves.

The opinions expressed herein are based on an analysis of existing laws, regulations, rulings and court decisions and cover certain matters not directly addressed by such authorities. Such opinions may be affected by actions taken or omitted or events occurring after the date hereof. We have not undertaken to determine, or to inform any person, whether any such actions are taken or omitted or events do occur. Our engagement with respect to the Bonds has concluded with their issuance, and we disclaim any obligation to update this letter. We have assumed the genuineness of all documents and signatures presented to us (whether as originals or copies) and the due and legal execution and delivery thereof by, and validity against, any parties other than the City. We have not undertaken to verify independently, and have assumed,

the accuracy of the factual matters represented, warranted or certified in the documents referred to in the second paragraph hereof. Furthermore, we have assumed compliance with all covenants and agreements contained in the Indenture and the Tax Certificate, including (without limitation) covenants and agreements compliance with which is necessary to assure that future actions, omissions or events will not cause interest on the Bonds to be included in gross income for federal income tax purposes. In addition, we call attention to the fact that the rights and obligations under the Bonds, the Indenture and the Tax Certificate and their enforceability may be subject to bankruptcy, insolvency, reorganization, arrangement, fraudulent conveyance, moratorium and other similar laws relating to or affecting creditors' rights, to the application of equitable principles, to the exercise of judicial discretion in appropriate cases and to the limitations on legal remedies against public bodies in the State of California. We express no opinion with respect to the plans, specifications, maps and other engineering details of the proceedings, or upon the validity of the individual separate Assessments securing the Bonds, which validity depends, in addition to the legal steps required, upon the accuracy of certain of the engineering details.

Based on and subject to the foregoing, and in reliance thereon, as of the date hereof, we are of the following opinions:

1. The execution and delivery of the Bonds has been duly authorized by the City and the Bonds constitute valid and binding special obligations of the City, payable solely from and secured by the Assessments on the Group Three Designated Parcels and any other amounts held in the funds and accounts established for the Bonds under the Indenture, other than the Group Three Rebate Fund established for the Bonds and the Group Three Costs Account, and the Assessments represented by the Bonds are secured by a valid and enforceable first lien against the Group Three Designated Parcels.

2. The Indenture has been duly executed and delivered by, and constitutes a valid and binding obligation of, the City. The Third Supplemental Indenture is in compliance with the requirements of the Original Indenture and is permitted by the Act.

3. Interest on the Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 and is exempt from State of California personal income taxes. Interest on the Bonds is not a specific preference item for purposes of the federal individual or corporate alternative minimum taxes, although we observe that it is included in adjusted current earnings in calculating corporate alternative minimum taxable income. We express no opinion regarding other tax consequences related to the ownership or disposition of, or the accrual or receipt of interest on, the Bonds.

Very truly yours,

RUTAN & TUCKER, LLP

EXHIBIT B

**MATURITY SCHEDULE FOR
CITY OF IRVINE
REASSESSMENT DISTRICT NO. 05-21
LIMITED OBLIGATION IMPROVEMENT BONDS
FIXED RATE SERIES (GROUP THREE)**

\$ _____ Serial Bonds

| Maturity (September 2) | Principal Amount | Interest Rate | Price |
|-----------------------------------|-----------------------------|----------------------|--------------|
| 2020 | | | |
| 2021 | | | |
| 2022 | | | |
| 2023 | | | |
| 2024 | | | |
| 2025 | | | |
| 2026 | | | |
| 2027 | | | |
| 2028 | | | |
| 2029 | | | |
| 2030 | | | |
| 2031 | | | |
| 2032 | | | |
| 2033 | | | |
| 2034 | | | |
| 2035 | | | |
| 2036 | | | |
| 2037 | | | |

\$ _____ % Term Bonds, Due September 1, 20__ Priced to Yield _____%
 \$ _____ % Term Bonds, Due September 1, 20__ Priced to Yield _____%

CITY COUNCIL RESOLUTION NO. 06-32

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE DECLARING ITS INTENTION TO ORDER THE CONSTRUCTION AND ACQUISITION OF CERTAIN IMPROVEMENTS IN PROPOSED ASSESSMENT DISTRICT NO. 05-21

WHEREAS, in accordance with the provisions of Section 2804 of the California Streets and Highways Code (the "Streets and Highways Code"), the owners of more than 60 percent in area of the property subject to assessment for the proposed construction and acquisition of certain improvements, hereinafter described, have signed and filed with the City Clerk of the City of Irvine a written Petition ("Petition") for the construction and acquisition of such improvements in proceedings to be taken by the City Council, pursuant to the Municipal Improvement Act. of 1913, and for the issuance of bonds in the proceedings under the Improvement Bond Act of 1915 and Chapter 5 of Division 7 of Title 2 of the City of Irvine Municipal Code, and by the Petition waived all proceedings required by the provisions of Division 4 of said Streets and Highways Code (being the Special Assessment Investigation, Limitation and Majority Protest Act of 1931, Streets and Highways Code Sections 2800-3012); and

WHEREAS, the public interest and convenience requires the construction and acquisition of said improvements.

NOW, THEREFORE, the City Council of the City of Irvine DOES HEREBY RESOLVE and order as follows:

SECTION 1. The foregoing recitals are true and correct and the City Council so finds and determines.

SECTION 2. The Petition for construction of said improvements and the issuance of said bonds is hereby accepted and approved.

SECTION 3. The City Council hereby finds and determines that the Petition has been signed by the owners of more than 60 percent in the area of the property subject to assessment for the proposed improvements hereinafter described and hereby grants the Petition and hereby determines that the situation described in Paragraph (3) of Subdivision (a) of Section 2804 of the Streets and Highways Code exists and that the Special Assessment Investigation, Limitation and Majority Protest Act of 1931 shall not apply to the proceedings hereinafter provided for.

SECTION 4. The public interest and convenience require the construction and acquisition of the improvements hereinafter described.

SECTION 5. It is the intention of the City Council City of Irvine. to order the work, acquisitions, and improvements to be made for assessment district (hereinafter provided for) designated Assessment District No. 05-21, the exterior boundaries of which are hereinafter specified and described in Section 6 hereof, the work, acquisitions and improvements being as set forth on Exhibit A attached hereto. Except as in this Resolution otherwise specifically provided, all the work, acquisitions and improvements shall be made and done pursuant to the Municipal Improvement Act of 1913 and Chapter 5 of Division 7 of Title 2 of the City of Irvine Municipal Code.

SECTION 6. The City Council hereby declares that the territory within the boundaries hereinafter specified and described is the district to be benefited by the work, acquisitions, and improvements to be made and to be assessed to pay the costs and expenses thereof; that the expense of the work, acquisitions, and improvements is hereby made chargeable upon the district; and that the exterior boundaries of the assessment district are hereby specified and described to be as shown on that certain map now on file in the office of the City Clerk of the City of Irvine entitled "Proposed Boundaries, Assessment District No. 05-21, City of Irvine," which map indicates by a boundary line the extent of the territory included in the proposed district and shall govern for all details as to the extent of the assessment district. On the original and copy of the map of such assessment district on file in the Clerk's office, the Clerk shall endorse the certificate evidencing the date and adoption of this Resolution. The Clerk shall file the original of such map in her office and, within fifteen (15) days after the adoption of the Resolution fixing the time and place of hearing on the formation and extent of the assessment district, the Clerk shall file a copy of such map so endorsed in the records of the County Recorder, County of Orange, State of California.

SECTION 7. Pursuant to Section 4 of Article XIID of the Constitution of the State of California, parcels within the assessment district that are owned or used by any agency, the State of California or the United States shall not be exempt from assessment, unless the City can demonstrate by clear and convincing evidence that such publicly owned parcels in fact receive no special benefit.

SECTION 8. The City Council further declares that it is its intention to enter into agreements with Southern California Edison Company, Southern California Gas Company, Pacific Bell, and Irvine Ranch Water District, public agencies or regulated utilities, pursuant to Section 10110 of the Streets and Highways Code, regarding the construction and installation of certain facilities, the cost of which shall be assessed upon the real property benefiting there from and title to which shall vest, upon completion, in said public agency or utility.

SECTION 9. Notice is hereby given that bonds to represent unpaid assessments, and which bear interest at a fixed or variable interest rate of not to exceed twelve percent (12%) per annum, or such higher maximum interest rate as may be provided in the resolution of issuance, will be issued hereunder in the manner provided in Division 10 of the Streets and Highways Code (the Improvement

Bond Act of 1915) and Chapter 5 of Division 7 of Title 2 of the City of Irvine Municipal Code, and the last installment of such bonds shall mature in not to exceed 39 years from the second of September next succeeding 12 months from their date or as provided in said Chapter 5. The alternate procedure for collecting assessments and advance retirement of bonds as set forth in Part 11.1 of Division 10 of the Streets and Highways Code shall apply herein. Pursuant to Section 8650.1 of said Code, the City Council may determine that the principal amount of bonds maturing or becoming subject to mandatory prior redemption each year shall be other than the amount equal to an even annual proportion of the aggregate principal of the bonds.

SECTION 10. The City Council hereby further declares that it is its intention to covenant that, upon default of any assessment payment due (except under certain circumstances to be specified in the Trust Indenture for the bonds) it will cause foreclosure proceedings to be brought within 150 days of such default, as permitted by Section 8830(b) of the Streets and Highways Code.

SECTION 11. The City Council hereby further declares that it is its intention to create a special reserve fund to provide for the purchase of tax delinquent property by the City and for other advances contemplated to be made by the City under Part 16 of Division 10 of the Streets and Highways Code, as permitted by Sections 8880-8886 of the Streets and Highways Code.

SECTION 12. The City Council hereby finds and determines that if the assessment proposed herein results in a surplus in the improvement fund to be provided for in the proceedings hereafter taken pursuant to this Resolution, after the improvements are acquired, the surplus shall be used or allocated in accordance with the provisions of Sections 10427 to 10427.2, inclusive, of the Streets and Highways Code.

SECTION 13. Whenever, in the Municipal Improvement Act of 1913 or in the Improvement Bond Act of 1915 a notice, resolution, order or other matter relative to said proceedings for the work, acquisitions and improvements in said assessment district is required to be published, the City Clerk is hereby ordered to publish such notice, resolution or other matter in the Irvine World News, which is hereby selected by the City Council for that purpose.

SECTION 14. The City Council hereby refers the proposed improvements to the Engineer of Work for the assessment district, and hereby directs said Engineer to make and file with the City Clerk a report in writing containing the matters specified in 10204, of the Streets and Highways Code.

SECTION 15. Pursuant to Section 20485 of the California Public Contracts Code, the property owner of the property within proposed Assessment District No. 05-21, being the owner of all lands to be assessed, may exercise its option to enter into the contract for the construction of improvements within said district, subject to the requirements of said Section 20485. Nevertheless, pursuant to

Section 20487 of said Code, the City Council hereby reserves the right to subsequently make the finding that, in its opinion, the public interest will not be served by allowing the property owner to take the contract for construction of the improvements and that the property owner may not elect to enter into such a contract pursuant to said Section 20485.

SECTION 16. Pursuant to Streets and Highways Code Section 8769 and Chapter 5 of Division 7 of Title 2 of the City of Irvine Municipal Code, the City Council hereby determines and declares that the City will not obligate itself to advance available funds from the City treasury to cure any deficiency which may occur in the bond redemption fund; provided, however, this determination shall not prevent the City from, in its sole and unbridle discretion, advancing funds for such purpose as otherwise provided in the Improvement Bond Act of 1915.

SECTION 17. The City Council hereby further declares that the bonds issued for Assessment District No. 05-21 shall be refundable in accordance with the provisions of the "Refunding Act of 1984 For 1915 Improvement Act Bonds." The specific conditions under which said bonds may be refunded include the condition that there be a reduction in the interest cost to maturity by reason of the refunding of such bonds and the condition that the refunding bonds shall bear interest at a maximum rate, and shall have a maximum number of years to maturity, not in excess of the maximum rate and years to maturity, respectively, then permitted by law. Any adjustment to assessments resulting from any such refunding will be done on a pro rata basis.

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 28th day of March 2006.


MAYOR OF THE CITY OF IRVINE

ATTEST:


CITY CLERK OF THE CITY OF IRVINE

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, PAMYLA MEANS, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine, held on the 28th day of March 2006.

AYES: 4 COUNCILMEMBERS: Agran, Choi, Kang, and Krom
NOES: 0 COUNCILMEMBERS: None
ABSENT: 1 COUNCILMEMBERS: Shea


CITY CLERK OF THE CITY OF IRVINE

CITY COUNCIL RESOLUTION NO. 06-46

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CONFIRMING THE ASSESSMENTS IN ASSESSMENT DISTRICT NO. 05-21 (ORCHARD HILLS) PLANNING AREA 1, ORDERING THE IMPROVEMENTS AND ACQUISITIONS TO BE MADE, AUTHORIZING ENTRY INTO CERTAIN AGREEMENTS, AND DESIGNATING THE CITY TREASURER TO COLLECT AND RECEIVE MONEY

WHEREAS, the City Council of the City of Irvine, by Resolution No. 06-32 heretofore adopted by the Council on March 28, 2006, declared its intention to order the improvements and acquisitions to be made as described in that Resolution in an assessment district to be designated Assessment District No. 05-21, as shown and designated on that certain map entitled "Proposed Boundaries, Assessment District No. 05-21, City of Irvine, County of Orange, State of California", on file in the Office of the City Clerk; and

WHEREAS, the Council in and by that resolution referred the work, acquisitions and improvements to Willdan, as Engineer, and directed it to make and file with the City Clerk a report in writing; and

WHEREAS, the Engineer duly filed with the City Clerk a report in writing, including a general description of the improvements and acquisitions, an estimate of the costs of the improvements and acquisitions and incidental expenses in connection with the improvements and acquisitions; a diagram showing the exterior boundaries of the Assessment District, the boundaries of any zones within the district and the boundaries and dimensions of the subdivisions of land within the district as they existed at the time the resolution of intention was adopted; a proposed assessment of the total amount of the costs and expenses of the proposed improvements and acquisitions upon the several subdivisions of land in the Assessment District in proportion to the estimated special benefits to be received by such subdivisions from the improvements; and a maximum annual assessment to defray the City's costs of collecting the assessments and paying the bonds, all in accordance with Article XIID of the California Constitution, California Government Code Section 53750 et seq. and Sections 10203 and 10204 of the California Streets and Highways Code, and other items required pursuant to Part 7.5 of the Streets and Highways Code; and

WHEREAS, the Council, by Resolution No. 06-33 heretofore adopted on March 28, 2006, preliminarily approved the Engineer's Report, approved the Boundary Map, fixed Tuesday, May 9, 2006 at 4:00 p.m. in the chambers of the City Council, City Hall, One Civic Center Plaza, Irvine, California, as the time and place for hearing comments on the proposed improvements and acquisitions, the extent of the

assessment district and the proposed assessment, and provided for mailed notice of the hearing; and

WHEREAS, the City Clerk filed with the Council a declaration setting forth the time and manner of compliance with the requirements for mailing notices of the passage of Resolution No. 06-33 and of the time and place for the public hearing for receiving comments or objections to the proposed construction and acquisitions, together with the assessment ballot required by Article XIID of the California Constitution and California Government Code Section 53753 and the Council hereby finds that notice of the passage of that resolution and of the time and place for hearing protests or objections to the proposed construction and acquisitions and the assessment ballots have been mailed in the time, form and manner required by law; and

WHEREAS, the hearing was duly held by the Council at the times and places for the hearing of all comments on the proposed improvements and acquisitions; and

WHEREAS, at the public hearing no adverse comments were received and the Council thereupon closed the public hearing and tabulated the assessment ballots submitted by the record owners of the properties within the Assessment District and received the written waiver of the sole property owner with regard to waiving the cash collection period; and

WHEREAS, all assessment ballots submitted were in favor of the formation of the district and levy of the assessment as set forth in the revised Report of the Engineer; and

WHEREAS, the Council immediately thereupon acquired jurisdiction to order the proposed improvements and acquisitions to be made.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF IRVINE DOES HEREBY RESOLVE AND ORDER AS FOLLOWS:

Section 1. The foregoing recitals are true and correct and the Council so finds and determines.

Section 2. Pursuant to Section 15168 of the State CEQA Guidelines, this project is covered by a previously certified Program EIR for the Northern Sphere of Influence, which includes Planning Area 1 and serves as a Program EIR for the proposed project (SCH No. 2001051010). The effects of the project were examined in the Program EIR and all feasible mitigation measures and alternatives developed in the Program EIR are incorporated into this project. Based on public testimony and independent judgment, the Subdivision Committee determines that no new mitigation measures are required. The Program EIR is, therefore, determined to be adequate to serve as the EIR for this project and satisfies all requirements of CEQA.

Section 3. The Council hereby confirms the assessment in the amount of \$235,257,164 and declares that the report of the Engineer, including the description of the improvements and acquisitions, estimate of the cost of the improvements and acquisitions, assessments, boundary map and diagram, are hereby finally adopted, accepted, confirmed and approved.

Section 4. The Council hereby orders the improvements and acquisitions described in Resolution No. 06-32 and in the revised Report of the Engineer dated April 4, 2006, to be done and made.

Section 5. The City Manager is hereby authorized and directed to execute and deliver all agreements required by Streets and Highways Code Section 10110 with an applicable public agency, public utility, or mutual water company, all as defined in the Municipal Improvement Act of 1913 in order to finance any or all of the relevant work, acquisitions, or improvements described in the Report of the Engineer dated April 4, 2006 prior to the construction and/or acquisition of the relevant work, acquisitions, or improvements, in substantially the form currently on file in the office of the City Clerk with such amendments, modifications, and substitutions approved in writing by the City Attorney.

Section 6. The Council hereby finds and determines that the maximum annual assessment set forth in the report is adequate for such purposes and authorizes the City Treasurer to annually levy said assessment in an amount sufficient to pay the incidental costs of Assessment District No. 05-21, not exceeding the maximum amount set forth in the report.

Section 7. The City Clerk shall transmit to the Superintendent of Streets of the City of Irvine the diagram and assessment, and the Superintendent of Streets is hereby directed to record the diagram and assessment in his office in a substantial book kept for that purpose and, in addition, the City Clerk is to record forthwith a Notice of Assessment in the Office of the Recorder, County of Orange, and upon the date of such recordation in the Recorder's office the assessment shall become a lien upon the lands upon which it is levied, and upon the date of recordation in the Superintendent of Street's office, the assessments shall become due and payable, all pursuant to the Municipal Improvement Act of 1913.

Section 8. The City Treasurer of the City of Irvine is hereby directed to collect the money paid pursuant to the assessment, in the manner to be prescribed in an Indenture between the City and a Trustee to be named and to be approved by the Council prior to the issuance of said bonds.

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 9th day of May 2006.


MAYOR OF THE CITY OF IRVINE

ATTEST:



CITY CLERK OF THE CITY OF IRVINE


STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, PAMYLA MEANS, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine, held on the 9th day of May 2006.

AYES: 5 COUNCILMEMBERS: Agran, Choi, Kang, Shea, and Krom
NOES: 0 COUNCILMEMBERS: None
ABSENT: 0 COUNCILMEMBERS: None



CITY CLERK OF THE CITY OF IRVINE

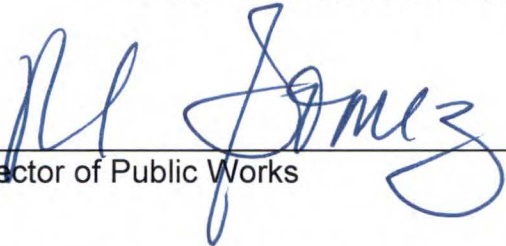

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REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: AUGUST 8, 2017

TITLE: A RESOLUTION OF INTENT TO CONSIDER GRANTING NONEXCLUSIVE FRANCHISE AGREEMENTS FOR COMMERCIAL WASTE COLLECTION AND RECYCLING SERVICES



Director of Public Works



City Manager

RECOMMENDED ACTION

Adopt – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, DECLARING ITS INTENT TO CONSIDER GRANTING NONEXCLUSIVE FRANCHISE AGREEMENTS FOR COMMERCIAL SOLID WASTE COLLECTION AND RECYCLING SERVICES AND SETTING FORTH THE PROPOSED TERMS AND CONDITIONS OF SAID FRANCHISE

EXECUTIVE SUMMARY

On May 9, 2017, the City Council reviewed the subject resolution, as the first in a multistep process, for granting new nonexclusive franchise agreements to the City's existing commercial waste haulers. The City Council also considered a proposed franchise area map and directed staff to return with a revised map that would potentially address concerns expressed by Waste Management of Orange County (the City's exclusive hauler for residential waste services) at the May 9 City Council meeting.

Accordingly, staff has prepared a revised map (Attachment 1) for consideration by the City Council that is supported by Waste Management. The updated map includes the following revisions to the map presented on May 9:

- Market Place Business Center (located behind the Irvine Market Place along the I-5 Freeway) is proposed to retain its existing Village Commercial designation
- Jeffrey Business Center (located at Jeffrey and the I-5 freeway) is proposed to retain its existing Village Commercial designation
- Los Olivos Village Center (located at Irvine Center Drive and the I-5 freeway) is proposed to be designated as Village Commercial

The updated map retains the previous staff recommendations to convert the following centers from existing Village Commercial (exclusive to Waste Management) to nonexclusive (open market rate competitive service):

- Irvine Market Place (located along Jamboree between I-5 freeway and Irvine Boulevard)
- Sand Canyon Medical/Office Centers (located along Sand Canyon between Irvine Center Drive and Alton)

The Irvine Company is the property owner for all centers listed above and has indicated it has no objection to the proposed changes.

Staff is recommending that the City Council adopt the proposed resolution setting September 12, 2017 as the public hearing date for City Council consideration of the proposed new franchise. Pursuant to the City Charter, the award of a franchise requires the City Council to first adopt a resolution declaring its intent to approve and grant said franchise, set forth the terms and conditions thereof, and set the place and time for a public hearing thereon. The recommended resolution (Attachment 2) satisfies this requirement. The City Charter also requires that franchise agreements be adopted by ordinance. The proposed public hearing on September 12 will satisfy this requirement for the reading and introduction of an ordinance approving the proposed franchise agreements, with a second reading and adoption of the ordinance on September 26, 2017.

A list of the City's existing authorized nonexclusive haulers is included as Attachment 3. As stated in the May 9 staff report (Attachment 4), the proposed new franchise agreement retains many of the same provisions of the existing nonexclusive agreement, including a tiered franchise fee structure designed to promote recycling. The proposed agreement also enhances programs necessary for City compliance with state waste diversion mandates and provisions for hauler qualifications and insurance. The proposed new nonexclusive agreement will also incorporate the proposed revised service area map.

COMMISSION/BOARD/COMMITTEE RECOMMENDATION

This item is scheduled for Finance Commission review and recommendation to the City Council on August 21, 2017, subject to City Council approval of the recommended action.

ANALYSIS

The new proposed nonexclusive waste collection franchise agreement (Attachment 5) was prepared by staff and the City Attorney for City Council consideration. The draft

agreement was previously shared with the City's existing franchisees and staff is not aware of any objection to the proposed terms of the agreement.

The terms of the proposed new agreement retain provisions contained in the existing nonexclusive franchise agreement while augmenting provisions to address new state laws and specified program enhancements. The following is a summary of the terms and conditions proposed by staff for City Council consideration:

1. **Term:** A new nine-year term from October 26, 2017 to August 31, 2026 to coincide with the term of the City's exclusive agreement with Waste Management.
2. **Retention of Existing Agreement Benefits:**
 - a. Open and competitive program for commercial properties located within the nonexclusive franchise area.
 - b. Support for public education programs.
 - c. A tiered franchise fee that promotes recycling.
3. **AB 341 Commercial Recycling Compliance:** Continued recycling programs for commercial properties within the franchise area with new expanded outreach and compliance assistance from haulers to enhance the City's compliance with state law AB 341, that mandates commercial recycling statewide.
4. **Organics Program:** Competitive organics waste program for businesses in the franchise area that are required to comply with State law AB 1826 requiring certain businesses to recycle "organics" (discarded food, green waste, nonhazardous wood waste, and food-soiled paper).
5. **Assignment:** Revised provisions, such that any corporate restructuring or other action that results in the "Contractor" being owned and controlled by any entity other than the original franchisee will require City Council approval of the contract assignment.
6. **Hauler Performance Reviews:** Annual compliance reviews to consider contractor performance, potential new services, application of new technologies, customer complaints, and developments in waste handling laws.

- 7. Revised Nonexclusive and Village Commercial Map:** The existing franchise agreement includes a map depicting those commercial areas subject to the proposed nonexclusive franchise agreement, and those areas known as "Village Commercial Premises" that are subject to the City's exclusive franchise. As directed by the City Council on May 9, the proposed new agreement provides an updated map accounting for existing land uses, future development areas and revisions proposed by Waste Management that are supported by staff and are presented for City Council consideration.

The existing nonexclusive franchise agreements are set to expire upon the earlier of December 31, 2017, or the date that a new nonexclusive franchise agreement has been approved by the City Council and becomes effective. As referenced above, pursuant to the City Charter, the award of a franchise requires the City Council to first adopt a resolution declaring its intent to approve and grant said franchise. The recommended action satisfies this requirement and approval of the proposed resolution (Attachment 2) sets September 12, 2017 as the public hearing date for City Council consideration of the proposed franchise. The proposed new franchise agreement would not be effective until 30 days following the second reading of the ordinance (i.e., October 26, 2017).

ALTERNATIVES CONSIDERED

The City Council may elect to discontinue the City's existing nonexclusive franchise program and direct staff to initiate a competitive bid process for exclusive waste handling services for the commercial business areas of the City, similar to its exclusive arrangement with Waste Management for village commercial properties and return with the results of the bidding process for consideration by the City Council. The City Council may also direct staff to negotiate terms for an exclusive arrangement with any of the existing nonexclusive haulers for exclusive services to the commercial areas and return with the result of that negotiation process for further consideration by the City Council. It should be noted that in considering the potential for an exclusive arrangement for the City's commercial properties, state law requires that the City provide its haulers with a five-year notice period of the proposed termination of its franchise. Therefore, a five-year transition period would be required to be incorporated with either of these two alternatives. These alternatives are not recommended by staff because the open and competitive program has worked well for commercial properties and promotes an open market rate competitive service for Irvine businesses located within the nonexclusive franchise area.

If the City Council elects to move forward with the proposed new nonexclusive franchise agreement, the City Council may also direct staff to make further revisions to the proposed map as deemed appropriate by the City Council or may direct that no changes be made to the map at this time. A copy of the existing service area map is included as Attachment 6.

FINANCIAL IMPACT

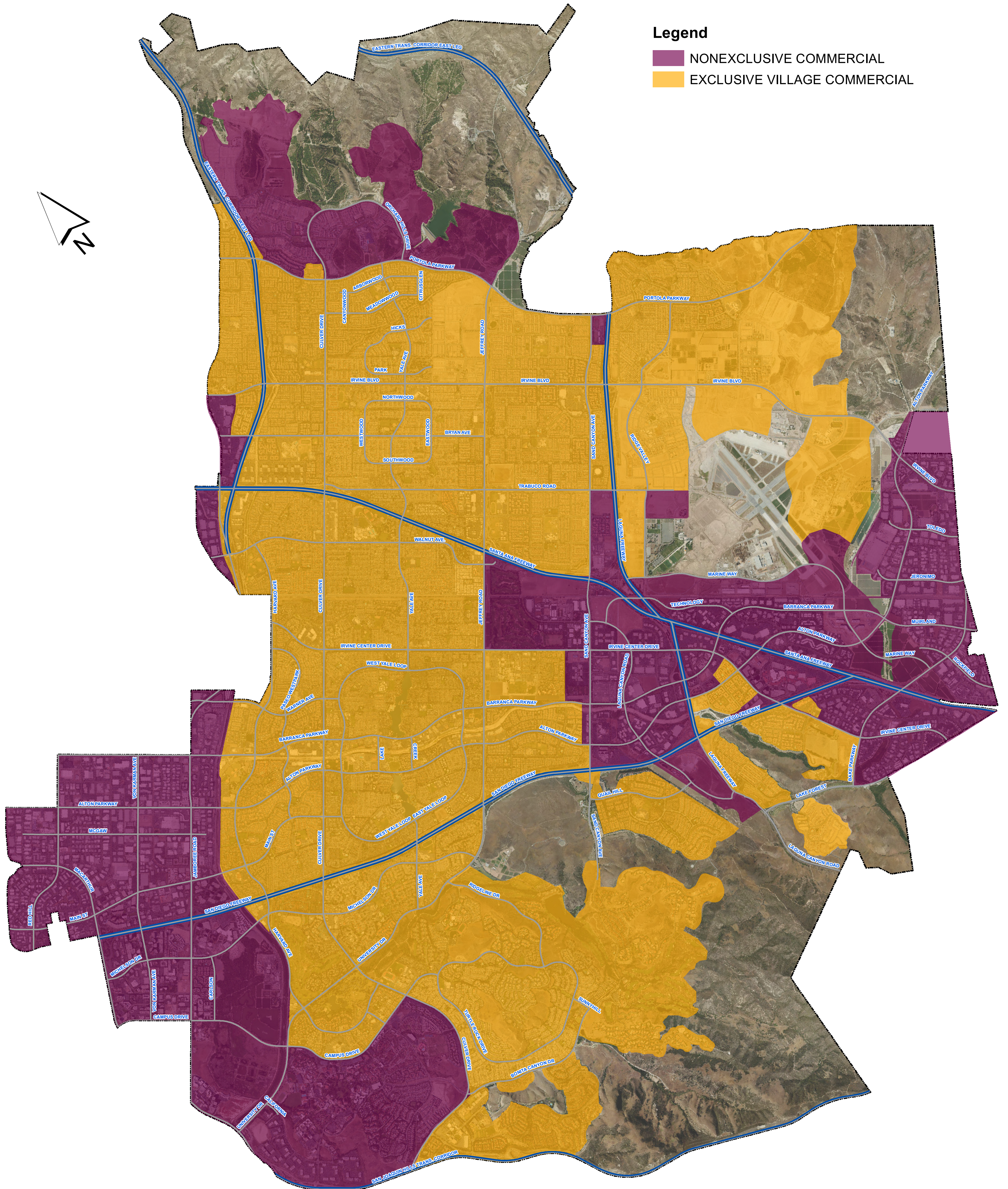
Under the proposed terms, the franchise agreements are expected to generate annual franchise fee revenues of approximately \$500,000 to the City's General Fund (consistent with existing franchise fee levels). These revenue estimates will vary depending on the amount of waste diverted from the landfill by the haulers over the term of the agreements.

REPORT PREPARED BY Michael J. Byrne, Senior Management Analyst

ATTACHMENT

1. Proposed Service Area Map
2. Resolution
3. Authorized Nonexclusive Haulers
4. May 9, 2017 City Council Staff Report (including attachment 1)
5. Draft Nonexclusive Franchise Agreement
6. Existing Service Area Map

CITY OF IRVINE PROPOSED COMMERCIAL SOLID WASTE COLLECTION SERVICE AREAS



NOTE: Pursuant to California Public Resources Code Section 49520, et seq., some solid waste haulers may have legal rights to provide waste services to certain areas in the City regardless of the area designations on this map. All franchised haulers are eligible to provide collection of Construction and Demolition Debris and Temporary Bin Service, as defined in the Nonexclusive Franchise Agreement, to any premises within the City on an as needed and temporary basis. The terms and limitations of this agreement shall not apply to waste services provided at the facilities or properties of public agencies within the City limits that are not subject to the legal jurisdiction of the City of Irvine, including but not limited to public schools and colleges, and services to State, County and other governmental agencies.

Date: 6/20/2017 Document Path: \\coi-file05\CommDev\B & S\GIS\projects\PublicWorks\Bridgford_R_WasteMap_20170321_vn\WasteHaulers_20170620.mxd

CITY COUNCIL RESOLUTION NO. 17-xx

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, DECLARING ITS INTENT TO CONSIDER GRANTING NONEXCLUSIVE FRANCHISE AGREEMENTS FOR COMMERCIAL SOLID WASTE COLLECTION AND RECYCLING SERVICES AND SETTING FORTH THE PROPOSED TERMS AND CONDITIONS OF SAID FRANCHISE

WHEREAS, in the interest of public health and safety, and to facilitate compliance with state recycling mandates, the City of Irvine enables solid waste and recycling collection through a nonexclusive franchise agreement with qualified waste haulers;

WHEREAS, on May 9, 2017, the City Council took action to extend the City's existing nonexclusive franchise agreement for the collection of commercial solid waste (the "Existing Agreement") to expire on or before December 31, 2017;

WHEREAS, as part of the process to replace the expiring Existing Agreement, a contract plan has been developed by the City in cooperation with the City's waste haulers and other stakeholders;

WHEREAS, based on the contract plan, City staff is finalizing the provisions of a nonexclusive franchise agreement with the City's waste haulers for commercial solid waste handling services (the "Proposed Agreement") and will be prepared to introduce an ordinance approving the Proposed Agreement to the City Council at its meeting on September 12, 2017;

WHEREAS, if the ordinance is approved, a second reading of the ordinance will occur on September 26, 2017, and if approved, the ordinance will become effective on October 26, 2017;

WHEREAS, the City of Irvine's charter requires that prior to the grant of a new franchise the City Council adopt a resolution declaring its intention to grant such a franchise, which also sets a day, time, and place for interested persons to be heard regarding the Council's decision to grant or deny the grant of a franchise.

NOW, THEREFORE, the City Council of the City of Irvine does hereby resolve as follows:

Section 1. The City Council of the City of Irvine hereby declares its intention to consider granting nonexclusive solid waste handling franchises to any hauler that successfully demonstrates and affirms its qualifications and capabilities to comply with the City's nonexclusive solid waste handling franchise agreement through a City provided application process administered by the City. The nonexclusive solid waste handling franchise is proposed to be granted pursuant to the following terms and conditions:

A. The franchise shall be nonexclusive with respect to 1) solid waste handling services occurring on a regular schedule (such as weekly service) at commercial premises (other than those designated as village commercial), and (2) temporary bin services, at any premises in the City (including residential and village commercial premises).

B. The franchise shall have a fixed term, which term shall commence from the day the agreement is signed and entered into by the City and the franchisee, and end at midnight on August 31, 2026, unless the agreement is extended or terminated at an earlier date pursuant to the terms of the agreement.

C. The franchise will require franchisees to ensure the City meets its obligations pursuant to AB 939, AB341, AB1826, and Public Resources Code 40000, et al., by committing a good faith effort to divert waste from landfills, with a goal of a minimum of 50% waste diversion, and indemnify the City from any potential fines and penalties that may be associated with a franchisee's failure to perform under the terms of the Agreement.

D. The franchise will require haulers to indemnify the City for claims based upon hazardous material liability.

E. The franchise will require the payment of franchise fees on "gross receipts" of franchisees, through an incentivized fee structure that encourages hauler waste diversion practices.

F. The franchise will require franchisees to assist the City in providing public education programs as mandated by AB 939, AB341, AB1826, and Public Resources Code 40000, et al.

G. The franchise will include audits pertaining to franchisee performance of the terms of the Agreement.

Section 2. A public hearing shall occur on September 12, 2017, at 4:00 pm, or as soon thereafter as addressed by the City Council, at which time any person having an interest in or objecting to the grant of the franchise may appear before the City Council and be heard thereon.

Section 3. The City Clerk is directed to publish this resolution at least once, not less than ten days prior to the above noted public hearing.

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 8th day of August 2017.

MAYOR OF THE CITY OF IRVINE

ATTEST:

CLERK OF THE CITY OF IRVINE

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine held on the 8th day of August 2017.

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

ABSTAIN: COUNCILMEMBERS:

CITY CLERK OF THE CITY OF IRVINE

Nonexclusive Franchise Waste Haulers

| <u>Company Name</u> | <u>Headquarters</u> |
|--|---------------------|
| A-2-Z Construction Svcs | Irvine |
| California Waste Services (CWS) | Gardena |
| CR&R, Inc. | Stanton |
| Direct Disposal | Huntington Beach |
| In-and-Out Removal | Pomona |
| Interior Removal Specialist (IRS) Demolition | South Gate |
| JPA Construction Clean-Up Svcs, Inc. | Santa Ana |
| Key Disposal, Inc. | Montebello |
| Mission Recycling | Pomona |
| NASA Services, Inc. | Montebello |
| New Green Day Recycling, L.L.C. | Los Angeles |
| Pacific Line Cleanup, Inc. | Laguna Niguel |
| Rainbow Disposal Co., Inc. | Huntington Beach |
| Republic Services | Anaheim |
| Robert's Waste & Recycling | Santa Ana |
| Southern Calif. Environmental, Inc. | Huntington Beach |
| Tierra Verde Industries | Irvine |
| United Pacific Waste | Pico Rivera |
| Universal Waste Systems Inc. | Santa Fe Springs |
| Ware Disposal, Inc. | Santa Ana |
| Waste Management of Orange County | Santa Ana |




REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: MAY 9, 2017

TITLE: A RESOLUTION OF INTENT TO CONSIDER GRANTING NONEXCLUSIVE FRANCHISE AGREEMENTS FOR COMMERCIAL WASTE COLLECTION AND RECYCLING SERVICES



Director of Public Works



City Manager

RECOMMENDED ACTION

Adopt – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, DECLARING ITS INTENT TO CONSIDER GRANTING NONEXCLUSIVE FRANCHISE AGREEMENTS FOR COMMERCIAL WASTE COLLECTION AND RECYCLING SERVICES AND SETTING FORTH THE PROPOSED TERMS AND CONDITIONS OF SAID FRANCHISE

EXECUTIVE SUMMARY

On June 28, 2016, the City Council approved a new exclusive waste collection franchise agreement with Waste Management of Orange County (WM) for residential and village commercial designated areas of the City (Attachment 1). All other commercial properties in the City (i.e., those properties not within the village commercial areas) are open for competitive services and rates from any of 21 nonexclusive haulers authorized to provide said services through separate individual nonexclusive franchise agreements with the City. A map of the existing nonexclusive commercial service areas, not designated as village commercial, is included as Attachment 2. Because the nonexclusive agreements cover areas of the City not subject to the City's exclusive franchise, those nonexclusive agreements have traditionally not been considered for a public competitive bidding process or for inclusion in the City's existing exclusive franchise. Absent direction from the City Council, staff did not consider an exclusive franchise program for those commercial areas. However, if that interest exists today or in the future, staff can prepare to address such an arrangement.

The June 28 staff report indicated staff's intent to update the service area map with the next iteration of nonexclusive franchise agreements. Staff initiated discussions with the existing nonexclusive haulers in July 2016 and continued to engage interested parties in review of the proposed updated service area map. A list of the City's existing authorized nonexclusive haulers is included as Attachment 3. The City's existing

agreements with its nonexclusive haulers expire on June 30, 2017 and staff recommends consideration of the proposed new franchise agreement and the accompanying revised map (Attachment 4) by the City Council.

The proposed new agreement retains many of the same provisions of the existing agreement, including a tiered franchise fee structure designed to promote recycling. The proposed agreement also enhances programs necessary for City compliance with state waste diversion mandates and provisions for hauler qualifications and insurance. In addition, as referenced above, the proposed new agreement also provides a revised service area map.

Pursuant to the City Charter, the award of a franchise requires the City Council to first adopt a resolution declaring its intent to approve and grant said franchise, set forth the terms and conditions thereof, and set the place and time for a public hearing thereon. The recommended resolution (Attachment 5) satisfies this requirement and sets May 23, 2017 as the public hearing date for City Council consideration of the proposed new franchise. The City Charter also requires that franchise agreements be adopted by ordinance. The proposed public hearing on May 23 will satisfy this requirement for the reading and introduction of an ordinance approving the proposed franchise agreements, with a second reading and adoption of the ordinance on June 13, 2017.

As referenced above, the existing nonexclusive franchise agreements are set to terminate on June 30, 2017 and the City Charter requires that the proposed franchise agreement be approved by ordinance. The proposed resolution takes into account the timing related to the effectiveness of an ordinance, and the possibility that the City Council may take action other than as recommended by staff. In this regard, the proposed resolution authorizes the extension of the term of the existing nonexclusive franchise agreements for a period of up to six months to ensure there is no interruption in services prior to the time the City Council's action on this matter become final.

COMMISSION/BOARD/COMMITTEE RECOMMENDATION

This item is scheduled for review by the City's Finance Commission on May 15, 2017.

ANALYSIS

Staff and the City Attorney have prepared the proposed new nonexclusive waste collection franchise agreement for consideration by the City Council. The draft agreement was shared with the City's existing franchisees and staff is not aware of any objection to the proposed terms of the agreement. Discussions regarding the proposed revisions to the service map are ongoing.

The terms of the proposed new agreement retain provisions contained in the existing nonexclusive franchise agreement while augmenting provisions to address new state

laws and specified program enhancements. The following is a summary of the terms and conditions proposed by staff for City Council consideration:

1. **Term:** A new nine-year term from July 13, 2017 to August 31, 2026 to coincide with the term of the City's exclusive agreement with Waste Management.
2. **Retention of Existing Agreement Benefits:**
 - a. Open and competitive program for commercial properties located within the nonexclusive franchise area.
 - b. Support for public education programs.
 - c. A tiered franchise fee that promotes recycling.
3. **AB 341 Commercial Recycling Compliance:** Continued recycling programs for commercial properties within the franchise area with new expanded outreach and compliance assistance from haulers to enhance the City's compliance with state law AB 341, that mandates commercial recycling statewide.
4. **Organics Program:** Competitive organics waste program for businesses in the franchise area that are required to comply with State law AB1826 requiring certain businesses to recycle "organics" (discarded food, green waste, nonhazardous wood waste, and food-soiled paper).
5. **Assignment:** Revised provisions, such that any corporate restructuring or other action that results in the "Contractor" being owned and controlled by any entity other than the original franchisee will require City Council approval of the contract assignment.
6. **Hauler Performance Reviews:** Annual compliance reviews to consider contractor performance, potential new services, application of new technologies, customer complaints, and developments in waste handling laws.
7. **Revised Nonexclusive and Village Commercial Map:** The existing franchise agreement includes a map depicting those commercial areas subject to the proposed nonexclusive franchise agreement, and those areas known as "Village Commercial Premises" that are subject to the City's exclusive franchise. The proposed new agreement provides an updated map to account for existing land uses, future development and development of the Great Park area.

As referenced above, pursuant to the City Charter, the award of a franchise requires the City Council to first adopt a resolution declaring its intent to approve and grant said franchise. The recommended action satisfies this requirement and approval of the proposed resolution (Attachment 5) sets May 23, 2017 as the public hearing date for City Council consideration of the proposed franchise. An ordinance approving the proposed new franchise agreement would not be effective until 30 days following the second reading of the ordinance (i.e., July 13, 2017). To provide the City with the maximum flexibility in considering the proposed new agreements, and to ensure there is no interruption in services prior to such time as the City Council's action on the proposed agreements become final, the proposed resolution also serves to extend the existing nonexclusive franchise agreements for up to six months. The proposed resolution provides that the existing agreements be extended until the earlier of December 31, 2017, or the date that a new nonexclusive franchise agreement has been approved by the City Council and becomes effective.

ALTERNATIVES CONSIDERED

The City Council may elect to discontinue the City's existing nonexclusive franchise program and direct staff to initiate a competitive bid process for exclusive waste handling services for the commercial business areas of the City, similar to its exclusive arrangement with Waste Management for village commercial properties and return with the results of the bidding process for consideration by the City Council. The City Council may also direct staff to negotiate terms for an exclusive arrangement with any of the existing nonexclusive haulers for exclusive services to the commercial areas and return with the result of that negotiation process for further consideration by the City Council. Under either of these scenarios, an extension to the existing nonexclusive agreements would be recommended by staff to ensure uninterrupted service to the commercial areas. It should also be noted that in considering the potential for an exclusive arrangement for the City's commercial properties, state law requires that the City provide its haulers with a five-year notice period of the proposed termination of its franchise. Therefore, a five-year transition period would be required to be incorporated with either of these two alternatives. These alternatives are not recommended by staff because the open and competitive program has worked well for commercial properties and promotes an open market rate competitive service for Irvine businesses located within the nonexclusive franchise area.

If the City Council elects to move forward with the proposed new nonexclusive franchise agreement, the City Council may also direct staff to make further revisions to the proposed map as deemed appropriate by the City Council or may direct that no changes be made to the map at this time.

FINANCIAL IMPACT

Under the proposed terms, the franchise agreements are expected to generate annual franchise fee revenues of approximately \$500,000 to the City's General Fund (consistent with existing franchise fee levels). These revenue estimates will vary depending on the amount of waste diverted from the landfill by the haulers over the term of the agreements.

REPORT PREPARED BY Michael J. Byrne, Senior Management Analyst
Rebecca Bridgeford, Public Works Administrator

ATTACHMENT

1. June 28, 2016 City Council Staff Report (without attachments)
2. Existing Service Area Map
3. Authorized Nonexclusive Haulers
4. Draft Nonexclusive Franchise Agreement and Revised Service Area Map
5. Resolution



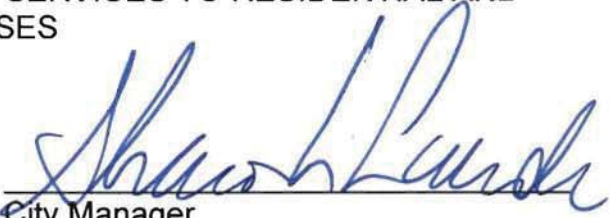
REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: JUNE 28, 2016

TITLE: CONSIDERATION OF AN ORDINANCE GRANTING AN EXCLUSIVE FRANCHISE TO WASTE MANAGEMENT COLLECTION AND RECYCLING, INC. DBA WASTE MANAGEMENT OF ORANGE COUNTY FOR SOLID WASTE HANDLING SERVICES TO RESIDENTIAL AND VILLAGE COMMERCIAL PREMISES



Director of Public Works



City Manager

RECOMMENDED ACTION

1. Receive staff report.
2. Open the public hearing; receive public input.
3. Close the public hearing.
4. City Council comments and questions.
5. Introduce for first reading and read by title only - AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, GRANTING A SOLID WASTE HANDLING FRANCHISE TO WASTE MANAGEMENT COLLECTION AND RECYCLING, INC. DBA WASTE MANAGEMENT OF ORANGE COUNTY, FOR THE PERIOD OF SEPTEMBER 1, 2016 THROUGH AUGUST 31, 2026

EXECUTIVE SUMMARY

On June 14, 2016, the City Council adopted a Resolution declaring its intent to consider granting a new franchise to Waste Management of Orange County (WM), setting forth the proposed terms and conditions thereof, and setting a public hearing date of June 28, 2016 as the date for the City Council to consider the proposed franchise. A copy of the June 14, 2016 staff report is included as Attachment 1. The public hearing on this matter was advertised per City policy on June 16, 2016.

On June 14, 2016, the City received a letter from the Los Angeles County Disposal Association indicating its interest in meeting with City representatives prior to the approval of a new franchise agreement. A meeting was held on June 22, 2016 with invitations extended to all 22 of the City's non-exclusive haulers. The meeting was attended by representatives from 8 haulers and staff provided information and responded to questions regarding the proposed new exclusive franchise agreement with WM. As of the printing date of this report, no other members of the public have submitted comments on the proposed franchise.

In accordance with the City Charter, the City Council may grant a franchise following a public hearing process. The recommended actions are the required next steps in the process should the City Council elect to grant a franchise to WM as recommended by staff.

On July 28, 2015, the City Council directed staff to negotiate and present for City Council consideration a new exclusive franchise agreement with WM for residential and village commercial waste and recycling collection services. These services have traditionally been provided under exclusive franchise agreements with WM and its predecessor without competitively bidding prior franchises. A copy of the July 28, 2015 staff report and meeting minutes are included for reference as Attachment 2.

The City's existing franchise agreement with WM is due to expire on June 30, 2017. This agreement is generally comprised of two major components. First, it requires WM to provide weekly trash and recycling service to all residential properties in the City regardless of village location. Second, the agreement designates certain commercial properties in or near residential villages as "Village Commercial". These commercial properties are included in the exclusive franchise area and may only receive their trash and recycling services from WM. Under the terms of its exclusive franchise agreement with the City, WM also is required to provide trash, recycling, and green waste collection services to all City facilities and public parks at no cost to the City.

An exclusive franchise for the City's residential and village commercial areas limits trash collection operations to one hauler, thereby providing uniform waste collection services to residents and mitigating traffic and infrastructure impacts to residential areas that would potentially occur if multiple trash haulers operated in those areas. These services have historically been provided at a very high service level and at a cost to Irvine residents that for many years has been the lowest in Orange County. The proposed franchise agreement would lower rates in the first year further still.

All other commercial properties in the City (i.e., those properties not within the village commercial areas) are now, and under the proposed new agreement would continue to be, open for competitive services and rates from any of 22 non-exclusive haulers authorized to provide said services through separate individual agreements with the City. A map of the existing non-exclusive commercial service areas (not designated as "Village Commercial") is included as Attachment 3.

The July 28, 2015 City Council staff report (Attachment 2) indicated the franchise service areas would be modified to reflect new residential villages with the next franchise. The proposed new agreement provides a framework for updating the existing map to account for new residential villages, future village commercial development and future build-out of the City's Great Park property. In an effort to alleviate potential concerns regarding impacts to existing non-exclusive open competitive commercial areas, revisions to the existing map are proposed to be deferred to coincide with

anticipated revisions that will be the subject of discussions over the next year with all non-exclusive authorized haulers. All commercial properties within the non-exclusive areas will remain eligible for competitive pricing and services from City authorized non-exclusive franchise haulers. The City's agreements with its non-exclusive haulers expire on June 30, 2017. Staff anticipates presenting those agreements separately for renewal consideration by the City Council in early 2017. Because the non-exclusive agreements cover areas of the City not subject to the existing exclusive franchise, those non-exclusive agreements have traditionally not been considered for a public competitive bidding process by the City. Absent direction from the City Council, staff did not consider an exclusive franchise program for those commercial areas. However, if that interest exists today or in the future, staff can prepare to address such an arrangement prior to the June 30, 2017 expiration of the existing non-exclusive agreements. Staff recommends addressing the non-exclusive franchise renewals by way of a separate process following a decision on the proposed new exclusive franchise agreement with WM. Note that prior to the June 28, 2016 City Council meeting, but after this report was prepared, a meeting was held with all non-exclusive franchise agreement haulers to discuss this issue. Any new information from that meeting will be presented as part of staff presentation at the June 28, 2016 public hearing.

From the outset, the key feature of negotiations with WM has been the City's interest to enhance services to the residential community as expressed by the City Council at its July 28, 2015 meeting and to extend to our residents the benefit (e.g. lower rates) that WM realizes from Irvine's growing residential customer base. Toward that end, the proposed new exclusive franchise agreement retains the provisions of the existing agreement, including low price guarantees for Irvine residents and village commercial businesses, and public education programs while enhancing services for which the City Council has expressed an interest, such as bulky item collection and programs necessary for City compliance with State waste diversion mandates.

The proposed agreement is expected to continue to generate annual franchise fee revenues to the City's General Fund of approximately \$600,000 (consistent with existing franchise fee levels) and provides for sharing in 50% of profits from revenue generated from anticipated future City-approved planned residential and village commercial growth. It is proposed that the City receive its share of this profit in the form of reduced rates for curbside residential customers, valued at more than \$2.1 million over the proposed 10-year term of the agreement.

COMMISSION/BOARD/COMMITTEE RECOMMENDATION

On June 20, 2016 the Finance Commission voted 4-0-1 (Chair Dressler, Commissioners Koh, Montgomery and Reyno voting yes and Vice Chair Bartlett was absent) to recommend the City Council award a new exclusive franchise to Waste Management Collection & Recycling, Inc. dba Waste Management of Orange County

for solid waste handling services to residential and village commercial premises in the City.

ANALYSIS

As previously directed by the City Council, staff and WM representatives, with assistance from the City Attorney's office, have negotiated terms for a proposed new exclusive waste collection franchise agreement for consideration by the City Council. The terms of the proposed new agreement retain the favorable provisions contained in the existing franchise agreement while augmenting provisions to address new state laws and specified City Council expressed interests for program enhancements. The following is a summary of the proposed terms and conditions for City Council consideration:

1. **Term:** A new ten-year term from September 1, 2016 to August 31, 2026.
2. **Franchise Area:** All residential premises and designated Village Commercial premises. All other areas will continue to be covered by the City's non-exclusive franchise agreements that provide for competitive waste hauler pricing and services.
3. **Retention of Existing Agreement Benefits:**
 - a. Guaranteed lowest curbside residential rate in Orange County. This rate is based on an annual rate survey as shown in Attachment 4.
 - b. A guaranteed maximum rate for all multi-family residential properties and commercial properties within the designated village commercial franchise area that is within the lowest third of commercial rates in Orange County. This rate is based on an annual rate survey as shown in Attachment 5.
 - c. Free recycling collection for all curbside residential premises and village commercial properties located within the franchise area.
 - d. Funding for public education programs.
 - e. Development planning assistance.
 - f. Free waste collection services to all City facilities and public parks.
 - g. A reduced curbside residential rate for low volume waste generators and a discounted senior rate, based on an annual rate survey as shown in Attachment 4.
 - h. 5% franchise fee.
4. **Profit Revenue Sharing:** Half of WM profit revenue from anticipated new planned residential and village commercial growth will be credited to Irvine residents resulting in a monthly rate reduced from the current rate (estimated by WM at 30-cents per month, from \$11.79 to \$11.49). Over the term of the agreement this results in WM sharing \$2.1 million of profits from its revenue with Irvine residents.

5. **Multi-Family Bulky Item Collection:** Enhanced program available for residents at multi-family complexes (subject to private property management approval) providing free monthly collection on pre-announced dates coordinated with each complex.
6. **Single-Family Bulky Item Collection:** Increased program frequency from two to four free bulky item curbside collection service calls annually.
7. **Assisted Services for Qualified Customers:** “Walk out service” for disabled persons and senior citizens needing assistance moving waste and recycling carts to and from the curbside for collection. This new service includes free curbside collection of Household Hazardous Waste, eliminating the need for qualifying residents to load and transport materials to County collection facilities.
8. **Sharps Program:** Medical Sharps Kits will be provided, upon request, for collection and proper disposal of medical needles. Each kit will include a self-addressed pre-paid postage mailer to facilitate delivery to an authorized processor.
9. **AB 341 Commercial Recycling Compliance:** Continued free recycling programs for village commercial properties within the exclusive franchise area, and new expanded outreach and compliance assistance with State law AB 341 mandating commercial recycling statewide.
10. **Organics Program:** A competitive initial (year 1 - 3) organics waste rate for businesses in the designated village commercial franchise area that are required to comply with State law AB1826 mandating certain businesses to recycle “organics” (discarded food, green waste, nonhazardous wood waste, and food-soiled paper), and a guarantee to be in the lowest third of rates charged in all other Orange County cities with similar services in years 4 – 10.
11. **Village Commercial Map:** The existing franchise agreement includes a map (Attachment 3) depicting certain commercial areas (“Village Commercial Premises”) subject to the existing franchise provisions of the agreement. The same map is used in the new agreement. In an effort to alleviate potential concerns regarding impacts to existing non-exclusive open competitive commercial areas, revisions to the existing map are proposed to be deferred to coincide with anticipated revisions that will be the subject of discussions over the next year with all non-exclusive authorized haulers. The proposed new agreement provides a framework for updating the existing map to account for future village commercial development and build-out of the City’s Great Park property.

- 12. Biennial Review:** Scheduled performance reviews to consider contractor performance, potential new services, application of new technologies, customer complaints, and developments in waste handling laws. Service complaints must be immediately addressed by WM.
- 13. Assignment:** Revised provisions, such that any corporate restructuring or other action that results in the "Contractor" being owned and controlled by any entity other than Waste Management of Orange County will require City Council approval of the contract assignment.

The City's Charter requires that any franchise granted by the City Council be authorized pursuant to an ordinance. The recommended ordinance and accompanying Franchise Agreement (Attachment 6) is presented for consideration by the City Council for this purpose. The proposed ordinance becomes effective 30-days after a second reading tentatively scheduled for July 12, 2016.

ALTERNATIVES CONSIDERED

The City Council could elect not to grant the proposed franchise to WM and instead direct staff to initiate a competitive bid process for exclusive waste handling services. This alternative is not recommended because the proposed terms negotiated with WM guarantee the lowest curbside residential rate in Orange County, provide significant benefit to village commercial customers within the proposed franchise area, and provide for revenue sharing from anticipated planned residential and village commercial growth that will be credited to residential customers resulting in reduced rates for Irvine residents. It is unlikely that similar or more favorable provisions could be secured through a complete bid process. It should also be noted that WM has consistently provided dependable service to the community at a very high level.

FINANCIAL IMPACT

If, at the conclusion of the public hearing process, the City Council elects to award a new exclusive franchise to WM containing the proposed terms, the franchise agreement is expected to continue to generate annual franchise fee revenues of approximately \$600,000 (consistent with existing franchise fee levels) and a profit sharing benefit to Irvine residents valued at more than \$2.1 million over the proposed 10-year term of the agreement.

REPORT PREPARED BY Michael J. Byrne, Senior Management Analyst

ATTACHMENTS

1. June 14, 2016 Staff Report with Errata
2. July 28, 2015 Staff Report and Meeting Minutes
3. Existing Village Commercial Map
4. Annual Curbside Residential Rate Survey, August 2015
5. Annual Commercial Rate Survey, August 2015
6. Proposed City Council Ordinance and Franchise Agreement

DRAFT

**NONEXCLUSIVE FRANCHISE AGREEMENT FOR
COMMERCIAL SOLID WASTE COLLECTION**

BETWEEN THE CITY OF IRVINE AND

EFFECTIVE DATE:

TABLE OF CONTENTS

Page

| | | |
|------|--|---|
| 1 | RECITALS | 2 |
| 2 | DEFINITIONS..... | 2 |
| 2.1 | AB 341 | 2 |
| 2.2 | AB 939 | 2 |
| 2.3 | AB 1594 | 3 |
| 2.4 | AB 1826 | 3 |
| 2.5 | Animal Waste..... | 3 |
| 2.6 | Annual Report | 3 |
| 2.7 | Applicable Laws | 3 |
| 2.8 | Bins | 3 |
| 2.9 | CalRecycle | 3 |
| 2.10 | CDI Processing Facility | 3 |
| 2.11 | CERCLA..... | 3 |
| 2.12 | City..... | 3 |
| 2.13 | City Council | 3 |
| 2.14 | City Indemnitees | 3 |
| 2.15 | City Limits | 4 |
| 2.16 | City Manager | 4 |
| 2.17 | Collect/Collection | 4 |
| 2.18 | Collection Vehicles..... | 4 |
| 2.19 | Commercial Premises | 4 |
| 2.20 | Construction and Demolition (C&D) Debris | 4 |
| 2.21 | County Agreement | 4 |
| 2.22 | Customer | 4 |
| 2.23 | Diversion..... | 4 |
| 2.24 | Division 7..... | 4 |
| 2.25 | Dwelling Unit..... | 5 |
| 2.26 | Effective Date | 5 |
| 2.27 | Environmental Laws | 5 |
| 2.28 | Exclusive Franchise Agreement | 5 |
| 2.29 | Exclusive Franchisee | 5 |
| 2.30 | Exclusive Franchise Premises..... | 5 |
| 2.31 | Food Waste | 5 |
| 2.32 | Franchisee | 5 |
| 2.33 | Franchise Fee | 5 |
| 2.34 | Generator..... | 6 |
| 2.35 | Green Waste..... | 6 |
| 2.36 | Green Waste Composting Facility | 6 |
| 2.37 | Gross Receipts | 6 |
| 2.38 | Hazardous Contaminant..... | 6 |
| 2.39 | Hazardous Substance | 7 |

| | | |
|------|--|----|
| 2.40 | Hazardous Waste | 7 |
| 2.41 | HHWE..... | 7 |
| 2.42 | Inert Debris | 7 |
| 2.43 | Landfill..... | 7 |
| 2.44 | Material Recovery Facility (MRF) | 7 |
| 2.45 | Medical Waste | 8 |
| 2.46 | Mixed-Use Development..... | 8 |
| 2.47 | Multi-Family Dwelling | 8 |
| 2.48 | Municipal Code..... | 8 |
| 2.49 | NPDES..... | 8 |
| 2.50 | Organics | 8 |
| 2.51 | Premises | 8 |
| 2.52 | Processing Facility..... | 8 |
| 2.53 | RCRA..... | 8 |
| 2.54 | Recycle or Recycling | 8 |
| 2.55 | Recyclable Material (Recyclables) | 9 |
| 2.56 | Residential Premises | 9 |
| 2.57 | Solid Waste | 9 |
| 2.58 | Solid Waste Handling Services..... | 9 |
| 2.59 | Source Reduction | 9 |
| 2.60 | Source Separation | 9 |
| 2.61 | Special Wastes | 9 |
| 2.62 | SRRE..... | 9 |
| 2.63 | State-Mandated Compliance Reports | 9 |
| 2.64 | Temporary Bin Service | 9 |
| 2.65 | Term..... | 10 |
| 2.66 | Tipping Fee | 10 |
| 2.67 | Transformation..... | 10 |
| 2.68 | Village Commercial Premises..... | 10 |
| 2.69 | Village Commercial Premises Map | 10 |
| 3 | NONEXCLUSIVE FRANCHISE | 10 |
| 3.1 | Grant of Franchise..... | 10 |
| 3.2 | Limitations on Scope of Franchise | 12 |
| 3.3 | Rights in Annexed Territories..... | 12 |
| 3.4 | Acknowledgment that Modification to Rights is Occurring Pursuant to Public Resources Code Section 49523..... | 12 |
| 3.5 | Notice Pursuant to Public Resources Code Section 49520..... | 13 |
| 3.6 | Processing Facility Approval..... | 13 |
| 4 | ACCEPTANCE; WAIVER | 14 |
| 5 | TERM | 14 |
| 6 | CONDITIONS TO EFFECTIVENESS OF AGREEMENT | 14 |
| 6.1 | Accuracy of Representation..... | 14 |
| 6.2 | Absence of Litigation..... | 14 |

| | | |
|------|--|----|
| 6.3 | Furnishing of Insurance and Bond or Letter of Credit..... | 14 |
| 6.4 | Effectiveness of City Council Action | 14 |
| 7 | FRANCHISEE’S CONSIDERATION | 15 |
| 7.1 | Franchise Fee Payment | 15 |
| 7.2 | Franchise Fee Calculation..... | 15 |
| 7.3 | Franchise Fee Review | 16 |
| 8 | ADDITIONAL CHARGES AND INTEREST FOR LATE PAYMENTS | 16 |
| 9 | OPERATING PROCEDURES | 16 |
| 9.1 | General..... | 16 |
| 9.2 | Compliance with Applicable Laws..... | 16 |
| 9.3 | Vehicles and Equipment | 17 |
| 9.4 | Performance Standards..... | 19 |
| 9.5 | Noise and Disruption | 20 |
| 9.6 | Restriction on Manner of Collection..... | 20 |
| 9.7 | Precautions Regarding the Collection of Hazardous Materials..... | 20 |
| 9.8 | Service Routes | 21 |
| 9.9 | Commercial Premises Recycling Services..... | 21 |
| 9.10 | Commercial Organics Program..... | 22 |
| 9.11 | Other Collection Programs As May Be Required by Law | 23 |
| 9.12 | Guaranteed Minimum Franchisee Recycling Rate | 23 |
| 9.13 | Compliance and Penalties | 24 |
| 10 | REPORTING REQUIREMENTS | 24 |
| 10.1 | Annual Report..... | 24 |
| 10.2 | Quarterly Summary Reports | 26 |
| 10.3 | Franchisee Recycling Plan..... | 26 |
| 10.4 | Adverse Information | 27 |
| 10.5 | Other Reporting Requirements | 27 |
| 10.6 | Failure to Report | 28 |
| 10.7 | Confidentiality | 28 |
| 11 | AB 939 OBLIGATIONS, GUARANTEE, AND INDEMNIFICATION | 28 |
| 11.1 | Warranties and Representations..... | 28 |
| 11.2 | Mutual Cooperation | 29 |
| 11.3 | Performance Requirements..... | 29 |
| 11.4 | Annual Compliance Review | 30 |
| 12 | FRANCHISEE’S BOOKS AND RECORDS; AUDITS..... | 30 |
| 12.1 | Examination of Records..... | 30 |
| 12.2 | CERCLA Defense Records..... | 30 |
| 12.3 | Audits by City..... | 31 |
| 12.4 | Inspection..... | 31 |
| 13 | RULES AND REGULATIONS OF CITY MANAGER..... | 31 |

| | | |
|-------|---|----|
| 14 | INDEMNIFICATION; LEGAL EXPENSES; BONDS; INSURANCE | 32 |
| 14.1 | Indemnification of City | 32 |
| 14.2 | Surety | 34 |
| 14.3 | Forfeiture of Surety..... | 34 |
| 14.4 | Use of Surety by City..... | 34 |
| 14.5 | Replacement Letter of Credit..... | 35 |
| 14.6 | Insurance Coverage..... | 35 |
| 15 | CITY’S REMEDIES; DEFAULT AND TERMINATION | 37 |
| 15.1 | City’s Right to Suspend or Terminate | 37 |
| 15.2 | Notice of Default..... | 37 |
| 15.3 | Termination Without Right to Cure..... | 37 |
| 15.4 | Termination Procedure..... | 38 |
| 15.5 | Franchisee’s Obligations Upon Termination | 39 |
| 15.6 | City’s Remedies Cumulative | 40 |
| 16 | FRANCHISEE’S REMEDIES; ADMINISTRATIVE HEARING | 40 |
| 16.1 | Administrative Hearing..... | 40 |
| 16.2 | Other Remedies; Claims | 40 |
| 16.3 | Actions for Damages..... | 40 |
| 17 | ASSIGNMENT, SUBLETTING, AND TRANSFER; REQUIREMENTS AND LIMITATIONS | 40 |
| 18 | GENERAL PROVISIONS | 41 |
| 18.1 | Force Majeure | 41 |
| 18.2 | Property Damage | 41 |
| 18.3 | City’s Authorized Agent..... | 41 |
| 18.4 | Amendments | 41 |
| 18.5 | Independent Contractor..... | 41 |
| 18.6 | Law to Govern; Venue..... | 41 |
| 18.7 | Successors and Assigns..... | 42 |
| 18.8 | Waiver..... | 42 |
| 18.9 | Notices | 42 |
| 18.10 | Severability | 42 |
| 18.11 | Attorneys’ Fees and Litigation Costs..... | 42 |
| 18.12 | Corporate Resolution | 43 |
| 18.13 | Integration..... | 43 |

NONEXCLUSIVE FRANCHISE AGREEMENT

This Nonexclusive Franchise Agreement (“Agreement”) is entered into and effective as of _____, __, 2017, by and between the CITY OF IRVINE, a California municipal corporation (“City”) and _____ (“Franchisee”), relating to the provision of certain Solid Waste Handling Services within the City which are not subject to City’s Exclusive Franchise Agreement. City and Franchisee are referred to herein collectively as the “Parties” and individually as a “Party.”

RECITALS

A. The Legislature of the State of California, by enactment of the California Integrated Waste Management Act of 1989 (“AB 939”), has declared that it is in the public interest to authorize and require local agencies to make adequate provision for the disposal of all Solid Waste within their jurisdictions. AB 939 requires, among other things, that every local agency Divert at least fifty percent (50%) of its Solid Waste from Landfills by the year 2000 or face possible fines of up to Ten Thousand Dollars (\$10,000) per day.

B. City previously entered several nonexclusive franchise agreements with various franchisees, approved by City’s City Council on November 27, 2007 (the “Prior Agreement”).

C. The Prior Agreement expires on December 31, 2017, and the Parties enter this Agreement with the intent of restating and amending the Prior Agreement to: (i) reflect service standards and legal requirements in the Solid Waste industry which have changed over time, (ii) document agreed upon changes to the scope of the nonexclusive franchise granted in the Prior Agreement, and (iii) memorialize that this Agreement shall supersede the Prior Agreement, except with respect to certain continuing obligations as more specifically set forth herein.

D. It is the intent of the Parties that Franchisee, and not City, shall be solely responsible for establishing and collecting all charges for Solid Waste Handling Services provided by Franchisee pursuant to this Agreement.

E. City and Franchisee are mindful of the provisions of the laws governing the safe Collection, transport, Recycling, and disposal of Solid Waste, including AB 939, AB 341, AB 1594, AB 1826, RCRA, and CERCLA. City and Franchisee desire to leave no doubts as to their respective roles, and to memorialize that by entering into this Agreement City is not thereby becoming an “arranger” or a “generator” as those terms are used in CERCLA, and that it is Franchisee, not City, who is “arranging for” the Collection, transport for disposal, composting, and Recycling of municipal Solid Waste in the City which may contain Hazardous Substances. City and Franchisee understand and agree that it is Franchisee, and not City, who will arrange to collect Solid Waste, that City has not, and, by this Agreement does not, instruct Franchisee on its Collection methods, nor supervise the Collection process, nor do the Parties intend to place title to such Solid Waste in City, but rather intend that whatever, if any, title in and to such Solid Waste that otherwise might exist in or with City in the absence of this Agreement is hereby transferred to Franchisee, and further that if Franchisee gains title to such Solid Waste it is by operation of law and agreement with its Customers and is not the result of this Agreement. By entering this Agreement, City and Franchisee further desire to confirm that Franchisee has agreed to indemnify

City in connection with any claims relating to the inadvertent or intentional collection, transportation and/or disposal by Franchisee of Hazardous Contaminants that may occur in connection with Franchisee's performance under this Agreement in accordance with the terms and conditions set forth herein.

F. To comply with the Diversion requirements of AB 939 and support "Zero Waste" principles, as adopted by the City Council on July 10, 2007, pursuant to Irvine City Council Resolution No. 07-95, while at the same time fostering competition, City deems it necessary to implement a program, as reflected by this Agreement, to effectively manage the commercial sector waste stream, to discourage landfilling and encourage waste reduction and Recycling.

G. By entering into this Agreement, Franchisee agrees to provide such Services as are necessary to ensure City complies with the requirements of all Applicable Laws including specifically, without limitation, AB 939, AB 341, AB 1826, and Public Resources Code Section 40000, et seq., in connection with the Solid Waste Handling Services it provides hereunder, and represents and warrants that it has the experience and qualifications to conduct the services detailed herein.

H. The City Council hereby determines and finds that the public interest, health, safety and wellbeing will be served by entering this Agreement.

COVENANTS

Based upon the foregoing Recitals and for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

SECTION 1 **RECITALS**

The Parties acknowledge the above Recitals are true and correct and incorporate them herein as if they were fully restated.

SECTION 2 **DEFINITIONS**

Whenever any term used in this Agreement has been defined by the California Public Resources Code or the Municipal Code, the definition of such term set forth therein shall apply unless the term is otherwise defined in this Agreement; and, terms defined in this Agreement shall have such meaning as defined in this Agreement for purposes of this Agreement. Otherwise, terms used in this Agreement shall have their ordinary meaning.

2.1 AB 341. "AB 341" shall mean Assembly Bill 341 from the 2011-2012 Regular Session of the California Legislature (Chapter 476, Statutes 2011), relating to mandatory commercial Recycling.

2.2 AB 939. "AB 939" shall mean the California Integrated Waste Management Act of 1989, currently codified as California Public Resources Code Section 40000 et seq., as it may be amended from time to time.

2.3 AB 1594. “AB 1594” shall mean Assembly Bill 1594 from the 2013-2014 Regular Session of the California Legislature (Chapter 719, Statutes 2014), relating to the ban on the use of Green Waste as alternative daily cover at landfills.

2.4 AB 1826. “AB 1826” shall mean Assembly Bill 1826 from the 2013-2014 Regular Session of the California Legislature (Chapter 727, Statutes 2014).

2.5 Animal Waste. “Animal Waste” shall mean animal carcasses, dead animals, and/or parts or portions of dead animals. Animal Waste shall not include manure.

2.6 Annual Report. “Annual Report” shall have the meaning ascribed in Section 10.1 of this Agreement.

2.7 Applicable Laws. “Applicable Laws” shall mean all federal, state, county, and local laws, regulations, rules, orders, judgments, decrees, permits, approvals, or other requirements of any governmental agency having jurisdiction over an aspect of this Agreement that are in force on the Effective Date, and as may be enacted, issued or amended thereafter, including without limitation City’s Municipal Code, AB 341, AB 939, AB 1594, AB 1826, CERCLA, and RCRA.

2.8 Bins. “Bins” shall mean dumpsters, three yard bins, Recycling Bins, 10, 36 and 40 yard Roll-Off Boxes, commercial compactors, 10 yard lowboy containers, and any similar such devices, regardless of size or capacity, provided by Franchisee to any Customer for use in Solid Waste Handling Services.

2.9 CalRecycle. “CalRecycle” shall mean the State of California Department of Resources Recycling and Recovery, the department within the State Natural Resources Agency responsible for the administration of the Integrated Waste Management Act of 1989, California Public Resources Code Section 40000 et seq.(“Act”), or any successor department or agency created or designated for such purpose pursuant to the Act.

2.10 CDI Processing Facility. “CDI Processing Facility” shall mean a Processing Facility that receives any combination of C&D Debris and Type A Inert Debris for the purpose of Recycling or reuse.

2.11 CERCLA. “CERCLA” shall mean the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (42 USC §9601 et seq.).

2.12 City. “City” shall mean the City of Irvine, a municipal corporation, located in Orange County, California.

2.13 City Council. “City Council” shall mean the City Council of the City of Irvine.

2.14 City Indemnites. “City Indemnites” shall mean the City and its past and present elected and appointed officials, officers, commissions, boards, members, employees, representatives, agents, consultants, and volunteers.

2.15 City Limits. “City Limits” shall mean the territorial boundaries of the City together with all amendments and changes thereto, which boundaries are depicted on maps, incorporated herein by reference, that are kept on file in the office of the City Clerk of the City of Irvine, and which are from time to time amended to reflect changes.

2.16 City Manager. “City Manager” shall mean the City Manager of the City of Irvine or his or her designee.

2.17 Collect/Collection. “Collect” or “Collection” shall mean to take physical possession of, transport, and remove (i) Solid Waste from a Premises, or (ii) any other materials that do not otherwise constitute Solid Waste, but that are discarded by a Customer pursuant to this Agreement.

2.18 Collection Vehicles. “Collection Vehicles” shall mean vehicles used by Franchisee in the performance of Solid Waste Handling Services.

2.19 Commercial Premises. “Commercial Premises” shall mean property upon which a business activity is conducted, including but not limited to retail sales, services, manufacturing, assembling, storage, or wholesale operations, but excluding businesses conducted upon residential premises that are permitted under applicable zoning regulations and that do not constitute the primary use of the property. Commercial Premises include hotels, motels, assisted living facilities, convalescent centers, nursing homes, and institutional premises, including, without limitation, churches and private schools.

2.20 Construction and Demolition (C&D) Debris. “Construction and Demolition Debris” or “C&D Debris” shall mean Solid Waste generated, produced, or discarded in connection with construction, demolition, landscaping, land clearing, or general clean-up activities within the City, including, but not limited to, concrete, plaster, drywall, Green Waste, wood, wood scraps, metals, dirt, rock and rubble, without regard to whether such materials are Recycled.

2.21 County Agreement. “County Agreement” shall mean that certain Waste Disposal Agreement, as the same may be amended from time to time, entered into among various Orange County cities, including specifically the City of Irvine, and the County of Orange relating to the use of County landfills for the disposal of Solid Waste Collected in such cities, and which is on file in the office of the Clerk of the City of Irvine.

2.22 Customer. “Customer” shall mean any person or entity receiving Solid Waste Handling Services, including Recycling services, from Franchisee pursuant to this Agreement.

2.23 Diversion. “Diversion” or “Divert” shall mean the diversion of Solid Waste, in accordance with all applicable federal, state and local requirements, from disposal at Solid Waste Landfills or transformation facilities through Recycling, reuse, or composting.

2.24 Division 7. “Division 7” shall mean Title 6, Division 7 of City’s Municipal Code, pertaining to Solid Waste, as it may be amended or recodified from time to time.

2.25 Dwelling Unit. “Dwelling Unit” shall have the meaning set forth in City Zoning Code Section 1-2-1, as of the Effective Date.

2.26 Effective Date. “Effective Date” shall mean October 26, 2017.

2.27 Environmental Laws. “Environmental Laws” shall mean all federal and state statutes, county, local and City ordinances concerning public health, safety and the environment including, by way of example and not limitation, CERCLA; RCRA; the Federal Clean Water Act, 33 USC §1251 et seq.; the Federal Clean Air Act, 42 USC §7401 et seq.; the Toxic Substances Control Act, 15 USC §2601 et seq.; the Occupational Safety and Health Act, 29 USC §651 et seq.; the California Hazardous Waste Control Act, California Health and Safety Code §25100 et seq.; the Carpenter-Presley-Tanner Hazardous Substance Account Act, California Health and Safety Code §25300 et seq.; the Porter-Cologne Water Quality Control Act, California Water Code §13000 et seq.; the Safe Drinking Water and Toxic Enforcement Act, California Health and Safety Code §25249.5 et seq.; as currently in force or as hereafter amended, and all rules and regulations promulgated thereunder.

2.28 Exclusive Franchise Agreement. “Exclusive Franchise Agreement” shall mean that certain agreement with Waste Management Collection & Recycling, Inc., a California corporation, dba Waste Management of Orange County (“Waste Management”), or its permitted successor or assignee, effective as of September 1, 2016, as amended from time to time, and which relates to exclusive Solid Waste Handling Services for Residential Premises and Village Commercial Premises in the City, and all Premises and facilities owned and/or operated by City or, if such agreement is terminated prior to the end of the term thereof, an agreement entered into with another hauler on substantially similar terms as are set forth in the above-described agreement with Waste Management.

2.29 Exclusive Franchisee. “Exclusive Franchisee” shall mean the franchisee set forth in the Exclusive Franchise Agreement.

2.30 Exclusive Franchise Premises. “Exclusive Franchise Premises” shall mean those Premises subject to the Exclusive Franchise Agreement, and specifically all Residential Premises, all Village Commercial Premises (which term is defined to include all Mixed-Use Developments), and all Premises owned and/or operated by City.

2.31 Food Waste. “Food Waste” shall mean compostable Organic materials, excluding Green Waste, including but not limited to: (i) all food (including fruits, vegetables, meat, poultry, seafood, shellfish, bones, rice, beans, pasta, bread, cheese and eggshells); (ii) food-soiled compostable paper (including napkins, paper towels, paper plates); and (iii) tea bags, coffee grounds and filters.

2.32 Franchisee. “Franchisee” shall mean the entity identified as the “Franchisee” in the preamble to this Agreement, or any entity pursuant to the terms hereof permitted to become the successor or assignee thereof.

2.33 Franchise Fee. “Franchise Fee” shall mean the franchise fee set forth herein and more fully defined in Section 7.

2.34 Generator. “Generator” shall mean any person or entity that generates, produces, or discards Solid Waste, including Recyclable Material.

2.35 Green Waste. “Green Waste” shall mean any plant material that is kept separate from other Solid Waste at the point of generation and contains no greater than one percent (1%) of physical contaminants by weight. Green Waste includes, but is not limited to, yard trimmings, untreated wood wastes, natural fiber products, and C&D Debris wood waste. Green Waste does not include food, food materials, biosolids, plant material mixed with Solid Waste, material processed from commingled waste, wood containing lead-based paint or wood preservative, or mixed C&D Debris.

2.36 Green Waste Composting Facility. “Green Waste Composting Facility” shall mean a Processing Facility that receives and processes Green Waste for the purposes of recycling or reuse. A Green Waste Composting Facility may also handle manure and paper products. A Processing Facility that handles feedstock that is not a Green Waste, manure, or a paper product shall not be considered a Green Waste Composting Facility.

2.37 Gross Receipts. “Gross Receipts” shall mean and include all monies, fees, charges, consideration, and revenue received by, or imputed to Franchisee and any affiliates, parent companies, subsidiaries and/or subcontractors of Franchisee, in connection with, arising from, or in any way attributable to the services carried out by or on behalf of Franchisee pursuant to this Agreement. Gross Receipts includes, without limitation, any amounts Collected by Franchisee from its Customers which reflects Tipping Fees or other costs incurred by Franchisee to provide services pursuant to this Agreement. As qualified exceptions to the above definition, and except as otherwise note below, Gross Receipts shall not include:

(a) Amounts Collected by Franchisee from its Customers which reflect that portion (if any) of the Franchise Fees imposed upon Franchisee by City which Franchisee may choose to pass on to its Customers; provided, however, any such amounts which exceed a Customer’s pro-rata share of the Franchise Fee actually imposed upon Franchisee by City shall not be exempted from the definition of Gross Receipts.

(b) Revenue from the resale of Recyclable Materials.

2.38 Hazardous Contaminant. “Hazardous Contaminant” shall mean any “hazardous material,” as that term is defined under California Health & Safety Code Section 25501(n); any “hazardous substance,” as that term is defined herein or under California Health & Safety Code Sections 25281(h), 25501(n), and under Title 42, Section 9601(14) of the United States Code; any “hazardous waste,” as that term is defined herein and under Title 42, Section 6903(5) of the United States Code and under California Health & Safety Code Section 25501(n); any chemical which the Governor has identified as a chemical known to the State to cause cancer or reproductive toxicity pursuant to California Health & Safety Code Section 25249.8; any crude oil or refined or unrefined petroleum product or any fraction or derivative thereof; and any asbestos or asbestos-containing material. The term “Hazardous Contaminant” shall also include any and all amendments to the above-referenced statutory and regulatory provisions made before or after the date of execution of this Agreement.

2.39 Hazardous Substance. “Hazardous Substance” shall mean any of the following: (a) any substances defined, regulated or listed (directly or by reference) as “Hazardous Substances,” “hazardous materials,” “Hazardous Wastes,” “toxic waste,” or “toxic substances” or similarly identified as hazardous to human health or the environment, in or pursuant to (i) CERCLA; (ii) the Hazardous Materials Transportation Act, 49 USC §5101, et seq.; (iii) RCRA; (iv) the Clean Water Act, 33 USC §1251 et seq.; (v) California Health and Safety Code §§25115-25117, 25249.8, 25281, and 25316; (vi) the Clean Air Act, 42 USC §7401 et seq.; and (vii) the California Water Code §13050; (b) any substances identified in any and all amendments, rules or regulations promulgated thereunder to such enumerated statutes or acts currently existing or hereafter enacted; and (c) any other hazardous or toxic substance, material, chemical, waste or pollutant identified and/or regulated as hazardous or toxic under any other applicable federal, state or local laws or regulations, including any of the Environmental Laws, currently existing or hereinafter enacted, including, without limitation, friable asbestos, polychlorinated biphenyl’s (“PCBs”), petroleum, natural gas and synthetic fuel products, and by-products.

2.40 Hazardous Waste. “Hazardous Waste” shall mean all substances defined as Hazardous Waste, acutely Hazardous Waste, or extremely Hazardous Waste by the State of California in Health and Safety Code §25110.02, §25115, and §25117 or in the future amendments to or recodifications of such statutes or identified and listed as Hazardous Waste by the US Environmental Protection Agency (EPA), pursuant to RCRA, all future amendments thereto, and all rules and regulations promulgated thereunder.

2.41 HHWE. “HHWE” shall mean City’s Household Hazardous Waste Element approved by the State of California pursuant to the requirements of AB 939.

2.42 Inert Debris. “Inert Debris” shall mean Solid Waste that is Source-Separated or separated for reuse; does not contain Hazardous Waste, Hazardous Contaminants, Hazardous Substances, or soluble pollutants at concentrations in excess of water quality objectives set by applicable Federal, State, and local authorities, including the City; and does not contain significant quantities of decomposable waste. Inert Debris may not contain more than 1% putrescible waste by volume calculated on a monthly basis, and the putrescible wastes shall not constitute a nuisance, as determined by the City Manager.

2.42.1 Type A Inert Debris. “Type A Inert Debris” shall mean C&D Debris, including but not limited to concrete, fully cured asphalt, glass, fiberglass, asphalt or fiberglass roofing shingles, brick, slag, ceramics, plaster, clay and clay products, that meets the definition of “Inert Debris.”

2.43 Landfill. “Landfill” shall mean a Solid Waste landfill as defined by Public Resources Code Section 40195.1 for which a current Solid Waste facilities permit has been issued by CalRecycle or which is currently permitted under the regulatory scheme of another state.

2.44 Material Recovery Facility (MRF). “Material Recovery Facility (MRF)” shall mean a Processing Facility permitted by the State of California where Solid Waste and/or Recyclable Materials are sorted or separated, by hand or by use of machinery, for the purpose

of Recycling, reuse, and/or composting, and which can reasonably demonstrate through documentation an average annual Diversion rate of at least fifty percent (50%).

2.45 Medical Waste. “Medical Waste” shall mean waste that is generated in the diagnosis, treatment, or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals, including, without limitation, blood-soaked bandages, culture dishes and other glassware, discarded surgical gloves, discarded surgical instruments, discarded needles used to give shots or draw blood (e.g., medical sharps), cultures, stocks, swabs used to inoculate cultures, removed body organs (e.g., tonsils, appendices, limbs), and discarded lancets.

2.46 Mixed-Use Development. “Mixed-Use Development” shall mean Premises where Bins are shared by Customers from both Commercial Premises and Multi-Family Dwellings. Mixed-Use Developments shall be deemed to be Village Commercial Premises for purposes of this Agreement. The term Mixed-Use Development has been defined for purposes of this Agreement, and is specifically intended to have a different definition and meaning than the term “Mixed-use development” as set forth and defined in City’s Municipal Code.

2.47 Multi-Family Dwelling. “Multi-Family Dwelling” shall mean any building or lot containing more than one Dwelling Unit and at which the Dwelling Units receive Solid Waste Handling Services through the use of shared Bins pursuant to the terms of the Exclusive Franchise Agreement.

2.48 Municipal Code. “Municipal Code” shall mean City’s Municipal Code of Ordinances, including City’s Zoning Code, and all uncodified ordinances duly adopted by City, as such may be amended from time to time.

2.49 NPDES. “NPDES” shall mean the National Pollutant Discharge Elimination System, a permit program established by the 1987 Water Quality Act to control non-point source pollution.

2.50 Organics. “Organics” shall mean Food Waste and Green Waste.

2.51 Premises. “Premises” shall mean any land, building and/or structure, or portion thereof, in the City where Solid Waste is produced, generated or accumulated.

2.52 Processing Facility. “Processing Facility” shall mean a facility approved pursuant to Section 3.6 of this Agreement that receives or processes Solid Waste, including but not limited to MRF’s.

2.53 RCRA. “RCRA” shall mean the Resource Conservation and Recovery Act (“RCRA”) (42 U.S.C. § 9601 et seq.).

2.54 Recycle or Recycling. “Recycle” or “Recycling” shall mean the process of Collecting, sorting, cleaning, treating and/or reconstituting materials that would otherwise be disposed of and returning these materials to the economic mainstream in the form of raw materials for new, reused or reconstituted products.

2.55 Recyclable Material (Recyclables). “Recyclable Material” or “Recyclables” shall mean that Solid Waste discarded within Premises that are subject to this Agreement and which is capable of being Recycled.

2.56 Residential Premises. “Residential Premises” shall mean all Premises upon which Dwelling Units exist.

2.57 Solid Waste. “Solid Waste” shall mean and include all discarded putrescible and nonputrescible solid, semisolid, and liquid wastes, including garbage, trash, refuse, rubbish, construction waste, industrial waste, commercial Solid Waste, bulky items, and any other discarded solid, semisolid, and liquid waste permitted to be disposed of at a Class III landfill and which are included within the definition of “Nonhazardous Solid Waste” set forth in the California Code of Regulations, as it may be amended from time to time. Solid Waste does not include Hazardous Contaminants, Hazardous Substances, Hazardous Waste, low-level radioactive waste, untreated Medical Waste, or Special Wastes.

2.58 Solid Waste Handling Services. “Solid Waste Handling Services” shall mean the Collection, and thereafter the transfer, transport, Recycling, processing, and disposal of Solid Waste.

2.59 Source Reduction. “Source Reduction” shall mean the process of reducing the amount of Solid Waste generated by the person or organization generating such Solid Waste.

2.60 Source Separation. “Source Separation” or “Source-Separated” describes the segregation of Recyclable Materials from other Solid Waste by the Generator, combined with Franchisee’s use of a collection process for such segregated Recyclable Materials by which they are kept segregated and are delivered to a Processing Facility for Recycling purposes, or to another destination for Recycling, reuse, or end-use purposes.

2.61 Special Wastes. “Special Wastes” shall mean waste materials including sewage, sludge, industrial sludge, asbestos, auto bodies, tires, used motor oil, Animal Waste, explosive substances, radioactive materials, and other materials which may not be disposed of at a Class III landfill or which require special handling.

2.62 SRRE. “SRRE” shall mean City’s Source Reduction and Recycling Element approved by the State of California pursuant to the requirements of AB 939.

2.63 State-Mandated Compliance Reports. “State-Mandated Compliance Reports” shall mean all reports required for City to meet its reporting obligations imposed by statutory mandates, including, but not limited AB 939, AB 341, and 1826, and the regulations implementing such mandates.

2.64 Temporary Bin Service. “Temporary Bin Service” shall mean Solid Waste Handling Services provided by a Solid Waste enterprise on an as needed and temporary basis to any Premises within the City in connection with, including but not limited to, construction, demolition, cleanup or other projects that do not qualify as a “Covered Project” pursuant to Section 6-7-901 of the Irvine Municipal Code, and by use of temporarily placed Bins.

2.65 Term. “Term” shall have the meaning ascribed in Section 5 of this Agreement.

2.66 Tipping Fee. “Tipping Fee” shall mean the fee charged to Franchisee to dispose of Solid Waste at a Landfill, Processing Facility, or other disposal location.

2.67 Transformation. “Transformation” shall mean incineration, pyrolysis, distillation, gasification, or biological conversion other than composting. “Transformation” does not include composting.

2.68 Village Commercial Premises. “Village Commercial Premises” shall mean that subset of Commercial Premises which have been designated by City as falling within the scope of the Exclusive Franchise Agreement, and which the Parties agree are not within the scope of the nonexclusive franchise granted by this Agreement. The specific Commercial Premises which are designated as Village Commercial Premises for purposes of this Agreement are (i) those Commercial Premises which are located in areas designated as “Exclusive Village Commercial” on the Village Commercial Premises Map, attached hereto as Exhibit A; (ii) Mixed-Use Developments, whether currently in existence or developed in the future, which are deemed for purposes of this Agreement to be Village Commercial Premises, regardless of their location and whether or not said location is designated as “Exclusive Village Commercial” on the Village Commercial Premises Map; and (iii) any Commercial Premises within Planning Area 51 that is re-designated following the Effective Date to a Village Commercial Premises designation as a result of an amendment to the Village Commercial Premises Map pursuant to the terms hereof. Notwithstanding anything herein to the contrary, Village Commercial Premises shall not include hotels, motels, assisted living facilities, convalescent centers or nursing homes, regardless of their location.

2.69 Village Commercial Premises Map. “Village Commercial Premises Map” shall mean the map attached hereto as Exhibit A, titled “Commercial Solid Waste Collection Service Areas.” The purpose of the Village Commercial Premises Map is to designate which Commercial Premises are designated as “Exclusive Village Commercial” Premises for purposes of this Agreement, and are thereby within the scope of the Exclusive Franchise Agreement and conversely outside of the scope of the nonexclusive franchise granted by this Agreement. The Village Commercial Premises Map is not intended to identify the location of Residential Premises, including Premises at which Mixed-Use Developments exist; and, accordingly, Mixed-Use Developments (which are deemed to be Village Commercial Premises) may exist in areas designated as “Nonexclusive Commercial” on the Village Commercial Premises Map.

SECTION 3 **NONEXCLUSIVE FRANCHISE**

3.1 Grant of Franchise.

3.1.1 General Grant. City hereby grants to Franchisee, and Franchisee shall have throughout the duration of this Agreement, the nonexclusive franchise, right, license and privilege to provide Solid Waste Handling Services within the City Limits, with respect to Solid Waste not subject to the Exclusive Franchise Agreement. Generally speaking, the rights granted

herein pertain to: (1) Solid Waste Handling Services to Commercial Premises, excepting Village Commercial Premises, occurring on a regular schedule (such as weekly service); and (2) Temporary Bin Services to any Premises in the City (including Exclusive Franchise Premises). In the event of any uncertainty, ambiguity, and/or dispute as to whether a particular Premises is subject to the Exclusive Franchise Agreement, the determination shall be made by the City Manager, and such determination shall be final. The Parties agree that any such determination is occurring pursuant to Public Resources Code Section 49523, is agreed to by the Parties upon mutually satisfactory terms, and is part of the consideration for entering into this Agreement.

3.1.2 Amendments to Scope of Franchise: The Parties acknowledge that as of the Effective Date, the Village Commercial Premises Map includes that certain land area located in the City's Great Park known as "Planning Area 51" and further shows a current conceptual plan by which to divide Planning Area 51 into individual "Districts." The City has not yet finalized its plans for Planning Area 51, and final Districts and boundaries therefore have yet to be established. Once the final planning for Planning Area 51 is complete, the Village Commercial Premises Map will be amended to depict those premises within Planning Area 51 that are designated as "Exclusive Village Commercial" Premises and those which are designated as "Nonexclusive Commercial" Premises. As of the Effective Date (but subject to change in the future as final plans for Planning Area 51 develop), it is anticipated that land currently shown as Districts 1, 4, 5, 7 and 8 within Planning Area 51 will be developed primarily for residential purposes, and accordingly City anticipates such Districts within Planning Area 51 will be designated as Village Commercial Premises. Moreover, City anticipates that land shown as Districts 2, 3, and 6 within Planning Area 51 will not be developed for residential purposes, and accordingly City does not anticipate designating such Districts within Planning Area 51 as Village Commercial Premises. City shall have the exclusive right to exercise its discretion to determine whether to designate properties within Planning Area 51 as Village Commercial Premises, although in doing so City will bear in mind the following: (i) City's primary consideration will be to minimize Collection Vehicle traffic in Residential Premises; (ii) the Village Commercial Premises designation is intended to apply to Premises located in close proximity to residential areas, which are established to provide for the unified commercial needs of neighborhood residents. Franchisee agrees that City may amend the Village Commercial Premises Map from time to time to reflect changes to Planning Area 51 as its planning is finalized by City, and that such changes will be reflected on amended maps to be maintained by the City Manager. Moreover, the Parties agree that any such changes effectuated by such amendments to the Village Commercial Premises Map are occurring pursuant to Public Resources Code Section 49523, are agreed to by the Parties upon mutually satisfactory terms, and are part of the consideration for entering into this Agreement. Franchisee expressly acknowledges that any change in scope of the franchise granted hereunder that may occur during the term hereof as a result of a change to the Village Commercial Premises Map as described in this Section is occurring pursuant to Public Resources Code Section 49523, and is not a waiver of rights set forth in Public Resources Code Section 49520 which would be subject to the provisions of Public Resources Code Section 49524.

3.1.3 Encroachment on Public Rights-of-Way. Included in the rights granted hereunder, is the right for Franchisee to place Bins in City's public rights-of-way, subject to the provisions of Division 7.

3.2 Limitations on Scope of Franchise.

3.2.1 Nonexclusive. This Agreement shall be nonexclusive, and no provision hereof shall be deemed to require City to grant similar franchises to one or to any particular number of franchisees, nor to restrict or prohibit City from doing so. Franchisee understands and acknowledges City may enter similar nonexclusive franchise agreements pursuant to the same, or substantially similar terms, with any qualified Solid Waste enterprise.

3.2.2 Exclusions. Notwithstanding any other provisions set forth in this Agreement to the contrary, the nonexclusive contract, right, franchise, license, and privilege granted herein excludes:

(a) Solid Waste Handling Services for Exclusive Franchise Premises as defined by this Agreement.

(b) except as provided otherwise herein, the Collection, transportation, or disposal of Hazardous Contaminants; Hazardous Substances; Hazardous Waste; items commonly known in the waste industry as “universal waste” and/or “e-waste”; biohazardous waste; untreated Medical Waste; infectious waste; Animal Waste; used cooking fats, oils, grease and similar waste; Special Waste; or other materials which do not constitute Solid Waste.

(c) Those Solid Waste Handling Services, if any, which are governed by or subject to any legal right held by any Solid Waste enterprise to continue to operate (whether pursuant to a pre-existing Solid Waste permit, license, agreement, franchise, or otherwise), so long as any such legal right shall continue to exist.

3.3 Rights in Annexed Territories. It is the intention of the Parties that, subject to all of the limitations set forth in Section 3.2 above, the nonexclusive franchise granted herein shall apply to any property incorporated into the City Limits during the Term hereof; provided, however, the exercise of the rights granted herein within annexed territories shall be limited by and subject to any legal right held by any Solid Waste enterprise to continue to operate (whether pursuant to a pre-existing Solid Waste permit, license, agreement, franchise, or otherwise), so long as any such legal right shall continue to exist.

3.4 Acknowledgment that Modification to Rights is Occurring Pursuant to Public Resources Code Section 49523. If Franchisee has a pre-existing permit, license, agreement, franchise or other rights to provide services in the City, including because of being a Franchisee under the Prior Agreement, then Franchisee expressly acknowledges that any change or modification to the scope of such rights that may be effectuated by this Agreement is occurring pursuant to Public Resources Code Section 49523, is included herein upon mutually satisfactory terms, and is part of the consideration for entering into this Agreement. Moreover, Franchisee expressly acknowledges that any change in scope of such prior rights is occurring pursuant to Public Resources Code Section 49523, and is not a waiver of rights set forth in Public Resources Code Section 49520 which would be subject to the provisions of Public Resources Code Section 49524. Franchisee acknowledges that City has advised it that if it has rights pursuant to Public Resources Code Section 49520 which it does not wish

to modify by entering this Agreement, it may choose to continue to operate in City pursuant to such rights rather than enter into this Agreement.

3.5 Notice Pursuant to Public Resources Code Section 49520. The rights granted pursuant to the terms hereof shall expire upon the end of the Term of this Agreement as set forth in Section 5 below. Franchisee shall have no right to continue to provide services in City pursuant to Public Resources Code Section 49520, or otherwise, following the end of the Term hereof unless a subsequent franchise, contract, or permit is granted to Franchisee by City, or unless this Agreement is amended to provide such rights. This provision is intended to, and shall serve as the notice contemplated by Section 49520 with respect to the franchise rights granted herein.

3.6 Processing Facility Approval.

3.6.1 Approval Required. In order for a Processing Facility to qualify as a CDI Processing Facility, Green Waste Composting Facility, or MRF for purposes of the Franchise Fee calculation, the Processing Facility must be approved by the City pursuant to this Section 3.6 at all relevant times. Facilities that are not approved pursuant to this Section 3.6 at all relevant times shall be considered “other disposal facilities” for purposes of the Franchise Fee calculation.

3.6.2 Processing Facility Audit. City reserves the right to the full extent permissible by law to deny approval to any Processing Facility that does not permit City to audit the Processing Facility for appropriate Franchise Fee and Diversion allocations. The audit may include, but is not limited to, requests for a detailed summary of the facility operations, visual inspections of the facility’s sorting and other processes, reviews of Diversion calculation methodology, and requests for an adequate explanation of the selection process of loads to be sorted or directed for disposal.

3.6.3 Other Jurisdiction Approval. If another jurisdiction has provided written approval to a particular Processing Facility, the City may, but is not required to, accept this approval in lieu of its own approval process.

3.6.4 Processing Facility Approval List. Upon request, Franchisee may obtain an approved Processing Facility list from the City Manager. Any requested changes or additions to the approved Processing Facility list shall be submitted to the City Manager in writing. Franchisee must obtain the City Manager’s written approval prior to Franchisee’s use of any facility not appearing on the approved Processing Facility list.

3.6.5 Approval Timeframe. Processing Facility approval shall be at the sole discretion of the City Manager. Approval decisions shall be made in a timely manner following a request for approval. The City estimates typical approval review may take up to thirty (30) days. The City may provide temporary approval for facilities in cases where a lengthy audit or additional information is being prepared or reviewed.

SECTION 4
ACCEPTANCE; WAIVER

Franchisee agrees to be bound by and comply with all the requirements of this Agreement. Franchisee waives Franchisee's right to challenge the terms of this Agreement under federal, state, or local law, or administrative regulation. Additionally, by and upon the execution of this Agreement, Franchisee agrees to the termination of the Prior Agreement as of the Effective Date, agrees to waive any and all rights under the Prior Agreement, and agrees to release and hold the City harmless from any of the City's obligations thereunder (excepting, however, the right to compensation accrued and unpaid for services provided prior to the Effective Date); provided, however, nothing contained in this provision is intended to or shall relieve Franchisee from any obligation existing under the Prior Agreement pertaining to insurance, indemnification, or other legal obligations to City or Franchisee's Customers (as opposed to obligations to provide service pursuant to the terms thereof), or from any obligation set forth in the Prior Agreement which are called out as surviving the termination thereof, and all such obligations, including specifically those indemnification obligations relating to Environmental Laws, general liability, and AB 939 shall survive the termination of the Prior Agreement.

SECTION 5
TERM

The term of this Agreement shall commence on October 26, 2017 and end at midnight on August 31, 2026, unless this Agreement is terminated at an earlier date pursuant to Section 15 hereof, or otherwise.

SECTION 6
CONDITIONS TO EFFECTIVENESS OF AGREEMENT

The satisfaction of each and all of the conditions set out below, each of which may be waived in whole or in part by City in writing, is a condition precedent to the effectiveness of this Agreement:

6.1 Accuracy of Representation. All representations and warranties made by Franchisee and set forth in this Agreement shall be accurate, true, and correct on and as of the Effective Date of this Agreement.

6.2 Absence of Litigation. There shall be no litigation pending in any court challenging the award of this Agreement to Franchisee or the execution of this Agreement or seeking to restrain or enjoin its performance.

6.3 Furnishing of Insurance and Bond or Letter of Credit. Franchisee shall have furnished evidence of the insurance and Surety required by Section 14 hereof, and shall comply with all ongoing requirements relating thereto.

6.4 Effectiveness of City Council Action. The City Council Ordinance approving this Agreement shall have become effective pursuant to California law.

SECTION 7
FRANCHISEE'S CONSIDERATION

As part of its consideration for the nonexclusive franchise rights contained herein, Franchisee shall provide a Franchise Fee in compliance with this Section 7.

7.1 Franchise Fee Payment. Franchisee shall pay to City, in lawful money of the United States, the Franchise Fee as calculated pursuant to Section 7.2 during the entire Term of this Agreement. Said Franchise Fee shall be due to City in four (4) quarterly payments, which shall be due on or before the forty-fifth (45th) day after the end of each calendar quarter (January-March, April-June, July-September, October-December). The Franchise Fee shall be delivered to the City Manager on or before May 15, August 14, November 14, and February 14. Franchise Fee payments shall be accompanied by a statement certified by an officer of Franchisee attesting to the accuracy of the amounts paid.

7.2 Franchise Fee Calculation. City intends the Franchise Fee calculation procedure to promote Diversion. Franchise Fee calculation is based on Franchisee's Gross Receipts and the percentage of Solid Waste Franchisee delivered to, and that was accepted by, various Processing Facilities and other disposal facilities during the immediately preceding calendar quarter. Franchise Fees due to the City shall be paid quarterly and accompanied by a calculation form developed and approved by the City, signed and completed by the Franchisee. The amount of Franchise Fees due to the City shall be determined by:

(a) calculating the total Gross Receipts derived from the Collection of Solid Waste in the City by Franchisee for the quarterly period;

(b) determining the percentage share of total Gross Receipts attributed to the Collection of Solid Waste according to the percentage of the total Collected Solid Waste delivered by Franchisee to each of the various Processing Facilities and other disposal facilities identified in this Section 7.2; and

(c) calculating and paying Franchise Fees on such Gross Receipts at the following rates based on the type of Processing Facility or other disposal facility utilized by the Franchisee during the quarter, such that on that portion of total Gross Receipts derived from Solid Waste Collected and delivered to:

(i) a Landfill, the Franchise Fee shall be 10%;

(ii) a MRF, the Franchise Fee shall be 3%;

(iii) a CDI Processing Facility, the Franchise Fee shall be 0%;

(iv) a Green Waste Composting Facility, the Franchise Fee shall be 0%;

(v) an end user approved by the City Manager in writing, the Franchise Fee shall be 0%; and

(vi) other disposal facilities, the Franchise Fee shall be 10%.

By way of example only, under the Franchise Fee calculation methodology described in this Section 7.2, a Franchisee that earns \$60,000 in Gross Receipts by collecting 100,000 tons of Solid Waste in a given calendar quarter, and delivers half of the Collected waste tonnage to the Landfill and the other half of the Collected waste tonnage to a MRF, would pay a total of \$3,900 in Franchise Fees (equal to a 10% Franchise Fee on that portion of the Gross Receipts attributed to Solid Waste landfilled and a lower 3% Franchise Fee on that portion of Gross Receipts attributed to Solid Waste delivered by Franchisee to a MRF).

7.3 Franchise Fee Review. The Franchise Fee calculation percentages specified in Section 7.2 will be reviewed by City on an ongoing basis, but not more often than annually, and if deemed necessary or appropriate by City, may be reduced or increased by approval of the City Council. City shall provide Franchisee with ninety (90) days advance written notice of any fee adjustment before such an adjustment shall take effect.

SECTION 8

ADDITIONAL CHARGES AND INTEREST FOR LATE PAYMENTS

In the event Franchisee fails to make any of the payments provided for in this Agreement on or before the dates due, Franchisee shall pay as consideration the following amounts:

8.1 A sum of money equal to the Franchise Fee due;

8.2 A sum of money equal to five percent (5%) of the amount due. This amount is required in order to defray those additional expenses and costs incurred by City by reason of the delinquent payment including, but not limited to, the cost of administering, accounting for, and collecting said delinquent payment and the cost to City of postponing services and projects necessitated by the delay in receiving the revenue; and

8.3 Interest on the delinquent sum (excluding the late payment charge referred to in Section 8.2) at the maximum legal rate, with said sum to be applied as interest for loss of use of the money due and to be calculated commencing on the date first due through and including the date upon which full payment, including all interest and penalties, is made.

SECTION 9

OPERATING PROCEDURES

9.1 General. Franchisee shall furnish all labor, supervision, materials, supplies, and equipment necessary to provide Solid Waste Handling Services in accordance with the terms of this Agreement.

9.2 Compliance with Applicable Laws. Franchisee shall fully comply with all Applicable Laws, including without limitation, Division 7 as it may be amended from time to time. Franchisee shall obtain and maintain, at Franchisee's sole cost and expense, all permits and licenses applicable to Franchisee's operations under this Agreement, including specifically, without limitation, a City of Irvine Business License.

9.3 Vehicles and Equipment. All Collection Vehicles and all Bins used by Franchisee in the performance of Solid Waste Handling Services hereunder shall comply with the vehicle and equipment requirements set forth in Division 7 and the provisions of this Section 9.

9.3.1 General Requirements for Collection Vehicles. All Collection Vehicles shall comply with all rules and regulations of the South Coast Air Quality Management District, the Air Resource Board, and any other regulatory body that may be in effect during the Term of this Agreement, as well as other federal, state and local laws and regulations that may be enacted during the Term of this Agreement. All Collection Vehicles shall meet or exceed such air quality standards as may be adopted by the forgoing regulatory bodies during the Term. All Collection Vehicles shall comply with the requirements in the South Coast Air Quality Management District's ("SCAQMD") Rule 1193 (Clean On-Road Residential and Commercial Refuse Collection Vehicles).

9.3.2 Specific Requirements for Collection Vehicles. Each Collection Vehicle utilized by Franchisee in the performance of Solid Waste Handling Services shall meet the following minimum standards:

(a) Each Collection Vehicle shall be fueled by clean air technology in accordance with Applicable Laws.

(b) Each Collection Vehicle shall be registered with the California Department of Motor Vehicles.

(c) Each Collection Vehicle shall be inspected regularly by Franchisee to ensure it meets the requirements of the California Vehicle Code and the California Highway Patrol. Franchisee shall provide copies of its Biannual Inspection of Terminal inspection reports to City within thirty (30) days of its receipt of such reports and shall make all records related to its Collection Vehicles, including Franchisee's maintenance records, available to City upon request by the City Manager.

(d) Each Collection Vehicle shall be equipped with devices capable of covering every open section of the Collection Vehicle in which Solid Waste may be placed and, while operating upon the public rights-of-way, shall be covered so as to prevent any Solid Waste from falling or being blown or otherwise dislodged from the Collection Vehicle.

(e) Each Collection Vehicle shall be continuously maintained so as to both: (1) meet the highest industry standards with regards to efforts to prevent liquid from leaking and to the degree possible ensure each Collection Vehicle is "watertight" and "leak-proof" and, (2) at all times comply with the provisions of all Applicable Laws, including, without limitation, the Vehicle Code and any applicable NPDES permit, with regard to materials leaking from Collection Vehicles. Franchisee shall be responsible to promptly clean any spillage or Solid Waste that leaks or otherwise escapes the Collection Vehicle.

(f) As frequently as determined necessary by the City Manager, each Collection Vehicle shall be painted and shall have routine body work performed so that such vehicles do not become unsightly, as determined by the City Manager.

(g) Franchisee's name, local or toll free telephone number, and a vehicle number shall be visibly printed or painted in letters not less than five (5) inches in height on both sides of each Collection Vehicle. Any other information or signage printed, painted, or displayed on Franchisee's Collection Vehicles, when such vehicles are providing Collection services within City Limits, shall be subject to approval by City. Collection Vehicles are not required to be for exclusive use in the City.

(h) Each Collection Vehicle shall be maintained in a clean and sanitary condition both inside and out and shall be washed at least once every seven (7) calendar days and steam cleaned on a regular basis.

(i) Each Collection Vehicle shall carry a broom, shovel, and operable fire extinguisher, and shall be equipped with a communication device sufficient to allow the driver to communicate directly with Franchisee's dispatcher and/or main office.

(j) Each Collection Vehicle shall be kept in good repair and working order, and shall be equipped with appropriate safety equipment, including any new safety related technologies that become standard in the waste industry, and at a minimum shall have a video monitor-based back-up system, or its equivalent. Franchisee shall keep a sufficient supply of replacement parts and equipment on hand to ensure adequate vehicle maintenance and timely and continuous performance of the Solid Waste Handling Services contemplated by this Agreement.

(k) Franchisee shall inspect each Collection Vehicle daily to ensure that all equipment is operating properly. Collection Vehicles which are not operating properly shall be removed from service until repaired and operating properly. Franchisee shall perform all scheduled maintenance functions upon Collection Vehicles in accordance with the manufacturer's specifications and schedule. Franchisee shall repair, or arrange for the repair of, all of its vehicles and equipment for which repairs are needed because of accident, breakdown or any other cause so as to maintain all equipment in a safe and operable condition. Franchisee shall keep accurate records of all Collection Vehicle maintenance and repair, recorded according to date and mileage, including signed verifications that repairs and maintenance have been properly performed, and shall make such records available to City upon request.

(l) No Collection Vehicle shall be utilized if it is leaking brake, hydraulic, or other fluids, and Franchisee shall clean up any leaks or spills from its Collection Vehicles per the NPDES permits in effect at the time. No fluids shall be washed into storm drains at any time. All NPDES dry-cleaning measures shall be complied with. All Collection Vehicles must be equipped with absorbent for such cleanup efforts.

(m) Franchisee shall annually furnish City a written inventory of all equipment, including Collection Vehicles, used in providing Solid Waste Handling Services pursuant to this Agreement. This inventory shall list all equipment by manufacturer, ID number, date of acquisition, type and capacity.

(n) Franchisee shall utilize Collection Vehicles of a size, weight, nature, and type so as to not be unreasonably intrusive on the community with respect to noise, emissions,

maneuverability, safety, and other factors, and to avoid or minimize pavement damage and wear and tear of the street or adjacent properties, as approved by the City Manager.

(o) Franchisee shall not load Collection Vehicles in excess of the manufacturer's recommendations or limitations imposed by state or local laws or regulations. Noise levels of equipment used for Collection shall not exceed 75db (seventy-five decibels) when measured at a distance of twenty-five (25) feet from the Collection Vehicle, five (5) feet from the ground.

(p) The average fleet age, when applied to all Collection Vehicles used by Franchisee within City Limits, shall be no more than ten (10) years of age at any time during the Term, nor may any Collection Vehicle be purchased for use within City Limits that is over seven (7) years of age at the time of purchase. For purposes of the average fleet age requirement, Collection Vehicles refurbished to specifications approved by the City Manager shall be considered as new when placed back into service.

9.3.3 Specific Requirements for Bins.

(a) Franchisee shall be responsible to maintain and replace, as necessary, all of its Bins.

(b) All of Franchisee's Bins shall be maintained by Franchisee in good repair, and any question as to the meaning of this standard shall be resolved by the City Manager.

(c) Franchisee shall ensure it maintains an accurate list that contains the total number and type of its Bins at each service address, as well as the frequency of Collection for each such Bin. Franchisee shall keep this list up to date at all times, provide it to City upon request, and shall include a current updated list with each Annual Report submitted pursuant to Section 10.1.

(d) All Bins which are used primarily for the disposal of Solid Waste containing liquids shall be maintained by Franchisee in a watertight condition; and shall at all times comply with the provisions of any applicable NPDES permit.

(e) Franchisee shall replace any damaged or unsightly Bins, and shall remove any graffiti that appears on its Bins, within one (1) business day after becoming aware of the damage or unsightly condition.

(f) All Bins shall be kept freshly painted in a uniform fashion.

(g) Franchisee's name and local telephone number shall be placed on all front load bins and roll-off boxes used for Solid Waste Handling Services within the City, in letters not less than three (3) inches high, so as to be visible when the Bin is placed in use. Any smaller wheeled style automated carts shall contain, at a minimum, Franchisee's name and a distinct logo or identification number.

9.4 Performance Standards. Franchisee shall perform Solid Waste Handling Services hereunder in a workmanlike manner consistent with good housekeeping standards

and all relevant provisions of Applicable Laws, including without limitations, the provisions of Division 7.

9.5 Noise and Disruption. Franchisee shall perform Solid Waste Handling Services hereunder in such a manner as to minimize noise and other disruptive impacts including, without limitation, those upon traffic.

9.6 Restriction on Manner of Collection.

9.6.1 No Commingling Without Consent. In order to ensure City complies with the provisions of AB 939, and to accurately account for and report the amount of Solid Waste including Recyclable Material Collected within the City Limits and processed, Recycled and/or disposed pursuant to this Agreement, no load of Solid Waste Collected by Franchisee from within the City Limits shall be commingled with Solid Waste collected by Franchisee from any person or place outside the City Limits or outside the area governed by this Agreement. Notwithstanding the foregoing, City, in its sole and absolute discretion, may allow Franchisee to commingle Solid Waste or Recyclable Material it Collects within the City Limits with that collected from persons or places outside the City Limits or outside the area governed by this Agreement, if:

(a) Franchisee proposes a means acceptable to City by which to accurately identify and report the Solid Waste and Recyclable Material collected from both within and outside the City Limits and specifically within areas covered by this Agreement as distinctive from areas not covered by this Agreement; and

(b) Franchisee obtains written consent from the City Manager to implement commingling pursuant to any such proposal; and

(c) Franchisee's proposal as approved by the City Manager is successfully implemented such that timely and accurate information regarding the Solid Waste and/or Recyclable Material Collected from within the City Limits, and specifically within areas covered by this Agreement, and the amount of Solid Waste and/or Recyclable Material Collected within the City that is Diverted from Landfills as a result of Recycling or other programs, is provided for all reporting purposes; and

(d) Franchisee's proposal meets all obligations that may exist relating to the use of certain Landfills for deposit of Solid Waste Collected in the City, including any such obligations imposed by the County Agreement.

9.6.2 Withdrawal of Consent for Commingling. The City Manager may, by giving written notice to Franchisee, with or without cause, withdraw any consent given to Franchisee by which commingling is authorized.

9.7 Precautions Regarding the Collection of Hazardous Materials.

9.7.1 Contractual Prohibition Requirement. Franchisee shall include as a condition to its contractual agreement with its Customers a provision prohibiting disposal of Hazardous Waste in any of Franchisee's Collection Vehicles, Bins, or other equipment.

9.7.2 Load Check Program. Franchisee shall implement a load check program that includes, at a minimum, a visual check of all Bins to be emptied to protect against inclusion of Hazardous Waste. Franchisee shall prepare a written record of all Hazardous Waste discovered during load checks. The records shall comply with all City, county, state and federal Hazardous Waste Regulations, shall be maintained for a minimum of five (5) years following the expiration of the Franchise, and shall be made available to the City Manager upon request. Further, prior to destroying or discarding any of such records, Franchisee shall notify City, and upon City's election, Franchisee shall deliver such records to City. Franchisee shall handle and dispose of any such Hazardous Materials in accordance with Applicable Laws.

9.8 Service Routes. Franchisee hereby acknowledges and agrees that the City Manager shall have the authority to set Solid Waste Handling Service routes, including but not limited to entry and exit points to and from Commercial Premises, and to direct Franchisee's Collection Vehicles to follow such routes, when necessary, in the City Manager's sole discretion, to reduce negative impacts on residential areas and City infrastructure.

9.9 Commercial Premises Recycling Services.

9.9.1 Franchisee shall promote, offer and provide a Recycling program for its Customers (the "Commercial Premises Recycling Program") that at a minimum meets the standards required under AB 341, and such program shall be consistent with any Ordinances adopted by the City to implement AB 341. Franchisee shall also assist the City in identifying Customers that are not in compliance with the Recycling requirements set forth in AB 341. Franchisee shall provide periodic, but not less than annually, on-site visits to its Customers to offer and promote Recycling services, determine if such Customer is receiving Recycling services from a third party in compliance with the requirements of AB 341, attempt to resolve any logistical detriments to providing Recycling services thereunder, and notify and request assistance from City for potential follow-up action where there is repeated refusal to implement the Commercial Premises Recycling Program. Concurrently with Franchisee's submittal of quarterly and Annual Reports, Franchisee shall submit a report to City that summarizes the results of each on-site visit, including, without limitation, the date and time of the visit, Customer contact information, and visit results, all in a form approved by City. Each such report shall also notify City of any Customer who refused Franchisee's request for an on-site visit, including, without limitation, the Customer's name and contact number, the date and time Franchisee contacted the Customer, and the reason for the Customer's refusal to schedule an on-site visit. City agrees to provide reasonable assistance to Franchisee, which may include adding its name to materials prepared for distribution to its Customers regarding AB 341 requirements, consideration of ordinances which may assist with gaining compliance with AB 341 requirements, and occasional participation by City personnel in meetings with Customers who repeatedly refuse to implement the Commercial Premises Recycling Program. Franchisee shall be responsible for ensuring that its Commercial Premises Recycling Program, combined with its other programs, enables it to achieve the required Diversion rates specified in this Agreement and may be required to modify its program from time to time to meet such Diversion requirements.

9.9.2 Franchisee shall provide commingled or Source Separated Recycling Collection services to all of its Customers. Franchisee shall Collect Recyclable Material from each

Customer at frequencies agreed upon with such Customer, but not less than once per week. As of the Effective Date, Customers shall be allowed to deposit, at a minimum, the following materials in Recycling Bins for Collection by Franchisee: paper (all types – anything that “tears”), cardboard, wooden pallets, beverage containers, plastics (including, without limitation, PET, HDPE,#3-7), plastic film, plastic bags, polystyrene packaging material, metals, and other Recyclable materials standard in the Recycling industry, as determined by the City Manager. Franchisee agrees to meet from time to time with City, as needed, and in good faith, to consider modifications to the above minimum list of Recyclable Material, and/or to address developments in processing technologies, emerging uses for various types of materials, changes in available markets, or other relevant issues.

9.9.3 On an ongoing basis throughout the Term, Franchisee shall make a proactive effort, utilizing outreach methods and frequency approved by the City Manager, to make all Commercial Premises aware of the availability of its Recycling services and programs. Such efforts shall include, without limitation, the annual publication and distribution of a brochure specifically outlining and describing its Recycling services and programs to all applicable Customers in City. As part of its quarterly reports to City, Franchisee shall provide details on such efforts to inform its Customers that its Recycling services are available in a form approved by the City Manager, including but not limited to provision of business names, business contacts, and phone numbers of such Customers contacted, and, if requested by City, samples of materials provided to said Customers during the subject quarter.

9.10 Commercial Organics Program. Franchisee shall promote, offer and provide an Organics Collection program to all of its Customers (the “Commercial Organics Program”), to be approved by the City Manager, that at a minimum meets the requirements of AB 1826. Franchisee’s Commercial Organics Program shall provide for the Collection of Organics separately from other Solid Waste, in Bins, bags, or by other methods approved in advance by the City Manager, and shall thereafter deliver or arrange for the on-going delivery of such Collected Organics to a Diversion facility approved by City. Franchisee shall also assist City in identifying Customers that are not in compliance with the requirements set forth in AB 1826. Franchisee shall provide periodic, but not less than annually, on-site visits to its Customers to offer and promote its Commercial Organics Program, determine if such Customer is receiving Organics services from a third party in compliance with the requirements of AB 1826, attempt to resolve any logistical detriments to providing services offered thereunder, and notify and request assistance from the City for potential follow up action where there is a repeated refusal to implement the Commercial Organics Program. Concurrently with Franchisee’s submittal of its quarterly and Annual Reports, Franchisee shall submit a report that summarizes the results of each on-site visit, including, without limitation, the date and time of the visit, Customer contact information, and visit results, all in a form approved by City. Each such report shall also notify City of any Customer who refused Franchisee’s request for an on-site visit, including, without limitation, the Customer’s name and contact number, the date and time Franchisee contacted the Customer, and the reason for the Customer’s refusal to schedule an on-site visit. City agrees to provide reasonable assistance to Franchisee, which may include adding its name to materials prepared for distribution to Customers regarding AB 1826 requirements, consideration of ordinances which may assist with gaining compliance with AB 1826 requirements, and occasional participation by City personnel in meetings with Customers who repeatedly refuse to

implement the Commercial Organics Program. Franchisee shall be responsible for ensuring that its Commercial Organics Program, combined with its other programs, enables it to achieve the required Diversion rates specified in this Agreement and may be required to modify its program from time to time to meet such Diversion requirements. Franchisee shall produce, keep current, and provide information specifically outlining its Commercial Organics Program, which shall specifically include the annual publication and distribution of a brochure describing this service to all applicable Customers in City. On an ongoing basis throughout the Term, Franchisee shall make a proactive effort, utilizing outreach methods and frequency approved by the City Manager, to make all Commercial Premises aware of the availability of its Commercial Organics program. Such efforts shall include, without limitation, the annual publication and distribution of a brochure specifically outlining and describing its Commercial Organics program to all applicable Customers in City. As part of its quarterly reports to City, Franchisee shall provide details on such efforts to inform its Customers that its Commercial Organics program is available in a form approved by the City Manager, including but not limited to provision of business names, business contacts, and phone numbers of such Customers contacted, and, if requested by the City Manager, samples of materials provided to said Customers during the subject quarter.

9.11 Other Collection Programs As May Be Required by Law. In the event CalRecycle, or any federal or state law or regulation, imposes upon City or Franchisee a requirement for the implementation of any Source Separated program for the Collection of any type of discarded material (whether or not meeting the definition of Solid Waste hereunder) not already covered by this Agreement but applicable to Franchisee's Customers, Franchisee shall design and present a program to City to comply with such requirement, which program shall meet the City Manager's reasonable approval ("Proposed Program").

Franchisee shall present the Proposed Program within ninety (90) days of a request to do so by City. The Proposed Program shall include a detailed description of the following: (1) method of Collection; (2) equipment to be used; (3) materials to be Collected; and (4) proposed promotional and public education materials.

9.12 Guaranteed Minimum Franchisee Recycling Rate. Franchisee shall conduct its operations hereunder such that a minimum of fifty percent (50%) of all Solid Waste Collected from Franchisee's Customers (taking into account Diversion achieved by efforts other than its services) is Diverted from disposal at Landfills for each calendar year beginning January 1, 2018 ("Recycling Diversion Requirement"). For the purposes of this Section, Diversion includes only Recycling methods, Transformation (and/or other forms of converting Solid Waste into energy), and other processes which are accepted by the State toward meeting City's Diversion goal under AB 939. Franchisee shall not be entitled to a reduction in the Recycling Diversion Requirement, or a rate adjustment, if or when:

- Transformation or other facilities are no longer available for any reason;
- CalRecycle Diversion credit under AB 939 or other Applicable Laws is no longer provided for Solid Waste sent to a Transformation facility; or
- CalRecycle Diversion credit under AB 939, AB 1594, or other Applicable Laws

expires for Green Waste used as alternative daily Landfill cover.

At such time as City discovers that CalRecycle Diversion credit under AB 939 or other Applicable Law will no longer be provided for Solid Waste sent to a Transformation facility, City shall issue formal notice to Franchisee that any Solid Waste delivered to a Transformation facility from the date specified in City's notice through the end of that calendar year shall be subject to the 10% Franchise Fee, and shall not be eligible for Diversion credit. Notwithstanding anything in this Agreement to the contrary, Franchisee's Diversion requirements under this Agreement shall be subject to all Applicable Laws, such that if Diversion requirements in the State of California increase, Franchisee shall be required to comply with such increased Diversion requirement.

To comply with this Section, Franchisee is required to submit timely tonnage reports supporting the Recycling Diversion Requirement, and to provide supporting documentation as may be requested by City or its designee as part of, or independent of, an audit. Failure to meet, and fully support, the Recycling Diversion Requirement may result in termination of this Agreement pursuant to Section 15.

9.12.1 Implementation of Additional Diversion Services. In the event City does not meet the current Diversion goal of fifty percent (50%) imposed by AB 939, and City finds that Franchisee is not achieving the minimum fifty percent (50%) Diversion requirement pursuant to this Section 9.12, City may direct Franchisee to perform additional services (including the implementation of new Diversion programs) or modify the manner in which it performs existing services, and Franchisee agrees to do so.

9.13 Compliance and Penalties. City may provide Franchisee with written notice of violations of this Section. If Franchisee fails to cure any noticed violation within a reasonable period of time determined in City's sole discretion, the end date of which is stated in the written notice, the City may charge Franchisee up to Two Hundred Fifty Dollars (\$250) per day for each violation identified in the written notice. Upon request, City may in its sole discretion, but is not required to, extend Franchisee's period to cure. The penalties in this Section are in addition to any penalties assessed pursuant to other provisions in this Agreement.

SECTION 10

REPORTING REQUIREMENTS

The Parties acknowledge that City will require reporting at various intervals by which information important to City can be compiled and analyzed. Throughout the Term the Parties agree to work together to address City's needs with respect to the information to be contained in reports prepared by Franchisee. The following is intended as a starting point in order to have established an objective baseline for reporting, but the frequency and content of the reports called out below may be changed by agreement of the Parties; provided any such change is approved by the City Manager in writing.

10.1 Annual Report. On or before the 45th day following January 1st of each year during the Term of this Agreement, Franchisee shall submit a written annual report and operations plan through completion and submittal of a form developed and approved by the

City Manager (each such report, an “Annual Report”). The Annual Report shall be accompanied by a statement certified by an officer of Franchisee attesting to the accuracy of the information provided. The Annual Report shall include, but may not be limited to, information on the amount of Solid Waste Collected, disposed of, and Diverted, the methods utilized to Collect such Solid Waste, and identifying the disposal and non-disposal facilities to which the Franchisee delivered such Solid Waste. At a minimum, the Annual Report shall include all of the following:

10.1.1 Total Tonnage Collected and Diverted. A summary of the total tons of Solid Waste Collected in City in the preceding year as well as a summary of the total tonnage Diverted from the State’s landfill systems during that time frame.

10.1.2 State-Mandated Compliance Reports. Information and State-Mandated Compliance Reports, in a form and content approved by the City Manager.

10.1.3 Yearly Comparison. In the second year and each subsequent year during the Term of the Agreement, Franchisee shall provide a year-by-year comparison, by weight, of Solid Waste disposal and Diversion.

10.1.4 Gross Receipts and Franchise Fee. Franchisee shall provide a total revenue statement, certified by the chief financial officer of Franchisee, setting forth the quarterly Franchise Fees paid and the basis for the calculation thereof, including specifically a breakdown of sources of revenue included in Gross Receipts and the amount of revenue derived from each such source comprising Gross Receipts.

10.1.5 Landfill and Processing Facilities. Franchisee shall provide the name and location of all Landfills, Processing Facilities, end users, and other disposal facilities used to dispose of material Collected from the City.

10.1.6 Customer/Bin Counts. Franchisee shall provide the number of Customers that received routine commercial service, the number of Customers that received Temporary Bin Service, and the Bin data required to be compiled and submitted by Franchisee pursuant to Section 9.3.3. In addition, Franchisee shall provide the number of Customers serviced in the City by processing type, including: Landfill Customers, MRF Customers, and Green Waste Composting Facility Customers. Also, Franchisee shall include the number of Source-Separated Recycling Customers.

10.1.7 Diversion Efforts. Franchisee shall describe Diversion efforts provided to Customers. Include staffing time, educational information provided, and other activities provided to help promote Recycling within commercial and industrial businesses.

10.1.8 Franchisee Recycling Plan. Franchisee shall provide an annual update to the Recycling Plan required by Section 10.3. In addition, Franchisee shall summarize each previous year’s Recycling Plan.

10.1.9 Vehicle List. Franchisee shall provide an updated list of vehicles to be used to provide Solid Waste Handling Services in the City.

10.1.10 Processing Facility Listing. Franchisee shall provide an updated list of Processing Facilities to be used by Franchisee.

10.2 Quarterly Summary Reports. No later than forty five (45) days following each calendar quarter during the Term of this Agreement, Franchisee shall submit quarterly reports including the same information required by Section 10.1 under the headings: Tonnage, Diversion, and State-Mandated Compliance Reports; Gross Receipts and Franchise Fee; Landfill and Processing Facilities; Customer Counts; and Diversion Efforts.

The quarterly reports shall be submitted to the City Manager. Each quarterly report shall be accompanied by a statement, included at the bottom of such report, by the chief financial officer of Franchisee certifying to the accuracy of the report.

The Franchise shall maintain in its files for the Term of this Agreement, and at least three (3) years thereafter, tonnage receipts provided to Franchisee by each Landfill or Processing Facility used by Franchisee to dispose of waste Collected in the City. Franchisee shall provide such receipts for the audit financial analysis or upon request of City. This data will be used by City to verify Franchisee's quarterly reports. City may require, in its discretion, and Franchisee shall provide, additional information in connection with the quarterly reports, such as the number and types of businesses serviced, or other information City deems useful or appropriate.

10.3 Franchisee Recycling Plan.

10.3.1 Recycling Plan. Franchisee shall develop and submit a Recycling Plan which must be approved in writing by the City Manager before Franchisee commences Solid Waste Handling Services under this Agreement. Approval of the Recycling Plan shall be in the City Manager's sole discretion. Approval shall be based on the City Manager's review of the following Recycling Plan requirements. The City Manager may authorize, in writing, Franchisee to commence Solid Waste Handling Services while the Franchisee's Recycling Plan is under review. Should the City Manager subsequently reject Franchisee's Recycling Plan, Franchisee must immediately cease operations unless otherwise authorized, in writing, by the City Manager to continue services while Franchisee develops a new Recycling Plan. The Recycling Plan shall include the following:

- (a) Statement of Overall Recycling Goals and Focus.
- (b) Statement of Targeted Means to Increase Diversion Opportunities.
- (c) Processing Facilities and Diversion information including:
 - Processing Facilities to be used and their respective types.
 - Estimated Solid Waste weight to be Collected by Franchisee within the City Limits in the current calendar year.
 - Estimated Solid Waste Collected within the City Limits to be delivered by Franchisee and accepted by each Processing Facility in the current calendar year.

- How, if at all, Solid Waste will be processed between Collection and delivery to a Processing Facility.
 - The Diversion rate of each Processing Facility.
- (d) Marketing and Education Strategy information including:
- Franchisee staff and dedicated hours per week focused on Diversion.
 - Information Franchisee intends to provide its Customers to encourage Diversion (e.g. brochures, guides, price incentives).
- (e) Target Goals information including:
- Franchisee's Diversion Target Goals, in tonnage, by material type and Processing Facility.
 - Franchisee's Customer Target Goals to increase the number of Customers that have Recycling, reuse, composting, or other Recycling services, including efforts to increase Source Reduction.

10.3.2 Annual Update. Franchisee shall submit on an annual basis an updated Recycling Plan as described in this Section 10.3. In addition, the annual Franchise Recycling Plan shall summarize each previous year.

10.4 Adverse Information. Franchisee shall provide City copies of all reports, pleadings, applications, notifications, communications, and documents, as well as copies of all decisions, correspondence, and actions, and other material adversely affecting this Agreement, or related in any manner to Franchisee's performance of this Agreement, submitted or received by Franchisee to or from the United States Environmental Protection Agency, CalRecycle, the California Regional Water Quality Control Board, and any other federal, state, regional, or local regulatory agency. Copies shall be submitted to City simultaneously with Franchisee's filing of such matters with said agencies. Franchisee's routine correspondence to said agencies need not be automatically submitted to City, but shall be made available to City upon written request. Franchisee shall submit to City such other information or reports in such forms and at such times as City may reasonably request or require.

10.5 Other Reporting Requirements. All reports and records required under this or any other Section of this Agreement shall be furnished at the sole expense of Franchisee. Franchisee agrees to submit such reports and information on computer discs or electronically in a format compatible with City's computer system as it may be upgraded from time to time, if requested by City. A copy of each of Franchisee's annual and other periodic public financial reports and those of each of its parent, subsidiary, and affiliated corporations and other entities, as City requests, shall be submitted to City within thirty (30) days after City giving

notice to Franchisee of such a request. Franchisee shall submit to City such other information or reports in such forms and at such times as City may reasonably request or require.

10.6 Failure to Report. The refusal, failure, or neglect of Franchisee to file any of the reports required by this Agreement within thirty (30) days such report is due, or the inclusion of any materially false or misleading statement or representation made knowingly by Franchisee in such report, shall be deemed a material breach of this Agreement, and shall subject Franchisee to all remedies, legal or equitable, which are available to City under this Agreement or otherwise. In the event City elects to suspend Franchisee's franchise rights for Franchisee's failure to file a report, as a condition to Franchisee's reinstatement, Franchisee shall be required to pay to City a penalty in the amount of Five Hundred Dollars (\$500) for each thirty (30) day period in which the applicable report is delinquent.

10.7 Confidentiality. To the extent permitted by law, City shall endeavor to keep confidential any confidential information, such as Customer information or information regarding Franchisee's financial matters, that is submitted in connection with any reports required hereunder.

SECTION 11

AB 939 OBLIGATIONS, GUARANTEE, AND INDEMNIFICATION

11.1 Warranties and Representations.

(a) Franchisee warrants and represents that it is familiar with City's SRRE, it is familiar with City's waste stream, and it has the ability to and will provide sufficient programs and services to ensure City will meet or exceed the Diversion requirements (including, without limitation, amounts of Solid Waste to be Diverted, time frames for Diversion, and any other requirements) set forth in AB 939, and all amendments thereto, with respect to the Customers it services hereunder.

(b) Without regard to any related indemnification requirements, Franchisee guarantees to City that it shall carry out its obligations under this Agreement so that (1) both it and City will at all times be in compliance with the requirements of all Applicable Laws, including specifically AB 939, AB 341, and AB 1826, and (2) City will meet or exceed the Diversion requirements (including, without limitation, amounts of Solid Waste to be Diverted, time frames for Diversion, and any other requirements) set forth in AB 939, AB 341, and AB 1826, as well as the regulations implementing each of them and any and all amendments to each of them, with respect to the Customers Franchisee services hereunder. In meeting this obligation, Franchisee shall be mindful of and comply with all requirements of the County Agreement, including specifically, without limitation, the requirements thereof generally relating to (i) the delivery of Solid Waste only to transfer stations that provide quarterly certifications of Solid Waste delivered, and (ii) the disposal of residual Solid Waste that remains after Recycling processes have been completed. Commencing immediately upon the Effective Date, Franchisee shall implement all programs necessary to ensure City complies with all state-mandated programs relevant to the services provided hereunder and shall perform public education, awareness, and outreach activities as required by any state-mandated program or as reasonably required by the City Manager. Franchisee shall submit to the City Manager for review and approval all proposed written public

educational, awareness and outreach materials. Franchisee shall engage in any required education, awareness, and outreach activities within thirty (30) days of commencing services to any new Customers, and on not less than an annual basis with all existing Customers. Franchisee shall provide City with quarterly and annual written reports in a form acceptable to the City Manager and adequate to meet City's filing and reporting requirements with CalRecycle and the County of Orange, including any associated with AB 939, AB 341, and AB 1826 throughout the Term of this Agreement. At City's request, Franchisee shall be responsible to prepare, or assist City with the preparation of, all reports and other information as may be required by any agency, including specifically, the State of California, in order to comply with any Applicable Laws related to the services contemplated by this Agreement.

11.2 Mutual Cooperation. City and Franchisee shall reasonably cooperate in good faith with all efforts by each other to meet City's Diversion and other compliance requirements imposed by AB 939, AB 341, AB 1826, and other Applicable Laws. In this regard, City's obligations shall include, without limitation, making such petitions, requests and applications as may be reasonably requested by Franchisee for time extensions in meeting Diversion goals, reductions in Diversion goals, or other exceptions from the terms of AB 939, AB 341, AB 1826, and other Applicable Laws.

11.3 Performance Requirements. Franchisee's obligations pursuant to the provisions of this Section shall include, but not be limited to, the following terms:

11.3.1 Indemnification Requirements. Franchisee agrees to defend, with counsel approved by City, indemnify, and hold harmless the City Indemnitees from and against all fines and/or penalties and other liabilities which may be imposed by CalRecycle or any other regulatory agency if (1) Franchisee fails or refuses to timely provide information relating to its operations which is required pursuant to this Agreement or any Applicable Laws and such failure or refusal prevents or delays City from submitting reports required by Applicable Laws in a timely manner; or (2) the Source Reduction and Recycling goals, Diversion goals, program implementation requirements, or any other requirements of Applicable Laws are not met with respect to the Customers Franchisee services hereunder.

11.3.2 Assistance to City; Payment of Fees, Fines, and Penalties. In addition, Franchisee agrees, at its sole cost and expense, to:

- (a) Assist City in responding to inquiries from CalRecycle;
- (b) Assist City in preparing for, and participating in, CalRecycle's biennial review of City's compliance with Applicable Laws;
- (c) Assist City in applying for an extension, if so directed by City;
- (d) Assist City in any hearing conducted by CalRecycle relating to City's compliance with Applicable Laws;
- (e) Assist City in the development and implementation of a public awareness and education program that is consistent with Applicable Laws, as well as any related requirements of Applicable Laws;

(f) Provide City with advice on Recycling, Source Reduction, and other technical assistance related to compliance with the Applicable Laws;

(g) Defend, with counsel acceptable to City, the City Indemnitees against the imposition of fines and/or penalties, or any other liabilities, issued by CalRecycle as a result of Franchisee's failure to comply with Applicable Laws, including, without limitation, AB 939, AB 341, and AB 1826; and

(h) Be responsible for and pay, any fees, penalties or other costs imposed against City by CalRecycle and Indemnify and hold harmless City against any fines, penalties, or other liabilities, levied against it for violation of any state-mandated Diversion requirements, or violation of any other provision of Applicable Laws; provided, however, Franchisee's obligation to indemnify City for any penalties or fines set forth in this sub-paragraph shall be in proportion to the amount of such fines or penalties imposed because of Franchisee's delay or failure to perform its obligations hereunder.

11.4 Annual Compliance Review. City intends to review Franchisee's performance annually at its expense to ensure compliance with the terms and provisions of this Agreement ("Annual Compliance Review"). At a minimum, City intends to have internal staff or outside consultants review Franchisee's performance to ensure ongoing compliance with the terms hereof, including, but not limited to, the payment of required fees, performance of the Solid Waste Handling Services stated herein, implementation of programs required under the Agreement, Franchisee's maintenance and upkeep of records, and Franchisee's compliance with all Applicable Laws. Franchisee shall provide any and all information reasonably requested by City in connection with its efforts to ensure compliance with the terms hereof, regardless of whether such information is specifically otherwise called out herein as an item that Franchisee is required to maintain and provide to City.

SECTION 12

FRANCHISEE'S BOOKS AND RECORDS; AUDITS

12.1 Examination of Records. Franchisee shall maintain all records relating to the Solid Waste Handling Services provided hereunder, including but not limited to Customer lists, billing records, accounts payable records, maps, service requests, cash receipts records, AB 939 compliance records, and other documents and materials which reasonably relate to Franchisee's compliance with and performance of the provisions of this Agreement (the "Records"), for the full Term of this Agreement, and an additional period thereafter of not less than three (3) years, or any longer period required by law. City shall have the right, upon five (5) business days advance notice, to inspect the Records. Such Records shall be made available to City at Franchisee's regular place of business, but in no event outside the County of Orange.

12.2 CERCLA Defense Records. City views the ability to defend against CERCLA and related litigation as a matter of great importance. For this reason, the City regards the ability to prove where Solid Waste Collected in the City was taken for disposal, as well as where it was not taken, to be matters of concern. Franchisee shall maintain data retention and preservation systems which can establish where Solid Waste Collected in the City was

landfilled (and therefore establish where it was not landfilled) for not less than five (5) years following the termination of this Agreement, and agrees to notify City's Risk Manager, City Clerk and City Attorney before destroying such records thereafter. At any time, including after the expiration of the Term hereof, Franchisee shall provide copies of such records to City. The requirements of this Section shall survive the expiration of the Term of this Agreement.

12.3 Audits by City. City shall have the right to conduct or to contract with an independent auditing firm to perform an audit, at City's expense, of Franchisee's records (the "City Audit") to ensure compliance with the provisions of this Agreement on an annual and/or as-needed basis, to be determined by the City. The City Audit shall include, without limitation, a review of Franchisee's cash receipts records, Solid Waste tonnage Collection, Diversion, and other related records, as well as those of each of its parent, subsidiary and/or affiliated companies, as appropriate, to determine Franchisee's Gross Receipts, the accuracy of Franchise Fees paid, and such other information as is reasonably deemed appropriate by the City Manager to evaluate Franchisee's performance hereunder. As part of the City Audit Franchisee's Customer's accounts and related records may be subject to review. While Franchisee will not be required to submit detailed account records, such as the names and addresses of Customers, to the City in connection with required reports hereunder, Franchisee shall make such records and information available for review in connection with the City Audit at Franchisee's business offices.

Should any City Audit reveal an underpayment of any Franchise Fee required pursuant to this Agreement, the amount of such underpayment shall become due and payable to City not later than fifteen (15) days after written notice of such underpayment is sent to Franchisee by City, complete with any additional late charges as set forth herein. If a City Audit reveals inaccuracies or inconsistencies in more than five percent (5%) of all Customer accounts, either with Franchisee's operations or billing systems, or an underpayment of Franchise Fees of more than three percent (3%), Franchisee shall bear the entire cost of such City Audit and shall pay a sum necessary to cover such costs to the City within thirty (30) days of demand.

12.4 Inspection. City shall have the right to inspect Franchisee's books and records related to the Franchisee's performance under this Agreement. The inspections shall be allowed at any time during normal business hours, but City shall provide at least two (2) days advance written notice before City commences an inspection of Franchisee's books and records. Among other things, City shall be allowed to review Franchisee's contracts with its Customers, and shall be allowed to communicate directly with Franchisee's Customers, for the purpose of determining whether Franchisee is in compliance with this Agreement. City shall not reveal any trade secrets or proprietary information obtained during their review of Franchisee's books and records.

SECTION 13 **RULES AND REGULATIONS OF CITY MANAGER**

The City Manager shall have the power to establish rules and regulations respecting the accumulation, Collection and transportation of Solid Waste not inconsistent with the provisions of this Agreement, providing such rules and regulations are found to be reasonably necessary by the

City Manager for enforcement of the provisions of this Agreement, or any and all applicable laws and ordinances, and for the preservation of the public peace, health and safety. Franchisee agrees to comply with any and all such rules and regulations.

SECTION 14
INDEMNIFICATION; LEGAL EXPENSES; BONDS; INSURANCE

14.1 Indemnification of City.

14.1.1 General Indemnification.

(a) Franchisee hereby agrees to and shall indemnify and hold harmless the City Indemnitees from and against any and all loss, liability, penalty, forfeiture, claim, demand, action, proceeding or suit in law or equity of any and every kind and description (including, but not limited to, injury to and death of any person and damage to property, or for contribution or indemnity claimed by third parties) arising out of, resulting from, and/or in any way connected with this Agreement including: (1) the negligence or willful misconduct of Franchisee, its officers, employees, agents, and/or subcontractors in performing services under this Agreement; (2) the failure of Franchisee, its officers, employees, agents, and/or subcontractors to comply in all respects with the provisions of this Agreement (including without limitation Franchisee's obligation to ensure City complies with the requirements of the County Agreement), all Applicable Laws (including, without limitation, the Environmental Laws), ordinances and regulations, and/or applicable permits and licenses; (3) the acts of Franchisee, its officers, employees, agents, and/or subcontractors in performing services under this Agreement for which strict liability is imposed by law (including, without limitation, the Environmental Laws); and (4) any challenge to the award of, or any provisions of this Agreement (including any claim that the application of any provision hereof violates any provision of the California Constitution). The foregoing indemnity and hold harmless provisions shall apply regardless of whether such loss, liability, penalty, forfeiture, claim, demand, action, proceeding, suit, injury, death or damage is also caused in part by any of City Indemnitees' negligence, but shall not extend to matters resulting from the City Indemnitees' sole negligence, or willful misconduct. Franchisee further agrees to and shall, upon demand of City, at Franchisee's sole cost and expense, defend (with attorneys acceptable to City) the City Indemnitees against any claims, actions, suits in law or equity or other proceedings, whether judicial, quasi-judicial or administrative in nature, arising or resulting from any of the aforementioned events, and to reimburse City for any and all costs and expenses City incurs in providing any such defense, either before, during or after the time Franchisee elects to provide such defense, including any and all costs incurred in overseeing any defense to be provided herein by Franchisee. Franchisee shall receive credit towards this indemnity obligation for any sums received by or for the benefit of City from insurance obtained by Franchisee for the benefit of City

(b) Franchisee, upon demand of City, made by and through the City Attorney, shall protect City and appear in and defend the City Indemnitees in any claims or actions by third parties, whether judicial, administrative or otherwise, including, but not limited to disputes and litigation over the definitions of "Solid Waste" or "Recyclable Material," the scope of the rights granted herein, conflicts between the rights granted herein and rights asserted by other Persons, or the limits of City's authority with respect to the grant of licenses, or agreements,

exclusive or otherwise, asserting rights under the Dormant Commerce Clause or any other federal or state laws to provide Collection services in the City.

(c) The provisions of this Section shall not terminate or expire, shall be given the broadest possible interpretation, and shall survive the expiration or earlier termination of this Agreement.

14.1.2 Hazardous Substances Indemnification.

(a) Without regard to any insurance coverage or requirements (but giving credit to Franchisee for any sums received by or for the benefit of City from insurance obtained by Franchisee for the benefit of City), and without limiting the above general indemnification obligation in any way, Franchisee specifically agrees to and shall, to the maximum extent permitted by law, defend (with counsel acceptable to City) reimburse, indemnify, and hold the City Indemnitees harmless from and against any and all claims, actions, liabilities, damages, demands, judgments, losses, costs, liens, expenses, suits, actions, attorneys' fees, consultant fees, penalties and any and all other losses, damages, fees and expenses of whatever kind or nature ("Claims") (including but not limited to response costs, investigative costs, assessment costs, monitoring costs, treatment costs, cleanup costs, removal costs, remediation costs, and similar costs, damages and expenses) that arise out of or are alleged to arise out of or in any way relate to any action, inaction or omission of Franchisee that:

(i) results in any demand, claim, notice, order, or lawsuit, asserting that any of the Indemnitees is liable, responsible or in any way obligated to investigate, assess, monitor, study, test, treat, remove, remediate, or otherwise cleanup, any Hazardous Contaminant (as defined herein); or

(ii) relates to material Collected, transported, Recycled, treated or disposed of by Franchisee.

(b) Franchisee's obligations pursuant to this Section shall apply, without limitation, to:

(i) any Claims brought pursuant to or based on the provisions of CERCLA, RCRA, the California Hazardous Substances Account Act (California Health & Safety Code Sections 25300 et seq.), the California Hazardous Waste Control Laws (California Health and Safety Code Sections 25100 et seq.), the California Porter-Cologne Act (California Water Code Section 13000 et seq.), and any and all amendments and regulations thereto, and any other Federal, State, regional or local environmental statutory or regulatory provision;

(ii) any Claims based on or arising out of or alleged to be arising out of the ownership, use, lease, sale, design, construction, maintenance or operation by Franchisee of any facility;

(iii) any Claims based on or arising out of or alleged to be arising out of the marketing, sale, distribution, storage, transportation, disposal, processing or use of any materials recovered by Franchisee;

(iv) any Claims based on or arising out of or alleged to be arising out of any breach of any express or implied warranty, representation or covenant arising out of or in connection with this Agreement.

14.1.3 Additional Indemnification Requirements.

(a) The indemnity and defense obligations in this Section 14 shall apply irrespective of the negligence or willful misconduct of Franchisee or any affiliate of Franchisee.

(b) The provisions of this Section shall not terminate or expire, shall be given the broadest possible interpretation, and shall survive the termination or expiration of this Agreement.

(c) With regard to any claim covered by this provision arising from the delivery of Solid Waste to the Orange County landfill system pursuant to the terms of the County Agreement, the indemnity provisions hereof are intended to be supplemental to any indemnification obligations owed to the City by the County of Orange pursuant to the County Agreement.

14.2 Surety. Contemporaneously with execution of this Agreement, as security for Franchisee's faithful performance of all obligations of this Agreement, Franchisee shall provide a surety mechanism (the "Surety") as more fully defined below in the amount of Ten Thousand Dollars (\$10,000). The Surety may be comprised of either a performance bond or an irrevocable letter of credit, or a combination of both. If a letter of credit is utilized to satisfy some or all of the Surety requirements, it shall be drawn upon a financial institution with an office within fifty (50) miles of City, and otherwise in a form acceptable to the City Attorney. The performance bond, if any, shall be issued by a duly authorized corporate surety company authorized to do business in California, and in a form acceptable to the City Attorney. The cost of the Surety shall be the sole responsibility of Franchisee. The Surety shall be released within ninety (90) days after both (i) the expiration of the Term of this Agreement, and (ii) Franchisee's satisfactory performance of all obligations hereunder.

14.3 Forfeiture of Surety. In the event Franchisee shall for any reason become unable, or fail in any way, to perform as required by this Agreement, City may declare a portion or all of the Surety, as may be necessary to recompense and make whole the City, forfeited to the City. Upon partial or full forfeiture of the Surety, Franchisee shall restore the Surety to its original amount within thirty (30) days of the City's notice to do so. Failure to restore the Surety to its full amount within thirty (30) days shall be a material breach of this Agreement.

14.4 Use of Surety by City. Notwithstanding any provision hereof to the contrary, thirty (30) days following City providing Franchisee with written notice of its failure to pay City any amount owing under this Agreement, either the letter of credit or performance bond comprising the Surety may be utilized by City for purposes including, but not limited to: (1) payment of sums due under the terms of this Agreement which Franchisee has failed to timely pay to City, including specifically liquidated damages; and (2) reimbursement of costs borne by City to correct violations of this Agreement not corrected by Franchisee.

14.5 Replacement Letter of Credit. City may draw upon the entire letter of credit (if any) utilized to meet Franchisee's obligations pertaining to the Surety, and convert it to a cash deposit, if Franchisee fails to cause the letter of credit to be extended or replaced with another satisfactory letter of credit no later than sixty (60) days prior to its expiration.

14.6 Insurance Coverage. Franchisee shall procure and maintain during the entire Term of this Agreement the following types of insurance and shall maintain the following minimum levels of coverage, which shall apply to any claims which may arise from or in connection with Franchisee's performance hereunder or the actions or inactions of any of Franchisee's officers, agents, representatives, employees, or subcontractors in connection with Franchisee's performance. The insurance requirements hereunder in no way limit Franchisee's various defense and indemnification obligations or any other obligations as set forth herein.

14.6.1 Comprehensive General Liability. Insurance which affords coverage at least as broad as Insurance Services Office "occurrence" form CG 00 01 including completed operations and contractual liability, with limits of liability of not less than Two Million Dollars (\$2,000,000) per occurrence and Four Million Dollars (\$4,000,000) annual aggregate for liability arising out of Franchisee's performance of this Agreement. The limits shall be provided by either a single primary policy or combination of policies. If limits are provided with excess and/or umbrella coverage the limits combined with the primary will equal the minimum limits set forth above. If written with an aggregate, the aggregate shall be double the occurrence limit. Such insurance shall be endorsed to:

(a) Name the City of Irvine and its employees, representatives, officers, officials, agents, representatives, and volunteers (collectively hereinafter "City and City Personnel") as additional insured for claims arising out of Franchisee's performance of this Agreement.

(b) Provide that the insurance is primary and non-contributing with any other valid and collectible insurance or self-insurance available to City.

A statement on an insurance certificate will not be accepted in lieu of the actual endorsement.

14.6.2 Automobile Liability Insurance. Insurance with a limit of liability of not less than Two Million Dollars (\$2,000,000) each occurrence and Two Million Dollars (\$2,000,000) annual aggregate. The limits shall be provided by either a single primary policy or combination of policies. If limits are provided with excess and/or umbrella coverage the limits combined with the primary will equal the minimum limits set above. Such insurance shall include coverage for all "owned," "hired" and "non-owned" vehicles, or coverage for "any auto." Such insurance shall be endorsed to:

(a) Name the City and City Personnel as additional insureds for claims arising out of Franchisee's performance of this Agreement.

(b) Provide that the insurance is primary and non-contributing with any other valid and collectible insurance or self-insurance available to City.

A statement on an insurance certificate will not be accepted in lieu of the actual endorsement.

14.6.3 Workers' Compensation Insurance.

(a) In accordance with the Labor Code of California and covering all employees of Franchisee providing any service in the performance of this agreement. Such insurance shall be endorsed to waive the insurer's right of subrogation against the City and City Personnel with respect to the performance of Franchisee's obligations under this Agreement.

A statement on an insurance certificate will not be accepted in lieu of the actual endorsement unless your insurance carrier is the State of California Insurance Fund (SCIF) and the endorsement numbers 2570 and 2065 are referenced on the certificate of insurance.

Franchisee's completion of the form attached hereto as Exhibit B shall be a condition precedent to Franchisee's rights under this Agreement. Should Franchisee certify, pursuant to Exhibit B, that, in the performance of the work under this Agreement, it shall not employ any person in any manner so as to become subject to the workers' compensation laws of California, Franchisee shall nonetheless maintain responsibility for requiring that any subcontractors performing work under this Agreement have and maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the work performed under this Agreement.

14.6.4 Environmental Pollution Control Insurance. Franchisee shall maintain either an endorsement to its general liability policy, or a separate policy of insurance covering environmental pollution and contamination that names the City and City Personnel as an additional insured. Said coverage shall be in the amount of not less than One Million Dollars (\$1,000,000) per occurrence, and Two Million Dollars (\$2,000,000) in the aggregate, and shall substantially comply with all other provisions set forth in Section 14.6.1.

14.6.5 Endorsements. A statement on an insurance certificate will not be accepted in lieu of the actual endorsement. Insurance policies shall not be in compliance if they include any limiting provision or endorsement that has not been submitted to City for approval.

Additional Insured Endorsements shall not:

- (1) Be limited to "Ongoing Operations"
- (2) Exclude "Contractual Liability"
- (3) Restrict coverage to the "Sole" liability of Franchisee
- (4) Contain any other exclusion contrary to the Agreement.

Any Deductible and/or Self-Insured Retentions must be disclosed to City.

14.6.6 Acceptability of Insurers. Each policy shall be from a company with current A.M. Best's rating of A VII or higher and authorized to do business in the State of California, or otherwise allowed to place insurance through surplus lines brokers under applicable

provisions of the California Insurance Code or any federal law. Any other rating must be approved in writing by the City.

14.6.7 Insurance of Subcontractors. Franchisee shall be responsible for causing subcontractors to maintain the same types and limits of coverage in compliance with this Agreement, including naming the City and City Personnel as additional insureds to the subcontractor's policies.

14.6.8 Verification of Coverage. Franchisee shall furnish City with certificates of insurance and with original endorsements affecting coverage required by this Article. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The certificates and endorsements are to be on forms provided by or acceptable to City and are to be received and approved by City before work commences.

14.6.9 Loss or Reduction in Insurance. In the event that Franchisee fails to retain or maintain insurance with the scope and amounts of coverage required hereunder, City shall have the right, but not the obligation, to either terminate this Agreement, or obtain insurance coverage as required herein on behalf of Franchisee and utilize funds from the Surety defined in this Section 14 to pay the cost of providing such coverage.

SECTION 15

CITY'S REMEDIES; DEFAULT AND TERMINATION

15.1 City's Right to Suspend or Terminate. The City shall have the right to suspend or terminate this Agreement, and the nonexclusive franchise granted herein, upon Franchisee's breach of any of its obligations hereunder.

15.2 Notice of Default. If the City Manager determines that Franchisee has defaulted in the performance of any obligation hereunder, or that Franchisee's performance pursuant to this Agreement with respect to such matters has not been in conformity with reasonable industry standards which are obtained in similar cities in Southern California, the provisions of this Agreement, the requirements of the Municipal Code, the requirements of CalRecycle, including, but not limited to, requirements for Source Reduction and Recycling or any other applicable federal, state, or local law or regulation, including but not limited to the laws governing transfer, storage, or disposal of Special Wastes, or Hazardous Substances (to the extent applicable to Franchisee, and/or Franchisee's activities under this Agreement), the City Manager may provide written notice to Franchisee of such default. The City Manager may, in such written notice, set a reasonable time within which correction of such default shall be made. Unless a longer or shorter time is otherwise specified by the City Manager, a reasonable time for correction shall be thirty (30) days from the date such written notice is given.

15.3 Termination Without Right to Cure. City shall have the right of suspension or termination as a result of Franchisee's failure to timely cure any deficiency as set forth above, which right is in addition to City's right to terminate this Agreement without affording Franchisee an opportunity to cure in circumstances where Franchisee is determined to have

materially breached this Agreement. Notwithstanding anything to the contrary in Section 15.2 above, City shall thus be afforded the right to terminate this Agreement without affording the right to cure in the event of any material breach hereof by Franchisee, including without limitation any action, inaction or circumstance defined herein as a material breach, and/or under any of the following circumstances which are hereby defined as material breaches:

- (a) If Franchisee practices, or attempts to practice, any fraud upon City.
- (b) If Franchisee becomes insolvent, unable, or unwilling to pay its debts, or upon listing of an order for relief in favor of Franchisee in a bankruptcy proceeding.
- (c) If Franchisee willfully violates any orders or rulings of any regulatory body other than City having jurisdiction over Franchisee relative to this Agreement. So long as City's rights are not prejudiced during the pendency of any challenge to such orders or rulings by Franchisee, Franchisee may contest any such orders or rulings by appropriate proceedings conducted in good faith, in which case no material breach of this Agreement shall be deemed to have occurred until a final ruling has been rendered.
- (d) If Franchisee fails to meet the Diversion requirements of this Agreement or pursuant to Applicable Laws.
- (e) If Franchisee fails to materially comply with any insurance or indemnification requirement set forth in this Agreement; provided, however, that Franchisee shall have a reasonable opportunity to cure any default relating to the Franchisee's failure to provide the City with proof of insurance, so long as such insurance is in effect at all times.
- (f) If City is required to pay any fine or penalty, which Franchisee is required by the terms hereof to pay, yet which Franchisee fails, refuses, neglects or is unable to timely pay.
- (g) If Franchisee, or any management level employee of Franchisee is convicted of a "Criminal Matter" (as defined herein). For purposes of this Section the term "Criminal Matter" refers to any felony or misdemeanor offense having any relationship to either Solid Waste Handling Services or public corruption (including, without limitation, bribery, conflict of interest related allegations, vote selling, or any similar type charges).

15.4 Termination Procedure. The following procedure shall apply to either of the following:

- (a) any action or inaction by Franchisee which is a material breach of this Agreement, not requiring that Franchisee be afforded the right to cure, or
- (b) any circumstance in which Franchisee fails to correct, to the satisfaction of the City Manager, all deficiencies contained in a written notice of default within the specified time (or if it is not reasonably possible to correct such deficiencies within the specified time, and Franchisee fails to commence to correct or remedy such deficiencies within the specified time and diligently effect such correction or remedy thereafter).

In the event of either of the above, then the City Manager shall either refer the matter to the City Council for review, or review the matter himself or herself and upon completion of such review notify Franchisee of the City Manager's decision, in writing.

15.4.2 City Manager Review. If the City Manager reviews the matter and determines that Franchisee has failed to properly or adequately perform as set forth above, the City Manager, in the exercise of his or her sole discretion, may terminate this Agreement, or take such other action as he or she deems appropriate to pursue any remedy available to City. A decision or order of the City Manager shall be final and binding on Franchisee unless Franchisee files a "Notice of Appeal" with the City Clerk within five (5) days of the date the notice of the City Manager's decision is given. The City Manager shall schedule any appeal for consideration by the City Council at the earliest feasible Council Meeting following the date a Notice of Appeal is given to City.

15.4.3 City Council Review. In the event an appeal of a decision of the City Manager is filed, or if the City Manager refers the matter directly to the City Council upon Franchisee's failure to cure a default, the City Council shall set the matter for consideration as a regular agenda item, and the matter shall not require a public hearing. In reviewing the matter the City Council may consider any information reported by the City Manager regarding the deficiencies, and shall give Franchisee, or its representatives and any other interested person, a reasonable opportunity to be heard. The Council shall determine, in the exercise of its absolute and sole discretion, whether Franchisee has failed to properly or adequately perform as set forth above, and if so whether to terminate the Agreement, or take such other action as it deems appropriate to pursue any remedy available to City. The decision of the City Council shall be final.

15.4.4 Performance During Reviews. Franchisee's performance under this Agreement is not excused, nor shall its rights to operate hereunder be impacted, during any period of time when its performance is under review as set forth above, including at any time prior to a final decision as to whether such performance is deficient.

15.5 Franchisee's Obligations Upon Termination. In the event this Agreement is terminated pursuant to this Section 15 or the Term of this Agreement expires:

(a) Franchisee shall have no right or authority to engage in Solid Waste Handling Services within the City Limits under this Agreement.

(b) Franchisee shall remain liable to City for any and all fees that would otherwise be payable by Franchisee, including specifically amounts resulting from the late payment of Franchise Fees.

(c) Franchisee shall allow its Customers to arrange for Solid Waste Handling Services with a Solid Waste enterprise collector authorized to perform such services, without penalty or liability for breach of contract.

(d) Franchisee shall remove all of its Bins used in performance of Solid Waste Handling Services hereunder from the Premises of all Customers, and shall properly dispose of all Solid Waste in such Bins, within such time period as specified by the City Manager. If Franchisee fails to remove its Bins and dispose of all Solid Waste in such Bins as required pursuant to this

Section 15.5 within the time periods prescribed, City shall have the right to take any of such actions that have not been performed by Franchisee. Franchisee shall promptly reimburse City for all sums expended by City in taking such actions, along with a ten percent (10%) administrative fee.

15.6 City's Remedies Cumulative. The rights and remedies of City set forth in any Section herein shall be in addition to any and all other rights and privileges City may have, and shall not be deemed to limit any such other rights or privileges of City under this Agreement or by virtue of any law.

SECTION 16

FRANCHISEE'S REMEDIES; ADMINISTRATIVE HEARING

16.1 Administrative Hearing. Should Franchisee contend that City is in breach of any aspect of this Agreement, it shall give notice to the City Manager requesting an administrative hearing on the allegation. The hearing shall occur as soon as reasonably possible, or on such date as mutually agreed by the parties, and shall be held before an impartial hearing officer to be determined by the City Manager. The hearing officer shall make an advisory ruling on Franchisee's allegations, and suggest a remedy if a breach by City is determined to exist. The hearing officer's ruling and recommendations shall become final and binding if the Parties so agree in writing within 30 days of the date notice of the decision is given to the Parties. Otherwise, the hearing officer's ruling shall have no further force or effect.

16.2 Other Remedies; Claims. Franchisee shall be entitled to all available remedies in law or equity for City's breach of this Agreement; provided, however, Franchisee shall not file or otherwise commence any action against City, in law or equity, in any court, until after an administrative hearing as set forth above has been completed, and the above noted thirty (30) day period to accept the hearing officer's decision has passed, or either City or Franchisee has given timely written notice to the other that it will not accept the hearing officer's decision.

16.3 Actions for Damages. As a prerequisite to the filing and maintenance of any action for damages by Franchisee against City arising out of or relating to this Agreement, Franchisee shall present a claim to City, as required by Government Code section 910 et seq., within thirty (30) days of the date of the occurrence giving rise to the claim for damages.

SECTION 17

ASSIGNMENT, SUBLETTING, AND TRANSFER; REQUIREMENTS AND LIMITATIONS

This Agreement shall not be sold, hypothecated, sublet, assigned, or otherwise transferred, nor shall any of the rights or privileges herein be hypothecated, leased, assigned, sold, or otherwise transferred, either in whole or in part, nor shall title thereto, either legal or equitable, or any right, interest, or property therein, pass to or vest in any person, except Franchisee, either by action or inaction of Franchisee or by operation of law, without the prior written consent of City which may be withheld with or without cause. For purposes of permitting Franchisee to subcontract with other haulers to assist in providing services hereunder, and provided Franchisee will continue to provide services hereunder with its own employees, the written consent of the City Manager shall

suffice. Any other transfer, sale, subcontract, hypothecation, assignment or lease shall require the written consent of the City Council as expressed by a Resolution. Any attempt by Franchisee to hypothecate, subcontract, lease, assign, sell, or otherwise transfer any right or interest in this Agreement without the written consent of City shall be null and void and shall give rise to City's right, but not obligation, to terminate this Agreement.

SECTION 18

GENERAL PROVISIONS

18.1 Force Majeure. Franchisee shall not be in default under this Agreement in the event that its ability to provide Solid Waste Handling Services in compliance with its obligation to do so hereunder is temporarily interrupted or discontinued for any of the following reasons: riots, wars, sabotage, civil disturbances, insurrections, explosion, natural disasters such as floods, earthquakes, landslides, and fires, strikes, lockouts, and other labor disturbances or other catastrophic events which are beyond the reasonable control of Franchisee. The phrase "other catastrophic events" does not include the financial inability of Franchisee to perform or the failure of Franchisee to obtain any necessary permits or licenses from other governmental agencies or the right to use the facilities of any public utility where such failure is due in substantial part to the acts or omissions of Franchisee.

18.2 Property Damage. Any physical damage caused by the negligent or willful acts or omissions of employees, agents, or subcontractors of Franchisee to private or public property shall be promptly repaired or replaced.

18.3 City's Authorized Agent. Excepting amendments hereto and such actions set forth herein specifically calling for City Council action or approval, the City Manager is authorized to take any action with regard to any matter, or enforce any right, set forth herein requiring action by City.

18.4 Amendments. Except as otherwise expressly stated herein, no amendment of this Agreement shall be valid unless in writing duly executed by the Parties.

18.5 Independent Contractor. It is expressly understood and agreed that Franchisee shall perform all work and services described herein as an independent contractor and not as an officer, agent, servant or employee of City; that Franchisee shall have the exclusive control over the details of the services and work performed hereunder and all persons performing the same; that Franchisee shall be solely responsible for the acts and omissions of its officers, agents, employees, contractors and subcontractors, if any; and that nothing herein shall be construed as creating a partnership or joint venture between City and Franchisee. Neither Franchisee nor its officers, employees, agents or subcontractors shall obtain any rights to retirement benefits, workers' compensation benefits or any other benefits which accrue to City employees and Franchisee hereby expressly waives any claim it may have, or hereafter acquire, to such benefits.

18.6 Law to Govern; Venue. The laws of the State of California shall govern this Agreement. In the event of litigation between the parties, venue and jurisdiction shall lie exclusively in a state court of competent jurisdiction in Orange County, California. The

parties agree to waive any potential claim to diversity jurisdiction under Title 28 U.S.C. § 1332 or any other statute, law or judicial authority which actually or colorably provides for federal jurisdiction. In the event of any legal proceeding this Agreement shall be interpreted as if jointly drafted by the Parties.

18.7 Successors and Assigns. The terms, covenants and conditions of this Agreement shall inure to the benefit of and be binding upon the respective successors and assigns of the Parties.

18.8 Waiver. The waiver by either Party of any breach or violation of any term, covenant or condition of this Agreement shall not be deemed to be a waiver of any other term, covenant or condition or of any subsequent breach or violation of the same or of any other term, covenant or condition.

18.9 Notices. All notices, or other communications whatsoever which this Agreement contemplates or requires either Party to give to the other, shall, except as otherwise provided herein, be in writing and shall be personally delivered or sent by registered or certified mail, postage prepaid, return receipt requested, addressed to the respective party as follows:

To City: City of Irvine
 City Hall
 1 Civic Center Plaza
 Irvine, California 92714
 Attn: City Manager

To Franchisee: _____

or to such other address as either Party may from time to time designate by notice to the other given in accordance with this Section. Notice shall be deemed given on the date served if served personally between the hours of 8:00 a.m. to 5:00 p.m. on any regular business day for City's business offices. If mailed, notice shall be deemed given three (3) business days from the date such notice is deposited in the United States mail in the manner proscribed above.

18.10 Severability. If any provision of this Agreement is determined by a court of competent jurisdiction to be invalid or unenforceable, the remaining provisions shall not be affected unless their enforcement under the circumstances would be unreasonable, inequitable or would otherwise frustrate the purposes of this Agreement.

18.11 Attorneys' Fees and Litigation Costs. In the event either party brings any action or proceeding to enforce or interpret the terms or provisions of this Agreement, the prevailing party in any such action or proceeding shall be entitled to recover its reasonable attorneys' fees and other litigation costs and expenses, including without limitation expert witness fees, consultant fees and costs, without regard to whether the matter proceeds to trial.

Without limiting its scope in any way, this provision is expressly intended to, and shall, apply to fees and costs incurred in any appeal.

18.12 Corporate Resolution. Concurrent with the execution of this Agreement, Franchisee shall provide City with a corporate resolution of its Board of Directors demonstrating the authority for the undersigned to enter and lawfully bind Franchisee to this Agreement, or in the event Franchisee is not a Corporation, with such evidence of authority as required by the City Manager.

18.13 Integration. This Agreement contains the entire integrated agreement and understanding concerning the subject matter herein and supersedes and replaces any prior negotiations, promises, proposals, and agreements between the Parties, whether written or oral. The Parties acknowledge this document has been executed with the consent and upon the advice of counsel. Each of the Parties acknowledges that no party or agent or attorney of any other party has made any promise, representation, or warranty, express or implied, not contained in this Agreement, to induce the other party to execute this instrument.

IN WITNESS WHEREOF, the parties hereto have executed this agreement on the dates indicated below.

CITY OF IRVINE
a California municipal corporation

APPROVED AS TO FORM:

City Attorney

Date: _____

By: _____
City Manager

ATTEST:

Date: _____

By: _____
City Clerk

Franchisee _____

Date: _____

By: _____
Title: _____

EXHIBIT A

Village Commercial Premises Map

EXHIBIT B

Workers' Compensation Insurance Certification

Contract Services Description: _____

WORKERS' COMPENSATION DECLARATION

I hereby affirm under penalty of perjury one of the following declarations:

(CHECK ONE APPLICABLE BOX BELOW)

I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work to be performed under this Agreement and shall submit insurance certificates evidencing such coverage as set forth herein.

I certify that, in the performance of the work under this Agreement, **I shall not employ any person** in any manner so as to become subject to the workers' compensation laws of California, and I hereby agree to indemnify, defend, and hold harmless the City of Irvine and all of its officials, employees, and agents from and against any and all claims, liabilities, and losses relating to personal injury or death, economic losses, and property damage arising out of my failure to provide such worker's compensation insurance. I further agree that, **if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions and immediately furnish insurance certificates** evidencing such coverage as set forth herein.

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

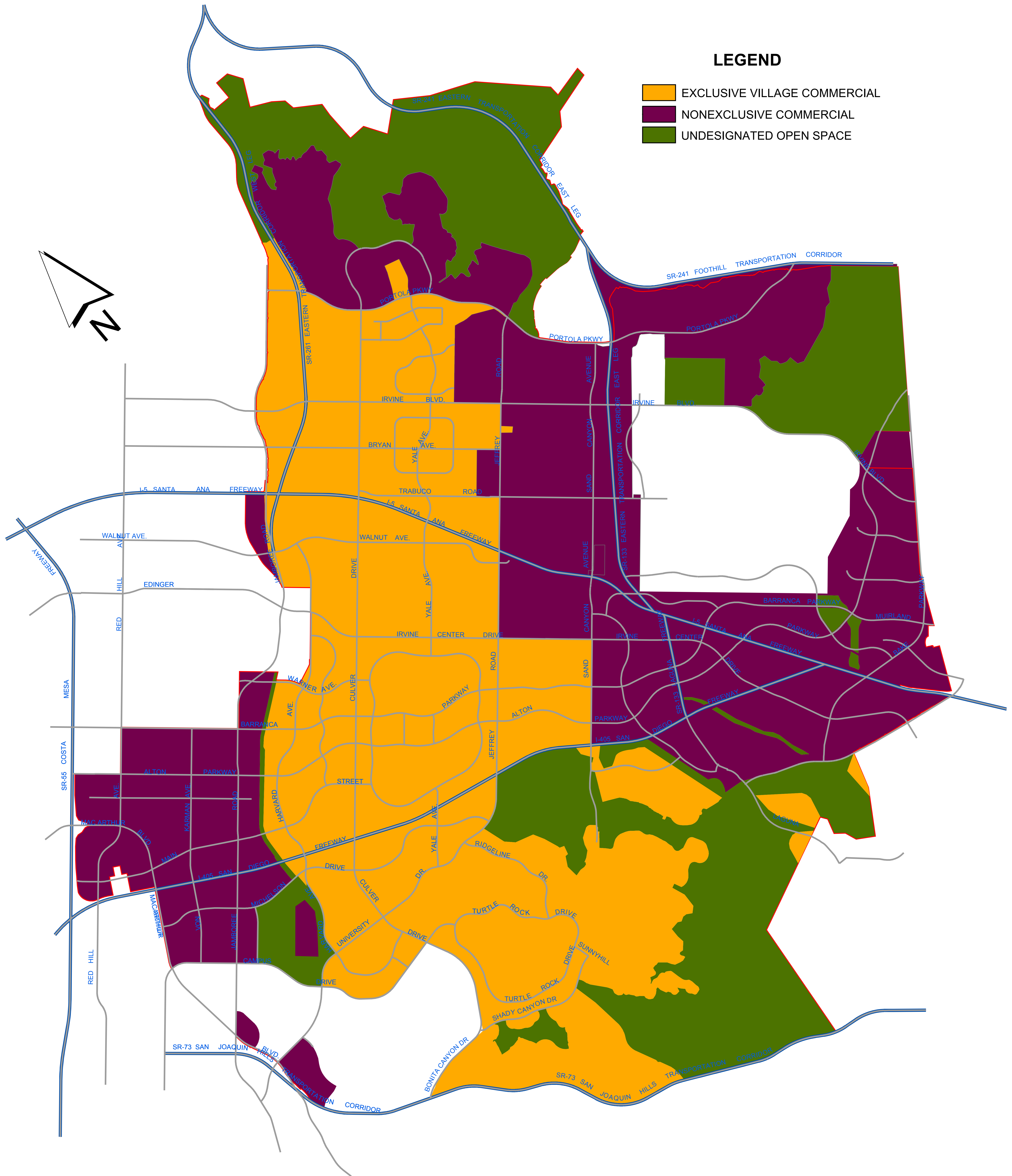
| | |
|-------------------|--|
| Dated: | |
| Contracting Firm: | |
| Signature: | |
| Title: | |
| Address: | |

EXISTING SERVICE AREA MAP

Exhibit D

CITY OF IRVINE

COMMERCIAL SOLID WASTE COLLECTION SERVICE AREAS



NOTE: Pursuant to California Public Resources Code Section 49520, et seq., some solid waste haulers may have legal rights to provide waste services to certain areas in the City regardless of the area designations on this map. All franchised haulers are eligible to provide collection of Construction and Demolition Debris and Temporary Bin Service, as defined in the Nonexclusive Franchise Agreement, to any premises within the City on an as needed and temporary basis. The terms and limitations of this agreement shall not apply to waste services provided at the facilities or properties of public agencies within the City limits that are not subject to the legal jurisdiction of the City of Irvine, including but not limited to public schools and colleges, and services to State, County and other governmental agencies.

DATE: November 8, 2007 N:\Community Development\Building and Safety\GIS\projects\PublicWorks\ByrneM_Waste_Collection_cri\ByrneM_Waste_Collection_2007_11_07_cn.mxd

5.3



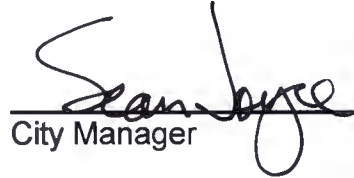
REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: AUGUST 8, 2017

TITLE: ORDINANCE TO ESTABLISH CHANGES AND ADDITIONS TO POSTED SPEED LIMITS



Director of Transportation



City Manager



Director of Public Safety

RECOMMENDED ACTION

Introduce for first reading, and read by title only - AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, DIRECTING AN AMENDMENT TO THE "CITY OF IRVINE ENGINEERING AND TRAFFIC SURVEYS FOR SPEED LIMITS," AS MAINTAINED BY THE CITY ENGINEER AS THE OFFICIAL DOCUMENTATION OF DECLARED PRIMA FACIE SPEED LIMITS

EXECUTIVE SUMMARY

The safe and efficient movement of traffic is, in part, guided by proper design of roadways and appropriate speed limit postings. Transportation and Public Safety staff work collaboratively to evaluate traffic characteristics on City streets to ensure that speed limit postings correspond with safe driving conditions and are enforceable by Public Safety officers. A traffic speed survey is conducted annually on portions of the City roadway network in accordance with standards set by the California Manual on Uniform Traffic Control Devices (MUTCD) and the California Vehicle Code. Based on the traffic survey data, any roadway segments recommended for new or revised speed limit postings are listed and documented for consideration and approval by the City Council through adoption of an ordinance.

A summary of the proposed new speed limit postings and revisions is included as Attachment 1. The proposed ordinance (Attachment 2) documents the recommended speed limit posting revisions and incorporates the same into the Master List of Traffic Surveys included with the ordinance. If approved by the City Council, the proposed ordinance will be effective 30 days after a second reading of the ordinance. New or revised signs will be posted shortly thereafter.

COMMISSION/BOARD/COMMITTEE RECOMMENDATION

The Transportation Commission reviewed this item at its regular meeting on June 6, 2017. The Commission recommended by a vote of 3-0-2 (Commissioners Montgomery, Greenberg and O'Malley voting in favor; Commissioner Moody and Commissioner Casey Absent) that the City Council adopt the proposed ordinance and also recommend that new traffic surveys be conducted along Irvine Boulevard, Jeffrey Road and Portola Parkway prior to the next update.

Traffic surveys for the next update are scheduled to begin in the Fall 2017 and will include the three segments as recommended by the Transportation Commission.

ANALYSIS

Traffic engineering staff annually review speed conditions on selected portions of the City's arterial highway network to assist Public Safety officers in monitoring and citing for violations that involve unsafe speeds. Electronic devices, such as hand-held speed detection equipment, are a reliable enforcement tool. The California Vehicle Code and the MUTCD require that local agencies provide justification and documentation to use electronic devices to enforce posted speed limits. In accordance with the City Municipal Code Section 6-3-505, an official list of streets and speed limits is updated annually to satisfy this requirement.

This annual report, titled City of Irvine Engineering and Traffic Surveys for Speed Limits, documents speed survey data results and is used by staff to determine appropriate and enforceable speed limit postings. The California Vehicle Code requires that engineering and traffic surveys be conducted in compliance with procedures set forth in the MUTCD. The MUTCD indicates that speed limits are to be posted at the nearest five miles-per-hour increment to the 85th percentile speed of free-flowing traffic, as determined by way of survey data documented in the report. There are two exceptions to this policy as follows:

- The posted speed may optionally be rounded down instead when the 85th percentile speed would typically be mathematically rounded up (e.g., rounding 38 to 35 instead of 40 miles per hour); or
- The posted speed may be reduced by 5 miles per hour if the conditions and justification are documented in an engineering and traffic survey.

The California Vehicle Code specifically precludes the consideration of physical conditions apparent to the driver, such as curvature, width, grade and surface conditions, as justification for a 5 miles-per-hour reduction. If the speed limit is optionally rounded down instead of up (first option), an additional 5 miles-per-hour reduction may not be taken.

The proposed ordinance (Attachment 2) and its corresponding Engineering and Traffic Surveys for Speed Limits Report incorporate the staff recommendations for speed limit reductions on portions of four street segments and an increase to the speed limit posting

on six street segments as summarized in Attachment 1. The ordinance also includes posted speed limits for ten street segments that at present have no posted limits.

New and revised speed limit postings become effective only by adoption of City ordinance and upon the posting of corresponding new signage. If approved by the City Council, the proposed ordinance will be effective 30 days after a second reading of the ordinance. New or revised signs will be posted shortly thereafter.

ALTERNATIVES CONSIDERED

The City Council could direct staff to defer the recommended speed limit postings and provide direction to staff for any additional information that the City Council may wish to consider to assist in its review of the recommend action.

FINANCIAL IMPACT

The installation of new speed limit signs is estimated at \$9,000 and funding is available in the Fiscal Year 2017-18 Public Works Street Maintenance budget.

REPORT PREPARED BY Tran Tran, P.E., Senior Transportation Engineer

ATTACHMENTS

1. List of New/Revised Speed Limit Recommendations
2. City Council Ordinance and Master List of Traffic Surveys - August 2017

NEW OR REVISED SPEED LIMIT RECOMMENDATIONS
AUGUST 2017

| NEW STREETS | | | |
|---|------------------------|-----------------------------------|-------------------------------|
| Roadway Segment | Location (Village) | Recommended Speed Limit (MPH) | |
| Business Center Drive – MacArthur to Cul-de-Sac | IBC | 35 | |
| Hallmark – Crossland to Regal | Woodbury | 35 | |
| Landmark – Journey to Crossland | Woodbury | 30 | |
| Millikan – Alton to Barranca | IBC | 40 | |
| Pacifica – Alton to Irvine Center Drive | Spectrum | 45 | |
| Regal – Hallmark to Vintage | Woodbury | 35 | |
| Ridgeline – Hillcrest to Turtle Rock Drive | Turtle Rock | 35 | |
| Scientific – Lake Forest Drive to Research | Spectrum | 35 | |
| Townsend – Vintage to Journey | Woodbury | 35 | |
| Vintage – Regal to Townsend | Woodbury | 40 | |
| SPEED REDUCTIONS | | | |
| Roadway Segment | Location (Village) | Existing Posted Speed Limit (MPH) | Recommended Speed Limit (MPH) |
| Jeffrey – Bryan to Irvine Blvd | Northwood/ Woodbury | 55 | 50 |
| Paseo Westpark – Harvard to Warner | Westpark | 40 | 35 |
| Sand Canyon – Irvine Blvd to Portola | Woodbury | 55 | 50 |
| Spectrum Center Drive – Enterprise to Entertainment Way | Spectrum | 40 | 30 |
| SPEED INCREASES | | | |
| Roadway Segment | Location (Village) | Existing Posted Speed Limit (MPH) | Recommended Speed Limit (MPH) |
| Dupont – Michelson to Von Karman | IBC | 35 | 40 |
| Stonecreek S – West Yale Loop to Stone Creek N | Woodbridge | 30 | 35 |
| Northwood – Eastwood to Westwood | Northwood | 35 | 40 |
| Southwood – Eastwood to Westwood | Northwood | 35 | 40 |
| Eastwood – Northwood to Southwood | Northwood | 35 | 40 |
| Westwood – Northwood to Southwood | Northwood | 35 | 40 |

CITY COUNCIL ORDINANCE NO. 17-XX

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, DIRECTING AN AMENDMENT TO THE "CITY OF IRVINE ENGINEERING AND TRAFFIC SURVEYS FOR SPEED LIMITS," AS MAINTAINED BY THE CITY ENGINEER AS THE OFFICIAL DOCUMENTATION OF DECLARED PRIMA FACIE SPEED LIMITS

WHEREAS, California Vehicle Code Section 22357 provides that a local authority may, by ordinance, determine and declare that the speed limit on any portion of any street, other than a state highway, which would otherwise be subject to a *prima facie* speed limit of 25 miles per hour shall be increased to a *prima facie* speed limit of 30, 35, 40, 45, 50, 55, 60, or 65 miles per hour, if an engineering and traffic study indicates that such increase would facilitate the orderly movement of traffic and would be reasonable and safe; and

WHEREAS, California Vehicle Code Section 22358 provides that a local authority may, by ordinance determine and declare, that the speed limit on any portion of any street, other than a state highway, which would otherwise be subject to a *prima facie* speed limit of 65 miles per hour shall be reduced to a *prima facie* speed limit of 60, 55, 50, 45, 40, 35, 30, or 25, miles per hour, if an engineering and traffic survey indicates that the *prima facie* speed limit of 65 miles per hour is faster than what is deemed reasonable and safe; and

WHEREAS, California Vehicle Code Sections 22357 and 22358 provide that whenever a local authority has designated a *prima facie* speed limit on any portion of any street other than the *prima facie* limits applicable therein, the limits shall be effective upon the local authority erecting upon the applicable street appropriate signs giving notice thereof; and

WHEREAS, the City Council of the City of Irvine amended the Municipal Code with the adoption of Ordinance No. 01-05 removing the list of streets and *prima facie* speed limits and establishing an official list of streets and *prima facie* speed limits that shall be maintained by the City Engineer; and

WHEREAS, the City Council of the City of Irvine has considered information presented by staff, and other interested parties at a public meeting held on August 8, 2017.

NOW, THEREFORE, the City Council of the City of Irvine DOES HEREBY ORDAIN as follows:

1. The *City of Irvine Engineering and Traffic Surveys for Speed Limits* as maintained by the City Engineer shall be amended to include *prima facie* speed limit postings in accordance with those new entries as shown in the attached Exhibit A titled the *City of Irvine Engineering and Traffic Surveys for Speed Limits*, dated August 2017.

ATTACHMENT 2

2. This Ordinance shall be posted in accordance with the provisions of the Irvine Municipal Code and shall become effective thirty (30) days from and after the date of its passage.

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the ___ day of _____, 2017.

MAYOR OF THE CITY OF IRVINE

ATTEST:

CITY CLERK OF THE CITY OF IRVINE

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing ordinance was introduced for first reading on the ___ day of _____, 2017, and duly adopted at a regular meeting of the City Council of the City of Irvine, held on the ___ day of _____, 2017.

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

City of Irvine Engineering and Traffic Surveys for Speed Limits
August 2017
Master List of Survey Data Results

| Street | From | To | Direction | Existing Posted Speed | 85th Percentile | Survey Date | Accident Data Considered | Recommended Posted Speed |
|-----------------------|--------------------|------------------|-----------|-----------------------|-----------------|-------------|--------------------------|--------------------------|
| <u>Alton Pkwy</u> | Pullman Street | Red Hill Ave | EB | 45 mph | 44 mph | 6/25/2015 | YES | |
| | Pullman Street | Red Hill Ave | WB | <> | <> | <> | <> | |
| | Red Hill Ave | Von Karman Ave | EB | 50 mph | 52 mph | 5/23/2013 | YES | |
| | Red Hill Ave | Von Karman Ave | WB | 50 mph | 51 mph | 5/23/2013 | YES | |
| | Von Karman Ave | Jamboree Rd | EB | 45 mph | 47 mph | 7/10/2013 | YES | |
| | Von Karman Ave | Jamboree Rd | WB | 45 mph | 46 mph | 7/10/2013 | YES | |
| | Jamboree Rd | Harvard Ave | EB | 50 mph | 46 mph | 9/22/2015 | YES | |
| | Jamboree Rd | Harvard Ave | WB | 50 mph | 45 mph | 9/22/2015 | YES | |
| | Harvard Ave | Culver Dr | EW | 50 mph | 53 mph | 8/9/2016 | YES | No Change |
| | Culver Dr | Lake Rd | EB | 45 mph | 48 mph | 11/12/2015 | YES | |
| | Culver Dr | Lake Rd | WB | 45 mph | 45 mph | 11/12/2015 | YES | |
| | Lake Rd | Creek Rd | EB | 50 mph | 48 mph | 9/16/2015 | YES | |
| | Lake Rd | Creek Rd | WB | 50 mph | 50 mph | 9/16/2015 | YES | |
| | Creek Rd | Jeffrey Rd | EW | 50 mph | 49 mph | 8/8/2016 | YES | No Change |
| | Jeffrey Rd | Sand Canyon Ave | EB | 50 mph | 49 mph | 8/22/2014 | YES | |
| | Jeffrey Rd | Sand Canyon Ave | WB | 50 mph | 54 mph | 8/22/2014 | YES | |
| | Sand Canyon Ave | Banting | EB | 50 mph | 48 mph | 5/20/2015 | YES | |
| | Sand Canyon Ave | Banting | WB | 50 mph | 50 mph | 5/20/2015 | YES | |
| | Banting | Irvine Center Dr | EB | 50 mph | 47 mph | 9/17/2014 | YES | |
| | Banting | Irvine Center Dr | WB | 50 mph | 46 mph | 9/17/2014 | YES | |
| Irvine Center Dr | Technology Dr West | EB | 45 mph | 43 mph | 5/20/2015 | YES | | |
| Irvine Center Dr | Technology Dr West | WB | 45 mph | 48 mph | 5/20/2015 | YES | | |
| Technology Dr West | Barranca Pkwy | NB | 55 mph | 59 mph | 8/25/2014 | YES | | |
| Technology Dr West | Barranca Pkwy | SB | 55 mph | 57 mph | 8/25/2014 | YES | | |
| Barranca Pkwy | Jeronimo Rd | NB | 50 mph | 53 mph | 8/26/2014 | YES | | |
| Barranca Pkwy | Jeronimo Rd | SB | 50 mph | 50 mph | 8/26/2014 | YES | | |
| Jeronimo Rd | Toledo Way | NB | 50 mph | 52 mph | 10/31/2014 | YES | | |
| Jeronimo Rd | Toledo Way | SB | 50 mph | 54 mph | 10/31/2014 | YES | | |
| Toledo Way | Irvine Blvd | NB | 55 mph | 58 mph | 6/5/2014 | YES | | |
| Toledo Way | Irvine Blvd | SB | 55 mph | 57 mph | 6/5/2014 | YES | | |
| Irvine Blvd | Commercentre | NS | 60 mph | 64 mph | 11/8/2016 | YES | No Change | |
| <u>Arborwood</u> | Canyonwood | Yale Ave | NON | 35 mph | 40 mph | 11/15/2012 | YES | |
| <u>Armstrong Ave</u> | Alton Pkwy | Barranca Pkwy | NON | 40 mph | 44 mph | 5/10/2016 | YES | No Change |
| <u>Auto Center Dr</u> | Oldfield | Revson | NON | 30 mph | 33 mph | 10/9/2013 | YES | |
| | Revson | Oldfield | NON | 30 mph | 32 mph | 9/26/2013 | YES | |
| <u>Bake Parkway</u> | Irvine Center Dr | Rockfield Blvd | NB | 55 mph | 47 mph | 4/9/2015 | YES | |
| | Irvine Center Dr | Rockfield Blvd | SB | 55 mph | 50 mph | 4/9/2015 | YES | |
| | Rockfield Blvd | Muirlands Blvd | NB | 55 mph | 54 mph | 4/14/2015 | YES | |
| | Rockfield Blvd | Muirlands Blvd | SB | 55 mph | 54 mph | 4/14/2015 | YES | |
| | Muirlands Blvd | Jeronimo Rd | NB | 55 mph | 53 mph | 4/14/2015 | YES | |
| | Muirlands Blvd | Jeronimo Rd | SB | 55 mph | 54 mph | 4/14/2015 | YES | |
| | Irvine Center Dr | Lake Forest Dr | EB | 50 mph | 49 mph | 10/17/2013 | YES | |
| | Irvine Center Dr | Lake Forest Dr | WB | 50 mph | 52 mph | 10/17/2013 | YES | |

EXHIBIT A

<> = Not Within Irvine City Limits
NON = Non-Directional (or Multi-Directional)
N/A = Not Applicable
R/R = Railroad Tracks

CITY OF IRVINE ENGINEERING AND TRAFFIC SURVEYS FOR SPEED LIMITS
AUGUST 2017
MASTER LIST OF SURVEYED DATA RESULTS

| Street | From | To | Direction | Existing Posted Speed | 85th Percentile | Survey Date | Accident Data Considered | Recommended Posted Speed |
|---------------------------|------------------------|--------------------|-----------|-----------------------|-----------------|-------------|--------------------------|--------------------------|
| <u>Barranca Pkwy</u> | Red Hill Ave | Von Karman Ave | EB | 50 mph | 47 mph | 5/9/2013 | YES | |
| | Red Hill Ave | Von Karman Ave | WB | 50 mph | 52 mph | 5/9/2013 | YES | |
| | Von Karman Ave | Jamboree Rd | EB | 50 mph | 48 mph | 10/1/2013 | YES | |
| | Von Karman Ave | Jamboree Rd | WB | 50 mph | 52 mph | 10/1/2013 | YES | |
| | Jamboree Rd | Harvard Ave | EB | 50 mph | 48 mph | 7/8/2013 | YES | |
| | Jamboree Rd | Harvard Ave | WB | 50 mph | 50 mph | 7/8/2013 | YES | |
| | Harvard Ave | Culver Dr | EB | 45 mph | 47 mph | 7/25/2013 | YES | |
| | Harvard Ave | Culver Dr | WB | 45 mph | 46 mph | 7/25/2013 | YES | |
| | Culver Dr | Lake Rd | EW | 45 mph | 48 mph | 10/6/2016 | YES | No Change |
| | Lake Rd | Jeffrey Rd | EB | 45 mph | 46 mph | 7/14/2014 | YES | |
| | Lake Rd | Jeffrey Rd | WB | 45 mph | 46 mph | 7/14/2014 | YES | |
| | Jeffrey Rd | Sand Canyon Ave | EB | 50 mph | 47 mph | 5/28/2015 | YES | |
| | Jeffrey Rd | Sand Canyon Ave | WB | 50 mph | 48 mph | 5/28/2015 | YES | |
| | Sand Canyon Ave | Banting | EB | 50 mph | 51 mph | 6/5/2014 | YES | |
| Sand Canyon Ave | Banting | WB | 50 mph | 52 mph | 6/5/2014 | YES | | |
| <u>Bay Tree</u> | Banting | Irvine Center Dr | EB | 50 mph | 47 mph | 6/13/2014 | YES | |
| | Banting | Irvine Center Dr | WB | 50 mph | 46 mph | 6/13/2014 | YES | |
| | Irvine Center Dr | Technology Dr West | EB | 50 mph | 48 mph | 7/1/2014 | YES | |
| | Irvine Center Dr | Technology Dr West | WB | 50 mph | 49 mph | 7/1/2014 | YES | |
| | Technology Dr West | Ada | EB | 55 mph | 55 mph | 7/2/2014 | YES | |
| | Technology Dr West | Ada | WB | 55 mph | 52 mph | 7/2/2014 | YES | |
| | Ada | Alton Pkwy | EB | 60 mph | 59 mph | 7/31/2014 | YES | |
| | Ada | Alton Pkwy | WB | 60 mph | 58 mph | 7/31/2014 | YES | |
| <u>Berkeley Ave</u> | Trabuco Rd | Roosevelt | NB | 35 mph | 39 mph | 12/3/2015 | YES | |
| | Trabuco Rd | Roosevelt | SB | 35 mph | 39 mph | 12/3/2015 | YES | |
| | Roosevelt | Starry Iris | NB | 30 mph | 35 mph | 12/7/2015 | YES | |
| <u>Berkeley Ave</u> | Roosevelt | Starry Iris | SB | 30 mph | 35 mph | 12/7/2015 | YES | |
| | Harvard Ave | Campus Dr | NB | 35 mph | 31 mph | 11/14/2012 | YES | |
| <u>Berkeley Ave</u> | Harvard Ave | Campus Dr | SB | 35 mph | 35 mph | 11/14/2012 | YES | |
| | <u>Blue Lake North</u> | West Yale Loop | Blue Lake | NON | 30 mph | 31 mph | 9/10/2013 | YES |
| <u>Blue Lake South</u> | West Yale Loop | Blue Lake | NON | 30 mph | 35 mph | 8/8/2012 | YES | |
| <u>Bonita Canyon Dr</u> | SR-73 NB Off-Ramp | Shady Canyon Dr | EW | 50 mph | 54 mph | 9/29/2016 | YES | No Change |
| <u>Bryan Ave</u> | Jamboree Rd | El Camino Real | EB | 50 mph | 47 mph | 5/28/2015 | YES | |
| | Jamboree Rd | El Camino Real | WB | 50 mph | 51 mph | 5/28/2015 | YES | |
| | El Camino Real | Culver Dr | EB | 45 mph | 45 mph | 7/1/2015 | YES | |
| | El Camino Real | Culver Dr | WB | 45 mph | 47 mph | 7/1/2015 | YES | |
| | Culver Dr | Yale Ave | EW | 45 mph | 49 mph | 5/5/2016 | YES | No Change |
| | Yale Ave | Jeffrey Rd | EB | 45 mph | 46 mph | 10/21/2013 | YES | |
| <u>Business Center Dr</u> | Yale Ave | Jeffrey Rd | WB | 45 mph | 47 mph | 10/21/2013 | YES | |
| | MacArthur Blvd | End | NON | | 34 mph | 12/15/2016 | YES | 35 mph |
| <u>California Ave</u> | Academy | Innovation | NB | 45 mph | 50 mph | 8/26/2015 | YES | |
| | Academy | Innovation | SB | 45 mph | 46 mph | 8/26/2015 | YES | |
| | Innovation | Theory | NS | 45 mph | 49 mph | 10/14/2016 | YES | No Change |

CITY OF IRVINE ENGINEERING AND TRAFFIC SURVEYS FOR SPEED LIMITS
AUGUST 2017
MASTER LIST OF SURVEYED DATA RESULTS

| Street | From | To | Direction | Existing Posted Speed | 85th Percentile | Survey Date | Accident Data Considered | Recommended Posted Speed |
|------------------------------|--------------------|--------------------|-----------|-----------------------|-----------------|-------------|--------------------------|--------------------------|
| <u>Campus Dr</u> | MacArthur Blvd | Von Karman Ave | EB | <> | <> | <> | <> | |
| | MacArthur Blvd | Von Karman Ave | WB | 40 mph | 41 mph | 11/25/2015 | YES | |
| | Von Karman Ave | Jamboree Rd | EB | <> | <> | <> | <> | |
| | Von Karman Ave | Jamboree Rd | WB | 45 mph | 44 mph | 4/15/2015 | YES | |
| | Jamboree Rd | Carlson Ave | EB | 45 mph | 48 mph | 9/8/2014 | YES | |
| | Jamboree Rd | Carlson Ave | WB | 45 mph | 44 mph | 9/8/2014 | YES | |
| | Carlson Ave | University Dr | EB | 55 mph | 54 mph | 9/30/2014 | YES | |
| | Carlson Ave | University Dr | WB | 55 mph | 57 mph | 9/30/2014 | YES | |
| | University Dr | Bridge Rd | EB | 45 mph | 46 mph | 6/24/2014 | YES | |
| | University Dr | Bridge Rd | WB | 45 mph | 47 mph | 6/24/2014 | YES | |
| Bridge Rd | Bridge Rd | Berkeley Ave | EB | 45 mph | 44 mph | 7/16/2013 | YES | |
| | Bridge Rd | Berkeley Ave | WB | 45 mph | 41 mph | 7/16/2013 | YES | |
| Berkeley Ave | Berkeley Ave | California Ave | EB | 45 mph | 42 mph | 8/7/2013 | YES | |
| | Berkeley Ave | California Ave | WB | 45 mph | 43 mph | 8/7/2013 | YES | |
| California Ave | California Ave | Culver Dr | EB | 45 mph | 45 mph | 9/11/2013 | YES | |
| | California Ave | Culver Dr | WB | 45 mph | 44 mph | 9/11/2013 | YES | |
| Culver Dr | Turtle Rock Dr | EW | 45 mph | 45 mph | 8/9/2016 | YES | No Change | |
| <u>Carlson Ave</u> | Campus Dr | Palatine | NB | 50 mph | 50 mph | 7/15/2013 | YES | |
| | Campus Dr | Palatine | SB | 50 mph | 49 mph | 7/15/2013 | YES | |
| | Palatine | Michelson Dr | NB | 45 mph | 46 mph | 7/15/2013 | YES | |
| | Palatine | Michelson Dr | SB | 45 mph | 40 mph | 7/15/2013 | YES | |
| <u>Chesapeake</u> | Shiloh | Atlanta | EB | 25 mph | 32 mph | 12/2/2013 | YES | |
| | Shiloh | Atlanta | WB | 25 mph | 32 mph | 12/2/2013 | YES | |
| <u>Construction Circle E</u> | Construction South | Construction North | NB | 35 mph | 36 mph | 8/8/2014 | YES | |
| | Construction South | Construction North | SB | 35 mph | 35 mph | 8/8/2014 | YES | |
| <u>Construction Circle W</u> | Construction North | Construction South | NB | 35 mph | 34 mph | 11/30/2015 | YES | |
| | Construction North | Construction South | SB | 35 mph | 33 mph | 11/30/2015 | YES | |
| <u>Cornell</u> | Berkeley Ave | Campus Dr | NON | 30 mph | 29 mph | 5/28/2014 | YES | |
| <u>Creek Rd</u> | Alton Pkwy | Barranca Pkwy | NB | 35 mph | 37 mph | 5/27/2015 | YES | |
| | Alton Pkwy | Barranca Pkwy | SB | 35 mph | 37 mph | 5/27/2015 | YES | |
| <u>Crested Bird</u> | Groveland | Medallion | EW | 35 mph | 35 mph | 10/13/2016 | YES | No Change |

<> = Not Within Irvine City Limits
NON = Non-Directional (or Multi-Directional)
N/A = Not Applicable
R/R = Railroad Tracks

CITY OF IRVINE ENGINEERING AND TRAFFIC SURVEYS FOR SPEED LIMITS
AUGUST 2017
MASTER LIST OF SURVEYED DATA RESULTS

| Street | From | To | Direction | Existing Posted Speed | 85th Percentile | Survey Date | Accident Data Considered | Recommended Posted Speed |
|-----------------------|------------------|------------------|-----------|-----------------------|-----------------|-------------|--------------------------|--------------------------|
| <u>Culver Dr</u> | Shady Canyon Dr | Vista Del Campo | NS | 55 mph | 58 mph | 10/21/2016 | YES | No Change |
| | Vista Del Campo | Campus Dr | NS | 50 mph | 53 mph | 10/21/2016 | YES | No Change |
| | Campus Dr | University Dr | NB | 50 mph | 45 mph | 7/17/2013 | YES | |
| | | | SB | 50 mph | 49 mph | 7/17/2013 | YES | |
| | University Dr | Michelson Dr | NB | 45 mph | 49 mph | 7/11/2013 | YES | |
| | | | SB | 45 mph | 48 mph | 7/11/2013 | YES | |
| | Michelson Dr | I-405 NB Ramps | NB | 45 mph | 46 mph | 7/17/2013 | YES | |
| | | | SB | 45 mph | 48 mph | 7/17/2013 | YES | |
| | I-405 NB Ramps | Main Street | NB | 50 mph | 53 mph | 7/30/2013 | YES | |
| | | | SB | 50 mph | 52 mph | 7/30/2013 | YES | |
| | Main Street | Alton Pkwy | NB | 50 mph | 53 mph | 6/27/2013 | YES | |
| | | | SB | 50 mph | 52 mph | 6/27/2013 | YES | |
| | Alton Pkwy | Barranca Pkwy | NB | 45 mph | 44 mph | 9/10/2013 | YES | |
| | | | SB | 45 mph | 46 mph | 9/10/2013 | YES | |
| | Barranca Pkwy | Warner Ave | NB | 50 mph | 51 mph | 7/12/2013 | YES | |
| | | | SB | 50 mph | 53 mph | 7/12/2013 | YES | |
| | Warner Ave | Irvine Center Dr | NB | 55 mph | 53 mph | 8/13/2014 | YES | |
| | | | SB | 55 mph | 53 mph | 8/13/2014 | YES | |
| | Irvine Center Dr | Deerfield Ave | NB | 50 mph | 47 mph | 8/5/2014 | YES | |
| | | | SB | 50 mph | 45 mph | 8/5/2014 | YES | |
| Deerfield Ave | Walnut Ave | NB | 55 mph | 54 mph | 6/13/2014 | YES | | |
| | | SB | 55 mph | 54 mph | 6/13/2014 | YES | | |
| Walnut Ave | I-5 SB Ramps | NB | 45 mph | 48 mph | 9/29/2015 | YES | | |
| | | SB | 45 mph | 48 mph | 9/29/2015 | YES | | |
| I-5 SB Ramps | Bryan Ave | NB | 50 mph | 51 mph | 8/20/2014 | YES | | |
| | | SB | 50 mph | 52 mph | 8/20/2014 | YES | | |
| Bryan Ave | Irvine Blvd | NB | 50 mph | 50 mph | 8/21/2014 | YES | | |
| | | SB | 50 mph | 53 mph | 8/21/2014 | YES | | |
| Irvine Blvd | Meadowood | NB | 55 mph | 54 mph | 8/22/2014 | YES | | |
| | | SB | 55 mph | 55 mph | 5/29/2015 | YES | | |
| <u>Culver Dr</u> | Meadowood | Portola Pkwy | NB | 50 mph | 51 mph | 5/17/2013 | YES | |
| | | Portola Pkwy | SB | 50 mph | 50 mph | 5/17/2013 | YES | |
| <u>Deerfield Ave</u> | Harvard Ave | Culver Dr | NON | 30 mph | 32 mph | 8/20/2013 | YES | |
| | Culver Dr | Yale Ave | EB | 30 mph | 32 mph | 5/16/2013 | YES | |
| | | Yale Ave | WB | 30 mph | 33 mph | 5/16/2013 | YES | |
| <u>Dovecreek</u> | Royal Oak | Valley Oak | EB | 35 mph | 36 mph | 10/25/2012 | YES | |
| | Royal Oak | Valley Oak | WB | 35 mph | 37 mph | 10/25/2012 | YES | |
| <u>Dupont</u> | Michelson Dr | Von Karman Ave | EW | 35 mph | 41 mph | 10/19/2016 | YES | 40 mph |
| | Von Karman Ave | Jamboree Rd | EW | 40 mph | 44 mph | 12/2/2016 | YES | No Change |
| <u>Eastshore</u> | Woodspring | East Yale Loop | NON | 35 mph | 37 mph | 9/28/2015 | YES | |
| <u>Eastwood</u> | Northwood | Southwood | NB | 35 mph | 42 mph | 9/27/2016 | YES | 40 mph |
| <u>East Yale Loop</u> | Yale Ave North | Barranca Pkwy | NB | 40 mph | 41 mph | 9/4/2013 | YES | |
| | | Barranca Pkwy | SB | 40 mph | 40 mph | 9/4/2013 | YES | |
| | Barranca Pkwy | Alton Pkwy | NB | 40 mph | 43 mph | 5/12/2016 | YES | No Change |
| | | | SB | 40 mph | 42 mph | 5/12/2016 | YES | No Change |
| Alton Pkwy | Yale Ave South | N/S | 40 mph | 44 mph | 5/16/2016 | YES | No Change | |
| <u>El Camino Real</u> | Jamboree Rd | SR-261 | EB | 40 mph | 37 mph | 8/20/2015 | YES | |
| | Jamboree Rd | SR-261 | WB | 40 mph | 36 mph | 8/20/2015 | YES | |
| | SR-261 | Commerce | EB | 45 mph | 45 mph | 7/2/2014 | YES | |
| WB | | | 45 mph | 46 mph | 7/2/2014 | YES | | |

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CITY OF IRVINE ENGINEERING AND TRAFFIC SURVEYS FOR SPEED LIMITS
AUGUST 2017
MASTER LIST OF SURVEYED DATA RESULTS

| Street | From | To | Direction | Existing Posted Speed | 85th Percentile | Survey Date | Accident Data Considered | Recommended Posted Speed |
|--|------------------|------------------|-----------|-----------------------|-----------------|-------------|--------------------------|--------------------------|
| <u>Gillette Ave</u> | Main Street | Armstrong Ave | NON | 40 mph | 45 mph | 11/9/2016 | YES | No Change ⁽¹⁾ |
| <u>Great Park Blvd (Formerly Trabuco Rd)</u> | Sand Canyon Ave | Ridge Valley | EW | 50 mph | 50 mph | 10/7/2016 | YES | No Change |
| <u>Groveland</u> | Irvine Blvd | Spring Meadow | NB | 35 mph | 33 mph | 12/3/2013 | YES | |
| | Irvine Blvd | Spring Meadow | SB | 35 mph | 33 mph | 12/3/2013 | YES | |
| <u>Hallmark</u> | Crossland | Regal | NS | | 38 mph | 12/9/2016 | YES | 35 mph |
| <u>Harvard Ave</u> | Culver Dr | Berkeley Ave | EB | 40 mph | 44 mph | 1/3/2013 | YES | |
| | Culver Dr | Berkeley Ave | WB | 40 mph | 42 mph | 1/3/2013 | YES | |
| | Berkeley Ave | University Dr | EB | 45 mph | 43 mph | 11/4/2014 | YES | |
| | Berkeley Ave | University Dr | WB | 45 mph | 43 mph | 11/4/2014 | YES | |
| | University Dr | Michelson Dr | NB | 50 mph | 52 mph | 7/10/2014 | YES | |
| | University Dr | Michelson Dr | SB | 50 mph | 51 mph | 7/10/2014 | YES | |
| | Michelson Dr | Main Street | NB | 45 mph | 46 mph | 8/27/2015 | YES | |
| | Michelson Dr | Main Street | SB | 45 mph | 46 mph | 8/27/2015 | YES | |
| | Main Street | Barranca Pkwy | NB | 50 mph | 48 mph | 9/17/2014 | YES | |
| | Main Street | Barranca Pkwy | SB | 50 mph | 52 mph | 9/17/2014 | YES | |
| | Barranca Pkwy | Irvine Center Dr | NB | 50 mph | 50 mph | 10/1/2014 | YES | |
| | Barranca Pkwy | Irvine Center Dr | SB | 50 mph | 51 mph | 10/1/2014 | YES | |
| | Irvine Center Dr | Walnut Ave | NB | 45 mph | 47 mph | 10/1/2015 | YES | |
| | Irvine Center Dr | Walnut Ave | SB | 45 mph | 47 mph | 10/1/2015 | YES | |
| <u>Hicks Canyon Dr</u> | Kara | Yale Ave | NON | 35 mph | 37 mph | 11/18/2015 | YES | |
| <u>Irvine Blvd</u> | Jamboree Rd | Marketplace | EB | 50 mph | 47 mph | 9/1/2015 | YES | |
| | Jamboree Rd | Marketplace | WB | 50 mph | 45 mph | 9/1/2015 | YES | |
| | Marketplace | SR-261 NB Ramps | EB | 50 mph | 51 mph | 8/25/2015 | YES | |
| | Marketplace | SR-261 NB Ramps | WB | 50 mph | 53 mph | 8/25/2015 | YES | |
| | SR-261 NB Ramps | Culver Dr | EB | 50 mph | 53 mph | 8/31/2015 | YES | |
| | SR-261 NB Ramps | Culver Dr | WB | 50 mph | 51 mph | 8/31/2015 | YES | |
| | Culver Dr | Yale Ave | EB | 55 mph | 54 mph | 7/11/2014 | YES | |
| | Culver Dr | Yale Ave | WB | 55 mph | 55 mph | 7/11/2014 | YES | |
| | Yale Ave | Jeffrey Rd | EB | 55 mph | 50 mph | 10/1/2014 | YES | |
| | Yale Ave | Jeffrey Rd | WB | 55 mph | 56 mph | 10/1/2014 | YES | |
| | Jeffrey Rd | Sand Canyon Ave | EW | 55 mph | 55 mph | 5/18/2016 | YES | No Change |
| | Sand Canyon Ave | Pusan Way | EB | 60 mph | 58 mph | 8/13/2013 | YES | |
| | Sand Canyon Ave | Pusan Way | WB | 60 mph | 58 mph | 8/13/2013 | YES | |
| | Pusan Way | Alton Pkwy | EB | 65 mph | 64 mph | 7/31/2013 | YES | |
| | Pusan Way | Alton Pkwy | WB | 65 mph | 66 mph | 7/31/2013 | YES | |
| | Alton Pkwy | Bake Pkwy | EB | 55 mph | 53 mph | 8/27/2014 | YES | |
| | Alton Pkwy | Bake Pkwy | WB | 55 mph | 52 mph | 8/27/2014 | YES | |

Footnote:

⁽¹⁾ Gillette is a local collector street in a mixed-use area. The roadway characteristics include two-way traffic, two 90-degree street bends, business driveways, and no parking allowed on street except on Sundays for religious events. The roadway does not include on-street bike lanes, off-street bike lanes or sidewalks for bicycle and pedestrian use. Therefore, bicyclists and pedestrians potentially may use the roadway as a path of travel. It is the opinion of the Registered Civil Engineer that the lack of sidewalk and potential for bicyclists or pedestrians to be traveling in the roadway constitutes a Condition Not Readily Apparent to Motorists. Therefore, a five (5) mph reduction has been applied.

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AUGUST 2017
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|-------------------------|------------------|------------------|-----------|-----------------------|-----------------|-------------|--------------------------|--------------------------|
| <u>Irvine Center Dr</u> | Harvard Ave | Culver Dr | EB | 50 mph | 49 mph | 8/28/2014 | YES | |
| | Harvard Ave | Culver Dr | WB | 50 mph | 50 mph | 8/28/2014 | YES | |
| | Culver Dr | Yale Ave | EB | 55 mph | 54 mph | 9/10/2014 | YES | |
| | Culver Dr | Yale Ave | WB | 55 mph | 56 mph | 9/10/2014 | YES | |
| | Yale Ave | Jeffrey Rd | EB | 55 mph | 56 mph | 8/27/2014 | YES | |
| | Yale Ave | Jeffrey Rd | WB | 55 mph | 54 mph | 8/27/2014 | YES | |
| | Jeffrey Rd | Orangetree | EB | 50 mph | 52 mph | 10/8/2014 | YES | |
| | Jeffrey Rd | Orangetree | WB | 50 mph | 51 mph | 10/8/2014 | YES | |
| | Orangetree | Sand Canyon Ave | EB | 50 mph | 46 mph | 11/14/2014 | YES | |
| | Orangetree | Sand Canyon Ave | WB | 50 mph | 52 mph | 11/14/2014 | YES | |
| | Sand Canyon Ave | Barranca Pkwy | EB | 50 mph | 51 mph | 8/28/2014 | YES | |
| | Sand Canyon Ave | Barranca Pkwy | WB | 50 mph | 54 mph | 8/28/2014 | YES | |
| | Barranca Pkwy | I-405 SB Ramps | EB | 50 mph | 45 mph | 9/10/2014 | YES | |
| | Barranca Pkwy | I-405 SB Ramps | WB | 50 mph | 46 mph | 9/10/2014 | YES | |
| I-405 SB Ramps | Bake Pkwy | EB | 50 mph | 51 mph | 11/19/2014 | YES | | |
| I-405 SB Ramps | Bake Pkwy | WB | 50 mph | 50 mph | 11/19/2014 | YES | | |
| Bake Pkwy | Scientific | EB | 50 mph | 50 mph | 8/27/2015 | YES | | |
| Bake Pkwy | Scientific | WB | 50 mph | 51 mph | 8/27/2015 | YES | | |
| Scientific | Lake Forest Dr | EB | 45 mph | 44 mph | 9/2/2015 | YES | | |
| Scientific | Lake Forest Dr | WB | 45 mph | 50 mph | 9/2/2015 | YES | | |
| <u>Jamboree Rd</u> | MacArthur Blvd | Campus Dr | NB | 50 mph | 52 mph | 9/5/2013 | YES | |
| | MacArthur Blvd | Campus Dr | SB | <> | <> | <> | <> | |
| | Campus Dr | Michelson Dr | NB | 50 mph | 52 mph | 9/12/2013 | YES | |
| | Campus Dr | Michelson Dr | SB | 50 mph | 47 mph | 9/12/2013 | YES | |
| | Michelson Dr | Main Street | NB | 50 mph | 48 mph | 9/30/2015 | YES | |
| | Michelson Dr | Main Street | SB | 50 mph | 44 mph | 9/30/2015 | YES | |
| | Main Street | Barranca Pkwy | NB | 50 mph | 49 mph | 9/6/2013 | YES | |
| | Main Street | Barranca Pkwy | SB | 50 mph | 48 mph | 9/6/2013 | YES | |
| | Barranca Pkwy | City Limit | NB | <> | <> | <> | <> | |
| | Barranca Pkwy | City Limit | SB | <> | <> | <> | <> | |
| | City Limit | City Limit @ R/R | NB | <> | <> | <> | <> | |
| | City Limit | City Limit @ R/R | SB | <> | <> | <> | <> | |
| | City Limit @ R/R | Walnut Ave | NB | 65 mph | 69 mph | 11/10/2010 | YES | |
| | City Limit @ R/R | Walnut Ave | SB | 65 mph | 67 mph | 11/10/2010 | YES | |
| Walnut Ave | Michelle Dr | NB | <> | <> | <> | <> | | |
| Walnut Ave | Michelle Dr | SB | <> | <> | <> | <> | | |
| Michelle Dr | I-5 NB Ramp | NB | <> | <> | <> | <> | | |
| Michelle Dr | I-5 NB Ramp | SB | <> | <> | <> | <> | | |

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|-------------------------|--------------------|----------------------|-----------|-----------------------|-----------------|-------------|--------------------------|--------------------------|
| <u>Jeffrey Rd</u> | I-405 SB Ramp | Alton Pkwy | NB | 50 mph | 50 mph | 4/16/2015 | YES | |
| | I-405 SB Ramp | Alton Pkwy | SB | 50 mph | 54 mph | 4/16/2015 | YES | |
| | Alton Pkwy | Barranca Pkwy | NB | 50 mph | 52 mph | 6/26/2014 | YES | |
| | Alton Pkwy | Barranca Pkwy | SB | 50 mph | 50 mph | 6/26/2014 | YES | |
| | Barranca Pkwy | Irvine Center Dr | NB | 50 mph | 51 mph | 6/1/2015 | YES | |
| | Barranca Pkwy | Irvine Center Dr | SB | 50 mph | 53 mph | 6/1/2015 | YES | |
| | Irvine Center Dr | I-5 SB Ramp | NB | 50 mph | 54 mph | 6/3/2015 | YES | |
| | Irvine Center Dr | I-5 SB Ramp | SB | 50 mph | 54 mph | 6/3/2015 | YES | |
| | I-5 SB Ramps | Roosevelt | NS | 50 mph | 54 mph | 11/8/2016 | YES | No Change |
| | Roosevelt | Trabuco Rd | NS | 50 mph | 52 mph | 11/9/2016 | YES | No Change |
| | Trabuco Rd | Bryan Ave | NB | 50 mph | 52 mph | 7/8/2015 | YES | |
| | Trabuco Rd | Bryan Ave | SB | 50 mph | 52 mph | 7/8/2015 | YES | |
| Bryan Ave | Irvine Blvd | NS | 55 mph | 53 mph | 8/10/2016 | YES | 50 mph | |
| Irvine Blvd | Encore | NB | 60 mph | 54 mph | 6/2/2015 | YES | | |
| Irvine Blvd | Encore | SB | 60 mph | 58 mph | 6/2/2015 | YES | | |
| Encore | Portola Pkwy | NB | 60 mph | 56 mph | 10/29/2015 | YES | | |
| Encore | Portola Pkwy | SB | 60 mph | 51 mph | 10/29/2015 | YES | | |
| <u>Jeronimo Rd</u> | Alton Pkwy | Bake Pkwy | EB | 50 mph | 52 mph | 6/30/2014 | YES | |
| | Alton Pkwy | Bake Pkwy | WB | 50 mph | 50 mph | 6/30/2014 | YES | |
| <u>Jordan Ave</u> | Michelson Dr | Jordan East | NS | 30 mph | 31 mph | 12/21/2016 | YES | No Change |
| <u>Jordan East</u> | Jordan Ave | Michelson Dr | NB | 30 mph | 31 mph | 11/23/2015 | YES | |
| | Jordan Ave | Michelson Dr | SB | 30 mph | 32 mph | 11/23/2015 | YES | |
| <u>Knollcrest W</u> | Quail Hill Pkwy | Radiance | NON | 35 mph | 38 mph | 8/13/2013 | YES | |
| <u>Knollcrest</u> | Radiance | Pine Needles | NON | 35 mph | 39 mph | 7/18/2013 | YES | |
| <u>Knollcrest E</u> | Pine Needles | Quail Hill Pkwy | NON | 35 mph | 38 mph | 7/30/2013 | YES | |
| <u>Laguna Canyon Rd</u> | City Limit | SR-133 | NB | <> | <> | <> | <> | |
| | City Limit | SR-133 | SB | <> | <> | <> | <> | |
| | SR-133 | Quail Hill Pkwy | NS | 50 mph | 52 mph | 10/6/2016 | YES | No Change |
| | Quail Hill Pkwy | Alton Pkwy | NS | 50 mph | 51 mph | 10/6/2016 | YES | No Change |
| | Alton Pkwy | Barranca Pkwy | NB | 45 mph | 42 mph | 6/25/2014 | YES | |
| | Alton Pkwy | Barranca Pkwy | SB | 45 mph | 43 mph | 6/25/2014 | YES | |
| Barranca Pkwy | Irvine Center Dr | NB | 45 mph | 43 mph | 10/6/2014 | YES | | |
| Barranca Pkwy | Irvine Center Dr | SB | 45 mph | 46 mph | 10/6/2014 | YES | | |
| <u>Lake Rd</u> | Alton Pkwy | Barranca Pkwy | NB | 25 mph | N/A | N/A | YES | |
| | Alton Pkwy | Barranca Pkwy | SB | 25 mph | N/A | N/A | YES | |
| <u>Lake Forest Dr</u> | SR-133 | Tesla | EB | 55 mph | 55 mph | 10/16/2013 | YES | |
| | SR-133 | Tesla | WB | 55 mph | 59 mph | 10/16/2013 | YES | |
| <u>Landmark</u> | Journey / Townsend | Crossland / Hallmark | NS | | 31 mph | 12/20/2016 | YES | 30 mph |
| <u>MacArthur Blvd</u> | SR-73 | Jamboree Rd | NB | 60 mph | 63 mph | 8/14/2013 | YES | |
| | SR-73 | Jamboree Rd | SB | 60 mph | 64 mph | 8/14/2013 | YES | |
| | Jamboree Rd | Campus Dr | NB | <> | <> | <> | <> | |
| | Jamboree Rd | Campus Dr | SB | <> | <> | <> | <> | |
| | Campus Dr | Michelson Dr | NB | 45 mph | 47 mph | 7/23/2013 | YES | |
| | Campus Dr | Michelson Dr | SB | 45 mph | 50 mph | 7/23/2013 | YES | |
| | Michelson Dr | I-405 SB Ramps | NB | 45 mph | 49 mph | 8/8/2013 | YES | |
| | Michelson Dr | I-405 SB Ramps | SB | 45 mph | 45 mph | 8/8/2013 | YES | |
| | I-405 SB Ramps | Red Hill Ave | EB | 50 mph | 50 mph | 7/22/2013 | YES | |
| | I-405 SB Ramps | Red Hill Ave | WB | 50 mph | 52 mph | 7/22/2013 | YES | |
| Red Hill Ave | SR-55 NB Ramps | EB | 45 mph | 49 mph | 7/24/2013 | YES | | |
| Red Hill Ave | SR-55 NB Ramps | WB | 45 mph | 49 mph | 7/24/2013 | YES | | |

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|-------------------------|------------------|-------------------|-----------|-----------------------|-----------------|-------------|--------------------------|--------------------------|
| <u>Main Street</u> | SR-55 | MacArthur Blvd | EB | 45 mph | 47 mph | 8/6/2013 | YES | |
| | SR-55 | MacArthur Blvd | WB | 45 mph | 49 mph | 8/6/2013 | YES | |
| | MacArthur Blvd | Jamboree Rd | EB | 45 mph | 44 mph | 8/7/2013 | YES | |
| | MacArthur Blvd | Jamboree Rd | WB | 45 mph | 43 mph | 8/7/2013 | YES | |
| | Jamboree Rd | Harvard Ave | EB | 45 mph | 46 mph | 6/27/2014 | YES | |
| | Jamboree Rd | Harvard Ave | WB | 45 mph | 48 mph | 6/27/2014 | YES | |
| | Harvard Ave | Paseo Westpark | EB | 50 mph | 51 mph | 4/14/2015 | YES | |
| | Harvard Ave | Paseo Westpark | WB | 50 mph | 49 mph | 4/14/2015 | YES | |
| | Paseo Westpark | Culver Dr | EB | 50 mph | 48 mph | 6/26/2014 | YES | |
| | Paseo Westpark | Culver Dr | WB | 50 mph | 49 mph | 6/26/2014 | YES | |
| <u>McGaw Ave</u> | Pullman St | Von Karman Ave | EB | 45 mph | 45 mph | 9/10/2015 | YES | |
| | Pullman St | Von Karman Ave | WB | 45 mph | 47 mph | 9/10/2015 | YES | |
| | Von Karman Ave | Murphy Ave | EB | 45 mph | 45 mph | 7/30/2014 | YES | |
| | Von Karman Ave | Murphy Ave | WB | 45 mph | 44 mph | 7/30/2014 | YES | |
| <u>Meadowood</u> | Culver Dr | Citrusglen | EW | 45 mph | 45 mph | 10/13/2016 | YES | No Change |
| <u>Michelson Dr</u> | MacArthur Blvd | Von Karman Ave | EB | 40 mph | 41 mph | 8/6/2013 | YES | |
| | MacArthur Blvd | Von Karman Ave | WB | 40 mph | 41 mph | 8/6/2013 | YES | |
| | Von Karman Ave | Jamboree Rd | EB | 45 mph | 45 mph | 9/20/2013 | YES | |
| | Von Karman Ave | Jamboree Rd | WB | 45 mph | 43 mph | 9/20/2013 | YES | |
| | Jamboree Rd | Harvard Ave | EB | 45 mph | 47 mph | 10/4/2013 | YES | |
| | Jamboree Rd | Harvard Ave | WB | 45 mph | 45 mph | 10/4/2013 | YES | |
| | Harvard Ave | Culver Dr | EB | 45 mph | 47 mph | 10/3/2013 | YES | |
| | Harvard Ave | Culver Dr | WB | 45 mph | 43 mph | 10/3/2013 | YES | |
| | Culver Dr | Sandburg/Seton Rd | EB | 35 mph | 39 mph | 11/5/2015 | YES | |
| | Culver Dr | Sandburg/Seton Rd | WB | 35 mph | 40 mph | 11/5/2015 | YES | |
| Sandburg/Seton Rd | Redwood Tree Ln | EW | 35 mph | 39 mph | 10/4/2016 | YES | No change | |
| Redwood Tree Ln | Yale Ave | EB | 35 mph | 36 mph | 10/6/2015 | YES | | |
| Redwood Tree Ln | Yale Ave | WB | 35 mph | 38 mph | 10/6/2015 | YES | | |
| Yale Ave | University Dr | EB | 35 mph | 36 mph | 11/12/2015 | YES | | |
| Yale Ave | University Dr | WB | 35 mph | 39 mph | 11/12/2015 | YES | | |
| <u>Millikan Ave</u> | Alton Pkwy | Barranca Pkwy | NS | | 42 mph | 12/2/2016 | YES | 40 mph |
| <u>Modjeska</u> | Irvine Blvd | Walking Stick | NB | 55 mph | 54 mph | 9/5/2013 | YES | |
| | Irvine Blvd | Walking Stick | SB | 55 mph | 51 mph | 9/5/2013 | YES | |
| | Walking Stick | Portola Springs | NB | 45 mph | 39 mph | 11/25/2015 | YES | |
| Walking Stick | Portola Springs | SB | 45 mph | 45 mph | 8/27/2014 | YES | | |
| <u>Muirlands Blvd</u> | Alton Pkwy | Bake Pkwy | EB | 50 mph | 52 mph | 7/1/2014 | YES | |
| | Alton Pkwy | Bake Pkwy | WB | 50 mph | 50 mph | 7/1/2014 | YES | |
| <u>Newport Coast Dr</u> | Bonita Canyon Dr | SR-73 | NS | 55 mph | 57 mph | 9/29/2016 | YES | No Change |
| <u>Nightmist</u> | Rush Lily | Tulip | EB | 25 mph | 32 mph | 1/22/2016 | YES | |
| | Rush Lily | Tulip | WB | 25 mph | 32 mph | 1/22/2016 | YES | |
| | Tulip | Sand Canyon Ave | EB | 30 mph | 35 mph | 1/22/2016 | YES | |
| | Tulip | Sand Canyon Ave | WB | 30 mph | 35 mph | 1/22/2016 | YES | |
| <u>Northwood</u> | Eastwood | Westwood | EB | 35 mph | 42 mph | 11/2/2016 | YES | 40 mph |
| <u>Pacifica</u> | Alton Pkwy | Irvine Center Dr | NON | | 46 mph | 12/6/2016 | YES | 45 mph |
| <u>Park Place</u> | Yale Ave | Kara | NON | 40 mph | 41 mph | 10/18/2016 | YES | No Change |
| <u>Paseo Westpark</u> | Harvard Ave | Warner Ave | EW | 40 mph | 35 mph | 8/10/2016 | YES | 35 mph |
| | Warner Ave | Barranca Pkwy | NB | 40 mph | 42 mph | 7/22/2015 | YES | |
| | Warner Ave | Barranca Pkwy | SB | 40 mph | 40 mph | 7/22/2015 | YES | |
| <u>Portola Springs</u> | Portola Pkwy | Long Grass | NB | 35 mph | 40 mph | 8/14/2013 | YES | |
| | Portola Pkwy | Long Grass | SB | 35 mph | 38 mph | 8/14/2013 | YES | |
| | Long Grass | Modjeska | NB | 40 mph | 41 mph | 9/24/2013 | YES | |
| | Long Grass | Modjeska | SB | 40 mph | 38 mph | 9/24/2013 | YES | |

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|------------------------|------------------|------------------|-----------|-----------------------|-----------------|-------------|--------------------------|--------------------------|
| <u>Portola Pkwy</u> | SR-261 NB Ramps | Culver Dr | EB | 50 mph | 52 mph | 6/25/2013 | YES | |
| | SR-261 NB Ramps | Culver Dr | WB | 50 mph | 54 mph | 6/25/2013 | YES | |
| | Culver Dr | Yale Ave | EB | 55 mph | 53 mph | 6/19/2013 | YES | |
| | Culver Dr | Yale Ave | WB | 55 mph | 58 mph | 6/19/2013 | YES | |
| | Yale Ave | Jeffrey Rd | EB | 55 mph | 56 mph | 6/20/2013 | YES | |
| | Yale Ave | Jeffrey Rd | WB | 55 mph | 58 mph | 6/20/2013 | YES | |
| | Jeffrey Rd | Bee Canyon | EB | 55 mph | 58 mph | 1/7/2015 | YES | |
| | Jeffrey Rd | Bee Canyon | WB | 55 mph | 56 mph | 1/7/2015 | YES | |
| | Bee Canyon | Sand Canyon Ave | EB | 55 mph | 54 mph | 11/5/2012 | YES | |
| | Bee Canyon | Sand Canyon Ave | WB | 55 mph | 56 mph | 11/5/2012 | YES | |
| | Sand Canyon Ave | Arrowhead | EB | 50 mph | 53 mph | 11/2/2012 | YES | |
| | Sand Canyon Ave | Arrowhead | WB | 50 mph | 53 mph | 11/2/2012 | YES | |
| | Arrowhead | Ridge Valley | EB | 50 mph | 50 mph | 9/11/2012 | YES | |
| | Arrowhead | Ridge Valley | WB | 50 mph | 52 mph | 9/11/2012 | YES | |
| Ridge Valley | Portola Springs | EB | 50 mph | 53 mph | 9/20/2012 | YES | | |
| Ridge Valley | Portola Springs | WB | 50 mph | 53 mph | 9/20/2012 | YES | | |
| Portola Springs | SR-241 | EB | 50 mph | 52 mph | 10/7/2015 | YES | | |
| Portola Springs | SR-241 | WB | 50 mph | 53 mph | 10/7/2015 | YES | | |
| <u>Quail Hill Pkwy</u> | Shady Canyon Dr | Knollcrest W | EB | 45 mph | 47 mph | 7/18/2013 | YES | |
| | Shady Canyon Dr | Knollcrest W | WB | 45 mph | 45 mph | 7/18/2013 | YES | |
| | Knollcrest W | Knollcrest E | EB | 45 mph | 47 mph | 6/18/2013 | YES | |
| | Knollcrest W | Knollcrest E | WB | 45 mph | 48 mph | 6/18/2013 | YES | |
| | Knollcrest E | Laguna Canyon Rd | EB | 45 mph | 48 mph | 6/25/2013 | YES | |
| <u>Red Hill Ave</u> | Knollcrest E | Laguna Canyon Rd | WB | 45 mph | 47 mph | 6/25/2013 | YES | |
| | Main Street | MacArthur Blvd | NB | 50 mph | 48 mph | 8/25/2014 | YES | |
| | Main Street | MacArthur Blvd | SB | 50 mph | 49 mph | 8/25/2014 | YES | |
| | MacArthur Blvd | Barranca Pkwy | NB | 50 mph | 50 mph | 10/3/2014 | YES | |
| | MacArthur Blvd | Barranca Pkwy | SB | 50 mph | 52 mph | 10/3/2014 | YES | |
| <u>Regal</u> | Hallmark | Vintage | EW | | 39 mph | 12/9/2016 | YES | 35 mph |
| <u>Research Dr</u> | Irvine Center Dr | Bake Pkwy | NB | 45 mph | 47 mph | 4/21/2015 | YES | |
| | Irvine Center Dr | Bake Pkwy | SB | 45 mph | 47 mph | 4/21/2015 | YES | |
| | Bake Pkwy | City Limit | NB | 50 mph | 48 mph | 9/28/2015 | YES | |
| | Bake Pkwy | City Limit | SB | 50 mph | 48 mph | 9/28/2015 | YES | |
| <u>Ridgeline Dr</u> | Turtle Rock | University Dr | NB | 50 mph | 60 mph | 9/28/2015 | YES | |
| | Turtle Rock | University Dr | SB | 50 mph | 58 mph | 9/28/2015 | YES | |
| | Hillcrest | Turtle Rock Dr | NON | | 39 mph | 12/12/2016 | YES | 35 mph |
| <u>Ridge Valley</u> | Portola Pkwy | Port/Cienega | NB | 35 mph | 38 mph | 1/22/2016 | YES | |
| | Portola Pkwy | Port/Cienega | SB | 35 mph | 38 mph | 1/22/2016 | YES | |
| | Port/Cienega | Irvine Blvd | NB | 45 mph | 50 mph | 1/22/2016 | YES | |
| | Port/Cienega | Irvine Blvd | SB | 45 mph | 50 mph | 1/22/2016 | YES | |
| <u>Rockfield Blvd</u> | Thomas | Bake Pkwy | EB | 45 mph | 43 mph | 9/15/2015 | YES | |
| | Thomas | Bake Pkwy | WB | 45 mph | 43 mph | 9/15/2015 | YES | |
| | Bake Pkwy | East City Limit | EB | 45 mph | 43 mph | 9/24/2015 | YES | |
| | Bake Pkwy | East City Limit | WB | 45 mph | 44 mph | 9/24/2015 | YES | |

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AUGUST 2017
MASTER LIST OF SURVEYED DATA RESULTS

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|---------------------------|-------------------------|-------------------|-----------|-----------------------|-----------------|-------------|--------------------------|--------------------------|
| <u>Roosevelt</u> | Monroe | Yale Ave | EB | 40 mph | 41 mph | 4/20/2015 | YES | |
| | Monroe | Yale Ave | WB | 40 mph | 43 mph | 4/20/2015 | YES | |
| | Yale Ave | Jeffrey Rd | EB | 40 mph | 43 mph | 9/3/2015 | YES | |
| | Yale Ave | Jeffrey Rd | WB | 40 mph | 43 mph | 9/3/2015 | YES | |
| | Jeffrey Rd | Visions | EB | 35 mph | 41 mph | 1/19/2016 | YES | |
| | Jeffrey Rd | Visions | WB | 35 mph | 41 mph | 1/19/2016 | YES | |
| | Visions | Bay Tree | EB | 35 mph | 42 mph | 1/19/2016 | YES | |
| | Visions | Bay Tree | WB | 35 mph | 42 mph | 1/19/2016 | YES | |
| | Bay Tree | Tulip | EB | 30 mph | 35 mph | 12/2/2015 | YES | |
| | Bay Tree | Tulip | WB | 30 mph | 35 mph | 12/2/2015 | YES | |
| | Tulip | Sand Canyon Ave | EB | 35 mph | 39 mph | 1/26/2016 | YES | |
| | Tulip | Sand Canyon Ave | WB | 35 mph | 39 mph | 1/26/2016 | YES | |
| <u>Royce Rd (West)</u> | Michelson Dr | Yale Ave | EB | 30 mph | 31 mph | 12/3/2013 | YES | |
| | Michelson Dr | Yale Ave | WB | 30 mph | 31 mph | 12/3/2013 | YES | |
| <u>Royce Rd (East)</u> | Yale Ave | Michelson Dr | EB | 30 mph | 29 mph | 9/24/2013 | YES | |
| | Yale Ave | Michelson Dr | WB | 30 mph | 28 mph | 9/24/2013 | YES | |
| <u>Rush Lily</u> | Roosevelt | Nightmist | NB | 25 mph | 30 mph | 12/9/2015 | YES | |
| | Roosevelt | Nightmist | SB | 25 mph | 30 mph | 12/9/2015 | YES | |
| <u>Sand Canyon Ave</u> | Alton Pkwy | Barranca Pkwy | NB | 50 mph | 49 mph | 8/14/2014 | YES | |
| | Alton Pkwy | Barranca Pkwy | SB | 50 mph | 48 mph | 8/14/2014 | YES | |
| | Barranca Pkwy | Irvine Center Dr | NB | 50 mph | 49 mph | 6/30/2014 | YES | |
| | Barranca Pkwy | Irvine Center Dr | SB | 50 mph | 51 mph | 6/30/2014 | YES | |
| | Irvine Center Dr | Oak Canyon | NB | 50 mph | 49 mph | 8/4/2015 | YES | |
| | Irvine Center Dr | Oak Canyon | SB | 50 mph | 50 mph | 8/4/2015 | YES | |
| | Oak Canyon | Marine Way | NB | 50 mph | 49 mph | 10/6/2015 | YES | |
| | Oak Canyon | Marine Way | SB | 50 mph | 51 mph | 10/6/2015 | YES | |
| | Marine Way | Trabuco Rd | NB | 55 mph | 55 mph | 10/7/2015 | YES | |
| | Marine Way | Trabuco Rd | SB | 55 mph | 52 mph | 10/7/2015 | YES | |
| Trabuco Rd | Irvine Blvd | NB | 55 mph | 56 mph | 9/1/2015 | YES | | |
| | Irvine Blvd | SB | 55 mph | 55 mph | 9/1/2015 | YES | | |
| Irvine Blvd | Portola Pkwy | NS | 55 mph | 53 mph | 12/5/2016 | YES | 50 mph | |
| <u>San Leon</u> | Harvard Ave | San Remo | NON | 30 mph | 31 mph | 6/26/2013 | YES | |
| <u>San Marino</u> | Harvard Ave | San Carlo | NON | 35 mph | 39 mph | 7/13/2012 | YES | |
| | San Carlo | Paseo Westpark | EB | 30 mph | 38 mph | 9/23/2015 | YES | |
| | San Carlo | Paseo Westpark | WB | 30 mph | 35 mph | 9/23/2015 | YES | |
| <u>San Remo</u> | San Leon | Paseo Westpark | NON | 30 mph | 34 mph | 10/10/2013 | YES | |
| <u>Sandburg Way</u> | Culver Dr | Michelson Dr | NON | 25 mph | 32 mph | 10/8/2013 | YES | |
| <u>Scented Violet</u> | Roosevelt | Starry Iris | NB | 30 mph | 34 mph | 12/9/2015 | YES | |
| | Roosevelt | Starry Iris | SB | 30 mph | 34 mph | 12/9/2015 | YES | |
| <u>Scientific</u> | Lake Forest Dr | Research Dr | NS | | 38 mph | 12/14/2016 | YES | 35 mph |
| <u>Seton Rd</u> | Culver Dr | Michelson Dr | NON | 25 mph | 34 mph | 11/16/2015 | YES | |
| <u>Shady Canyon Dr</u> | Bonita Canyon Dr | Summit Park | EB | 50 mph | 51 mph | 9/19/2013 | YES | |
| | Bonita Canyon Dr | Summit Park | WB | 50 mph | 52 mph | 9/19/2013 | YES | |
| | Summit Park | Sunnyhill | EB | 50 mph | 50 mph | 8/15/2013 | YES | |
| | Summit Park | Sunnyhill | WB | 50 mph | 51 mph | 8/15/2013 | YES | |
| | Private Gate | Quail Hill Pkwy | NB | 50 mph | 48 mph | 9/9/2015 | YES | |
| | Private Gate | Quail Hill Pkwy | SB | 50 mph | 50 mph | 9/9/2015 | YES | |
| <u>Sky Park Circle</u> | < < < Entire Loop > > > | | NON | 35 mph | 37 mph | 9/30/2015 | YES | |
| <u>Southwood</u> | Eastwood | Westwood | EW | 35 mph | 42 mph | 10/3/2016 | YES | 40 mph |
| <u>Spectrum Center Dr</u> | Enterprise Dr | Entertainment Way | NS | 40 mph | 32 mph | 12/21/2016 | YES | 30 mph |
| <u>Springbrook N</u> | Springbrook S | East Yale Loop | EB | 35 mph | 35 mph | 9/8/2015 | YES | |
| | Springbrook S | East Yale Loop | WB | 35 mph | 34 mph | 9/8/2015 | YES | |

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AUGUST 2017
MASTER LIST OF SURVEYED DATA RESULTS

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|---------------------------|-------------------------------|------------------------|-----------|-----------------------|-----------------|-------------|--------------------------|--------------------------|
| <u>Spring Meadow</u> | Sand Canyon Ave | Medallion | EB | 40 mph | 39 mph | 8/10/2015 | YES | |
| | Sand Canyon Ave | Medallion | WB | 40 mph | 42 mph | 8/10/2015 | YES | |
| | Medallion | Groveland | EB | 40 mph | 35 mph | 9/16/2015 | YES | |
| | Medallion | Groveland | WB | 40 mph | 38 mph | 9/16/2015 | YES | |
| <u>Spyglass</u> | Knollcrest | Weathervane | EB | 35 mph | 39 mph | 10/29/2015 | YES | |
| | Knollcrest | Weathervane | WB | 35 mph | 40 mph | 10/29/2015 | YES | |
| <u>Stanford Ct</u> | Harvard Ave | Bridge Rd | NON | 30 mph | 30 mph | 5/28/2014 | YES | |
| <u>Starcrest</u> | Hillcrest | Turtle Rock Dr | EW | 45 mph | 44 mph | 10/14/2016 | YES | No Change |
| <u>Stone Creek N</u> | West Yale Loop | Stone Creek S | NON | 30 mph | 30 mph | 9/23/2013 | YES | |
| <u>Stone Creek S</u> | West Yale Loop | Stone Crk S-East curve | NON | 30 mph | 37 mph | 10/6/2016 | YES | 35 mph |
| <u>Summit Park</u> | Turtle Ridge Dr | Lonetree | EW | 45 mph | 45 mph | 10/21/2016 | YES | No Change |
| <u>Sweet Shade</u> | Harvard Ave | Fringe Tree | EB | 30 mph | 31 mph | 6/16/2014 | YES | |
| | Harvard Ave | Fringe Tree | WB | 30 mph | 31 mph | 6/16/2014 | YES | |
| <u>Technology Dr West</u> | (West Terminus) | Barranca Pkwy | NON | 45 mph | 47 mph | 4/23/2015 | YES | |
| | Barranca Pkwy | Alton Pkwy | EB | 40 mph | 41 mph | 11/20/2014 | YES | |
| | Barranca Pkwy | Alton Pkwy | WB | 40 mph | 45 mph | 9/9/2015 | YES | |
| <u>Technology Dr</u> | < < < Loop: Alton-Alton > > > | | NON | 45 mph | 50 mph | 11/13/2015 | YES | |
| <u>Toledo Way</u> | Alton Pkwy | Bake Pkwy | EB | 50 mph | 47 mph | 5/19/2015 | YES | |
| | Alton Pkwy | Bake Pkwy | WB | 50 mph | 48 mph | 5/19/2015 | YES | |
| <u>Townsend</u> | Vintage | Journey / Landmark | EW | | 39 mph | 12/9/2016 | YES | 35 mph |
| <u>Trabuco Rd</u> | Culver Dr | Yale Ave | EW | 50 mph | 51 mph | 10/6/2016 | YES | No Change |
| | Yale Ave | Jeffrey Rd | EB | 50 mph | 50 mph | 8/13/2015 | YES | |
| | Yale Ave | Jeffrey Rd | WB | 50 mph | 55 mph | 8/13/2015 | YES | |
| | Jeffrey Rd | Sand Canyon Ave | EB | 50 mph | 49 mph | 8/26/2014 | YES | |
| | Jeffrey Rd | Sand Canyon Ave | WB | 50 mph | 52 mph | 8/26/2014 | YES | |
| <u>Tulip</u> | Trabuco Rd | Roosevelt | EW | 35 mph | 39 mph | 1/20/2016 | YES | |
| | Trabuco Rd | Roosevelt | SB | 35 mph | 39 mph | 1/20/2016 | YES | |
| | Roosevelt | Nightmist | NB | 35 mph | 38 mph | 1/20/2016 | YES | |
| | Roosevelt | Nightmist | SB | 35 mph | 38 mph | 1/20/2016 | YES | |
| <u>Turtle Ridge</u> | Newport Coast Dr | Bonita Canyon Dr | NB | 40 mph | 45 mph | 8/26/2015 | YES | |
| | Newport Coast Dr | Bonita Canyon Dr | SB | 40 mph | 40 mph | 8/26/2015 | YES | |
| <u>Turtle Rock Dr</u> | Campus Dr | Grossmont Ave | NB | 40 mph | 49 mph | 8/10/2015 | YES | |
| | Campus Dr | Grossmont Ave | SB | 40 mph | 44 mph | 8/10/2015 | YES | |
| | Grossmont Ave | Sierra Amigo Rd | NS | 45 mph | 48 mph | 12/13/2016 | YES | No Change |
| | Sierra Amigo Rd | Sierra Cecile Rd | NB | 40 mph | 46 mph | 6/17/2015 | YES | |
| | Sierra Amigo Rd | Sierra Cecile Rd | SB | 40 mph | 48 mph | 6/17/2015 | YES | |
| | Sierra Cecile Rd | Ridgeline Dr | NS | 45 mph | 47 mph | 12/15/2016 | YES | No Change |
| | Ridgeline Dr | Sycamore Creek E | EW | 45 mph | 49 mph | 12/13/2016 | YES | No Change |
| Sycamore Creek E | Campus Dr | EW | 45 mph | 49 mph | 12/12/2016 | YES | No Change | |

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|-----------------------|----------------|------------------|-----------|-----------------------|-----------------|-------------|--------------------------|--------------------------|
| <u>University Dr</u> | MacArthur Blvd | Campus Dr | EB | 55 mph | 52 mph | 7/29/2014 | YES | |
| | MacArthur Blvd | Campus Dr | WB | 55 mph | 57 mph | 7/29/2014 | YES | |
| | Campus Dr | Harvard Ave | EB | 50 mph | 51 mph | 8/13/2015 | YES | |
| | Campus Dr | Harvard Ave | WB | 50 mph | 52 mph | 8/13/2015 | YES | |
| | Harvard Ave | San Joaquin | EB | 55 mph | 57 mph | 5/7/2015 | YES | |
| | Harvard Ave | San Joaquin | WB | 55 mph | 58 mph | 5/7/2015 | YES | |
| | San Joaquin | Culver Dr | EB | 55 mph | 55 mph | 6/15/2015 | YES | |
| | San Joaquin | Culver Dr | WB | 55 mph | 54 mph | 6/15/2015 | YES | |
| | Culver Dr | Yale Ave | EB | 50 mph | 54 mph | 8/5/2015 | YES | |
| | Culver Dr | Yale Ave | WB | 50 mph | 55 mph | 8/5/2015 | YES | |
| | Yale Ave | Michelson Dr | EB | 50 mph | 56 mph | 8/18/2015 | YES | |
| | Yale Ave | Michelson Dr | WB | 50 mph | 55 mph | 8/18/2015 | YES | |
| | Michelson Dr | I-405 SB Ramp | EB | 50 mph | 50 mph | 10/5/2015 | YES | |
| | Michelson Dr | I-405 SB Ramp | WB | 50 mph | 50 mph | 10/5/2015 | YES | |
| <u>Valley Oak</u> | Alton Pkwy | Barranca Pkwy | NB | 45 mph | 44 mph | 8/8/2013 | YES | |
| | Alton Pkwy | Barranca Pkwy | SB | 45 mph | 42 mph | 8/8/2013 | YES | |
| | Barranca Pkwy | Irvine Center Dr | NB | 45 mph | 49 mph | 7/1/2013 | YES | |
| | Barranca Pkwy | Irvine Center Dr | SB | 45 mph | 47 mph | 7/1/2013 | YES | |
| <u>Vintage</u> | Regal | Townsend | NS | | 41 mph | 12/20/2016 | YES | 40 mph |
| <u>Visions</u> | Trabuco Rd | Roosevelt | NB | 35 mph | 38 mph | 12/10/2015 | YES | |
| | Trabuco Rd | Roosevelt | SB | 35 mph | 38 mph | 12/10/2015 | YES | |
| <u>Von Karman Ave</u> | Campus Dr | Michelson Dr | NB | 45 mph | 43 mph | 10/2/2013 | YES | |
| | Campus Dr | Michelson Dr | SB | 45 mph | 48 mph | 10/2/2013 | YES | |
| | Michelson Dr | Main Street | NB | 45 mph | 48 mph | 10/2/2013 | YES | |
| | Michelson Dr | Main Street | SB | 45 mph | 44 mph | 10/2/2013 | YES | |
| | Main Street | Barranca Pkwy | NB | 50 mph | 50 mph | 7/23/2013 | YES | |
| | Main Street | Barranca Pkwy | SB | 50 mph | 51 mph | 7/23/2013 | YES | |
| <u>Walnut Ave</u> | Myford Rd | Harvard Ave | EB | 40 mph | 45 mph | 12/4/2014 | YES | |
| | Myford Rd | Harvard Ave | WB | 40 mph | 43 mph | 12/4/2014 | YES | |
| | Harvard Ave | The Mall | EB | 45 mph | 45 mph | 6/28/2013 | YES | |
| | Harvard Ave | The Mall | WB | 45 mph | 45 mph | 6/28/2013 | YES | |
| | The Mall | Culver Dr | EB | 40 mph | 44 mph | 7/1/2013 | YES | |
| | The Mall | Culver Dr | WB | 40 mph | 44 mph | 7/1/2013 | YES | |
| | Culver Dr | Yale Ave | EB | 45 mph | 46 mph | 7/3/2013 | YES | |
| | Culver Dr | Yale Ave | WB | 45 mph | 46 mph | 7/3/2013 | YES | |
| | Yale Ave | Kazan St | EB | 45 mph | 48 mph | 5/16/2013 | YES | |
| | Yale Ave | Kazan St | WB | 45 mph | 48 mph | 5/16/2013 | YES | |
| <u>Warner Ave</u> | City Limit | NB Jamboree Rd | EB | 45 mph | 46 mph | 8/22/2013 | YES | |
| | City Limit | NB Jamboree Rd | WB | 45 mph | 48 mph | 8/22/2013 | YES | |
| | NB Jamboree Rd | Harvard Ave | EB | 50 mph | 47 mph | 5/9/2013 | YES | |
| | NB Jamboree Rd | Harvard Ave | WB | 50 mph | 50 mph | 5/9/2013 | YES | |
| | Harvard Ave | Culver Dr | EB | 45 mph | 41 mph | 9/8/2014 | YES | |
| | Harvard Ave | Culver Dr | WB | 45 mph | 40 mph | 9/8/2014 | YES | |
| <u>Westwood</u> | Northwood | Southwood | NS | 35 mph | 41 mph | 10/12/2016 | YES | 40 mph |
| <u>West Yale Loop</u> | Yale Ave South | Alton Pkwy | NS | 40 mph | 42 mph | 9/29/2016 | YES | No Change |
| | Alton Pkwy | Barranca Pkwy | NS | 40 mph | 43 mph | 9/28/2016 | YES | No Change |
| | Barranca Pkwy | Yale Ave North | NS | 40 mph | 42 mph | 9/28/2016 | YES | No Change |

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|----------|------------------|------------------|-----------|-----------------------|-----------------|-------------|--------------------------|--------------------------|
| Yale Ave | University Dr | Royce Rd | NB | 35 mph | 41 mph | 11/16/2015 | YES | |
| | University Dr | Royce Rd | SB | 35 mph | 41 mph | 11/16/2015 | YES | |
| | Royce Rd | Michelson Dr | NB | 40 mph | 45 mph | 6/30/2015 | YES | |
| | Royce Rd | Michelson Dr | SB | 40 mph | 44 mph | 6/30/2015 | YES | |
| | West Yale Loop | Irvine Center Dr | NB | 40 mph | 39 mph | 5/18/2016 | YES | No Change |
| | Irvine Center Dr | Deerfield Ave | NB | 45 mph | 47 mph | 8/9/2014 | YES | |
| | Irvine Center Dr | Deerfield Ave | SB | 45 mph | 46 mph | 8/9/2014 | YES | |
| | Deerfield Ave | Winvale Ave | NB | 45 mph | 48 mph | 5/18/2015 | YES | |
| | Deerfield Ave | Winvale Ave | SB | 45 mph | 45 mph | 5/18/2015 | YES | |
| | Winvale Ave | Walnut Ave | NB | 40 mph | 40 mph | 5/27/2015 | YES | |
| | Winvale Ave | Walnut Ave | SB | 40 mph | 42 mph | 5/27/2015 | YES | |
| | Walnut Ave | Trabuco Rd | NS | 45 mph | 47 mph | 10/5/2016 | YES | No Change |
| | Trabuco Rd | Monticello | NB | 40 mph | 43 mph | 5/8/2013 | YES | |
| | Trabuco Rd | Monticello | SB | 40 mph | 42 mph | 5/8/2013 | YES | |
| | Monticello | Irvine Blvd | NB | 40 mph | 42 mph | 7/2/2013 | YES | |
| | Monticello | Irvine Blvd | SB | 40 mph | 42 mph | 7/2/2013 | YES | |
| | Irvine Blvd | Meadowood | NB | 40 mph | 44 mph | 5/25/2016 | YES | No Change |
| | Irvine Blvd | Meadowood | SB | 40 mph | 42 mph | 5/25/2016 | YES | No Change |

5.4



REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: AUGUST 8, 2017

TITLE: CONSIDERATION OF MEMORANDUM OF UNDERSTANDING WITH PRETEND CITY CHILDREN'S MUSEUM FOR PROPERTY AT THE CULTURAL TERRACE



Director, Orange County Great Park



City Manager

RECOMMENDED ACTION

Approve a Memorandum of Understanding with Pretend City Children's Museum for lease of property at the Great Park Cultural Terrace.

EXECUTIVE SUMMARY

At its July 25 meeting, the Orange County Great Park Board of Directors directed staff to negotiate a Memorandum of Understanding (MOU) with Pretend City (Museum) for the lease of property at the Orange County Great Park. The attached MOU expresses the mutual interest of both parties in entering lease negotiations, and based on discussions with the Museum's Executive Director, provides a sufficient level of City commitment for the Museum to retain its funding from the Children and Families Commission of Orange County.

The MOU commits both parties to good faith negotiations toward a property lease for a period of one year. The agreement also outlines a set of terms to serve as a starting point for lease negotiations as summarized below:

- Term of lease: Not less than 30 years
- Rent: To be determined
- Construction Cost: Museum is solely responsible for costs of facility design and construction
- Capital: As a precondition of lease commencement, Museum would be required to meet or exceed all fundraising milestones set forth in the fundraising timeline approved by City and provide evidence of commitments for all funding necessary to construct the facility
- Operations and Maintenance: Museum is solely responsible for ongoing costs of operations and maintenance during term of the lease

COMMISSION/BOARD/COMMITTEE RECOMMENDATION

Not applicable.

ANALYSIS

At the July 25, 2017 Orange County Great Park Board meeting, staff was directed to negotiate an MOU with the Museum along the terms specified by the Great Park Board of Directors and return to the City Council for its consideration and action at the first City Council meeting in August. The MOU (Attachment 1) outlines a set of basic terms to be used as the basis for lease negotiation. Pursuant to discussions with the Museum's executive director, the MOU provides a sufficient level of commitment from the City for the Museum to retain its \$5.5 million funding from the Children and Families Commission of Orange County (Commission Resolution included as Attachment 2).

The MOU outlines the two parties' interest in entering a lease for property at the Cultural Terrace, but does not pre-commit the City nor affect the City's discretion concerning its designation of a proposed site or its consideration of a proposed lease. The MOU has a term of one year and sets forth City and Museum obligations:

- City Obligations
 1. Negotiate in good faith with Museum toward the basic terms of a proposed lease.
 2. Timely review and response to all submittals made by Museum pursuant to this MOU.
- Museum Obligations
 1. Negotiate in good faith with City toward the terms of a proposed lease.
 2. Submit to City, no later than six months after the effective date, preliminary space plans, project budget and financing plans, fundraising timeline, and design and preconstruction schedule.

Beyond the two parties' obligations during the one-year MOU term, the document includes a set of lease terms, summarized below, which would serve as the starting point for lease negotiations.

- Term of lease: Not less than 30 years
- Rent: To be determined through further negotiations based, in part, on an assessment of the fair market value of any proposed site and the public benefit anticipated to be provided by a new facility
- Construction Cost: Museum is solely responsible for costs of facility design and construction
- Capital: As a precondition of lease commencement, Museum would be required to meet or exceed all fundraising milestones set forth in the fundraising timeline approved by City and provide evidence of commitments for all funding necessary to construct the facility
- Operations and Maintenance: Museum is solely responsible for ongoing costs of operations and maintenance during term of the lease

If the MOU is approved by the City Council, staff will engage with Pretend City in negotiations toward a proposed lease based on the terms outlined above and then return to the Board for further direction. Staff will provide periodic updates on the progress of lease negotiations.

ALTERNATIVES CONSIDERED

The Board could await the presentation of the Cultural Terrace Joint Studies this fall prior to directing City staff to enter into an MOU with Pretend City. At that time, staff plans to bring forth for Board consideration a conceptual master plan, and an implementation plan, which will include a systematic approach for vetting and establishing potential tenants/partners at the Cultural Terrace.

FINANCIAL IMPACT

Approval of the MOU with Pretend City does not have an immediate financial impact to the City. The MOU does not convey property nor commit the City to conveying property at a later date, nor does it curtail the City's full discretion in designation of a proposed site or consideration of a proposed lease in the future. A lease between the City and Pretend City will have a financial impact and staff would return with a more detailed evaluation of the estimated impact when such lease terms are defined.

REPORT PREPARED BY Pete Carmichael, Director, Orange County Great Park

ATTACHMENTS

1. Memorandum of Understanding between the City of Irvine and Pretend City
2. Children and Families Commission of Orange County Resolution Authorizing Funding for to Pretend City

MEMORANDUM OF UNDERSTANDING

This MEMORANDUM OF UNDERSTANDING (“**MOU**”) is entered into this ____ day of August, 2017 (the “**Effective Date**”), by and between the CITY OF IRVINE, a California municipal corporation (“**City**”), and PRETEND CITY, THE CHILDREN’S MUSEUM OF ORANGE COUNTY, a California public benefit corporation (“**Museum**”), on the terms and provisions set forth below.

RECITALS

A. Museum owns and operates the Pretend City Children’s Museum, a child-sized interactive city located at 29 Hubble, in the City of Irvine, County of Orange, State of California (the “**Existing Facility**”).

B. Since its opening in August 2009, the Existing Facility has served over one million four hundred thousand (1,400,000) visitors. In recent years, the Existing Facility has reached visitor capacity, which is 200,000 visitors per year. In order to serve more visitors, expand impact on early child development, and expand its exhibits and include outdoor exhibits, Museum desires to relocate and develop a new Pretend City Children’s Museum (a “**New Facility**”) at a larger site.

C. In 2012, Museum obtained a funding commitment from the Children & Families Commission of Orange County (the “**Commission**”) in the amount of Five Million Dollars (\$5,000,000) (the “**Commission Funds**”), to be used towards developing a New Facility at a larger, permanent location. In order to continue to secure the commitment of the Commission Funds, Museum has requested a commitment from City to negotiate in good faith towards a lease for a proposed New Facility.

D. City owns fee title or has a sub-leasehold interest in certain real property that has been designated for development of a metropolitan park known as the “Orange County Great Park,” located in the City of Irvine, County of Orange, State of California (the “**Great Park**”).

E. City and Museum now desire to enter into this MOU to (i) initiate exclusive negotiations, for one (1) year, regarding a possible lease by City to Museum of approximately five (5) acres of land within the area of the Great Park commonly referred to as the “Cultural Terrace,” which comprises approximately two hundred twenty-five (225) acres, for a Proposed Facility (a “**Proposed Lease**”), and (ii) set forth the respective obligations of City and Museum pursuant to this MOU. The Cultural Terrace portion of the Great Park is depicted in the Map attached hereto as Exhibit “A” and incorporated herein by this reference.

NOW, THEREFORE, in consideration of the above Recitals, which are incorporated herein by this reference, and the mutual covenants and conditions contained herein, the parties hereto agree as follows:

1. **Term.** This MOU shall commence as of the Effective Date and, unless earlier terminated pursuant to the terms of this MOU, shall remain and continue in effect for a period of one (1) year. Upon expiration of said initial one (1) year period, this MOU shall automatically terminate. Notwithstanding the foregoing, the City Manager of City shall have the right to grant an administrative extension of this MOU for up to ninety (90) days.

2. **Scope of MOU.** The roles and responsibilities of City and Museum pursuant to this MOU are defined below:

A. **City's Obligations** During the term of this MOU, City shall

1. Negotiate in good faith with Museum towards the basic terms of a Proposed Lease.

2. Timely review and respond to all submittals made by Museum pursuant to this MOU.

B. **Museum's Obligations** During the term of this MOU, Museum shall:

1. Negotiate in good faith with City towards the basic terms of a Proposed Lease.

2. Submit to City, no later than six (6) months after the Effective Date, preliminary space plans, project budget and financing plans, fundraising timeline, and design and preconstruction schedule.

C. **Proposed Lease Terms** City and Museum contemplate that (i) any Proposed Lease would be for a term of not less than thirty (30) years, (ii) Rent payable under a Proposed Lease would be determined through further negotiations based, in part, on an assessment of the fair market value of any proposed site and the public benefit anticipated to be provided by a New Facility, (iii) commencement of any Proposed Lease would be conditioned on various factors, including, without limitation, Museum providing evidence that Museum has financial commitments for all funding necessary to develop the New Facility and that Museum has met or exceeded all of the fundraising milestones set forth in the fundraising timeline approved by City, (iv) Museum would be responsible for all costs of designing constructing, maintaining, and operating the New Facility, and (v) Museum would be required to pay certain common area maintenance costs for maintenance of common facilities, such as parking areas and walkways.

3. **No Predetermination of City Discretion.**

City and Museum acknowledge and agree that nothing in this MOU in any respect does or shall be construed to affect or prejudice the exercise of City's discretion concerning the designation of a proposed site, consideration of a New Facility, a Proposed Lease, and/or any submittal by Museum with respect to any of the foregoing. Neither City nor Museum intend this MOU to be a Proposed Lease, development agreement, purchase agreement or other agreement for the lease or other conveyance of land or the construction or development of improvements thereon. City and Museum acknowledge and agree that they have not agreed upon the essential terms of the subject matter of a transaction, and that such essential terms will be the subject matter of further negotiations. Notwithstanding any submittals to be made by Museum hereunder, and/or any

authorization by the City Manager to extend the term of this MOU, City and Museum acknowledge and agree that any final agreement, if an agreement is reached, would be in the form of a Proposed Lease, and any such Proposed Lease would not be effective until it has been considered and formally approved by the City Council and thereafter has been executed by authorized representatives of each of City and Museum. Notwithstanding anything in this MOU to the contrary, City does not intend by this MOU to commit to a definite course of action with respect to a proposed site, a New Facility or a Proposed Lease. City retains full discretion with respect to a proposed site, a New Facility and a Proposed Lease, any determination pursuant to the California Environmental Quality Act (“CEQA”) with respect to a proposed site, New Facility and Proposed Lease, and any mitigation measures or alternatives to a proposed site, New Facility, or Proposed Lease pursuant to CEQA, including a decision not to proceed with a proposed site, a New Facility, and/or a Proposed Lease.

4. Assignment.

Museum may not assign, hypothecate, encumber, or otherwise transfer (voluntarily or involuntarily) this MOU or any of its rights or obligations hereunder (whether in whole or in part) (each, an “Assignment”) without the prior written approval of the City Manager, which approval may be given or withheld in the City Manager’s sole and absolute discretion. Any Assignment City has approved shall not be effective unless and until Museum submits a signed assignment and assumption agreement in a form and with content reasonably approved by the City Attorney of City.

5. Real Estate Commissions.

Each party represents and warrants to the other party that the representing party has not engaged a broker, agent, or finder in connection with this transaction. Each party agrees to defend, indemnify, and protect and hold the other party harmless from any such claims contrary to the representation or warranty of the applicable party in the preceding sentence.

6. General Provisions.

A. Legal Actions; Governing Law; Service of Process.

In addition to any other rights or remedies, either party may institute legal action to cure, correct or remedy any default, or to obtain any other remedy consistent with the purposes of this MOU; provided, however, that Paragraph C of this Section 6 of this MOU shall supersede any conflicting provisions of this Paragraph A. Such legal actions must be instituted and maintained in the Superior Court of the County of Orange, State of California, or in any other appropriate court in that county. The laws of the State of California shall govern the interpretation and enforcement of this MOU. In the event that any legal action is commenced by Museum against City, service of process on City shall be made by personal service upon the City Manager of City or in such other manner as may be provided by law. In the event that any legal action is commenced by City against Museum, service of process on Museum shall be made by personal service upon Museum or in such other manner as may be provided by law, and shall be valid whether made within or without the State of California.

B. Rights and Remedies are Cumulative.

Except as otherwise expressly stated in this MOU, the rights and remedies of the parties are cumulative, and the exercise by either party of one or more of its rights or remedies shall not preclude the exercise by it, at the same or different times, of any other rights or remedies for the same default or any other default by the other party.

C. Remedies for Breach of MOU.

In the event of an uncured default under this MOU, the sole remedies of the non-defaulting Party shall be (a) to terminate this MOU, or (b) to institute an action for specific performance of this MOU. Following the termination of this MOU, neither City nor Museum shall have any further rights, remedies or obligations under this MOU, except as specifically set forth herein. Neither City nor Museum shall have any liability to the other for monetary damages for the breach of this MOU, or failure to reach agreement on a Proposed Lease, and each party hereby waives and releases any such rights or claims it may otherwise have at law or at equity. Furthermore, Museum knowingly agrees that it shall have no right to specific performance for conveyance of any right, title or interest in any proposed site or any portion thereof, and shall not file a lis pendens with respect to any proposed site or any portion thereof. The parties' rights and obligations under this Paragraph C shall survive the expiration or termination of this MOU.

D. Attorney's Fees.

In the event any action is taken by either party to this MOU to enforce this MOU, the prevailing party shall be entitled to recover from the other party its reasonable attorneys' fees and costs. The parties' rights and obligations under this Section 6 shall survive the expiration or termination of this MOU.

E. Termination Rights.

Notwithstanding the term hereinabove set forth, either party may terminate this MOU if the other party has materially defaulted in its obligations herein set forth, and the terminating party has provided the defaulting party with written notification of such determination, and the defaulting party has refused or failed to cure same prior to the expiration of the cure period below. The written notification shall set forth the nature of the actions required to cure such default if curable. The defaulting party shall have ten (10) days from the date of the written notification to cure such default. If such default is not cured within the ten (10) days, the termination shall be deemed effective. For purposes of this paragraph, the parties hereby acknowledge that time is of the essence. Each party shall also have the right to terminate this MOU in the event that (i) City or Museum determines that a New Facility is infeasible, based on financial or environmental impact considerations, or not in the public interest; or (ii) the parties reach an impasse in their negotiation of the terms of a Proposed Lease which cannot be resolved after good faith efforts.

F. Indemnity.

Museum shall indemnify, protect, defend and hold harmless City and City's elected officials, officers, employees, representatives, members, and agents from and against any and all losses, liabilities, damages, claims or costs (including reasonable attorneys' fees) arising from Museum's negligent acts, errors, or omissions with respect to its obligations hereunder, excluding

H. Implementation of MOU

City shall maintain authority to implement this MOU through the City Manager (or his or her duly authorized representative). The City Manager shall have the authority to make approvals, waive provisions and/or enter into certain amendments of this MOU on behalf of City so long as such actions do not materially or substantially change the substantive business terms of this MOU, or add to the costs incurred or to be incurred by City as specified herein. Such amendments may include extensions of time to perform. All other material and/or substantive approvals, waivers, or amendments shall require the consideration, action and written consent of the City Council.

I. Nonliability of City Officials and Employees.

No member, official, employee, or contractor of City shall be personally liable to Museum in the event of any default or breach by City or for any amount which may become due to Museum or on any obligations under the terms of the MOU.

J. Enforced Delay; Extension of Times of Performance.

In addition to specific provisions of this MOU, performance by either party (who is not then otherwise in material default) shall not be deemed to be in default where delays or defaults are due to war, insurrection, strikes, lock-outs, riots, floods, earthquakes, fires, casualties, supernatural causes, acts of the public enemy, terrorism, epidemics, quarantine restrictions, freight embargoes, lack of transportation, governmental restrictions or priority, litigation, unusually severe weather, inability to secure necessary labor, materials or tools, delays of any contractor, subcontractor or supplies, acts of the other party, acts or failure to act of City or any other public or governmental agency or entity, including, without limitation, unreasonable delays in the processing and issuance of required permits for a development project required by Museum (except that any act or failure to act of City shall not excuse performance by City) or any other causes beyond the reasonable control or without the fault of the party claiming an extension of time to perform, for up to a maximum cumulative period of ninety (90) days. Notwithstanding the foregoing, inability to secure satisfactory financing, or market and economic conditions shall not entitle Museum to an extension of time to perform. An extension of time for any such cause shall be for the period of the enforced delay and shall commence to run from the time of the commencement of the cause, if notice by the party claiming such extension is sent to the other party within ten (10) days of knowledge of the commencement of the cause. In addition, times of performance under this MOU may be extended by mutual written agreement by City and Museum.

K. Interpretation.

The terms of this MOU shall be construed in accordance with the meaning of the language used and shall not be construed for or against either party by reason of the authorship of this MOU or any other rule of construction which might otherwise apply. The Section and Paragraph headings are for purposes of convenience only, and shall not be construed to limit or extend the meaning of this MOU.

L. Entire Agreement, Waivers, and Amendments.

This MOU integrates all of the terms and conditions mentioned herein, or incidental hereto, and supersedes all negotiations or previous agreements between the parties with respect to all or

any part of the subject matter hereof. All waivers of the provisions of this MOU must be in writing and signed by the appropriate authorities of the party to be charged, and all amendments and modifications hereto must be in writing and signed by the appropriate authorities of City and Museum. Without limiting the foregoing, the parties understand that the results of this MOU may lead to future agreements or obligations which shall only become valid (if at all) upon full execution of such future agreements.

M. Counterparts.

This MOU may be executed in counterparts, each of which, after all the parties hereto have signed this MOU, shall be deemed to be an original, and such counterparts shall constitute one and the same instrument.

N. Successors.

Subject to the limitations on Assignments above, this MOU shall be binding upon and shall inure to the benefit of the permitted successors of each of the parties hereto.

O. Further Assurances.

The parties hereto each agree, without further consideration, to execute such other and further documents, and to perform such other and further acts, as may be reasonably necessary or proper in order to consummate the transaction set forth in and contemplated by this MOU.

P. Severability.

In the event any section or portion of this MOU shall be held, found, or determined to be unenforceable or invalid for any reason whatsoever, the remaining provisions shall remain in effect, and the parties hereto shall take further actions as may be reasonably necessary and available to them to effectuate the intent of the parties as to all provisions set forth in this MOU.

Q. Time is of the Essence.

Time is of the essence for each of the parties' obligations under this MOU.

[Signatures contained on following page]

IN WITNESS WHEREOF, City and Museum have executed this MOU on the respective dates set forth below.

CITY OF IRVINE, a California municipal corporation

Dated: _____

("City")

By: _____
Donald P. Wagner, Mayor

ATTEST:

By: _____
Molly McLaughlin, City Clerk

APPROVED AS TO FORM:
RUTAN AND TUCKER, LLP

For:  _____
Jeffrey T. Melching, City Attorney

PRETEND CITY, THE CHILDREN'S MUSEUM OF ORANGE COUNTY, a California public benefit corporation

Dated: _____

("Museum")

By: _____

Its: _____

By: _____

Title: _____

Its: _____

IN WITNESS WHEREOF, City and Museum have executed this MOU on the respective dates set forth below.

CITY OF IRVINE, a California municipal corporation

Dated: _____

("City")

By: _____
Donald P. Wagner, Mayor

ATTEST:

By: _____
Molly McLaughlin, City Clerk

APPROVED AS TO FORM:
RUTAN AND TUCKER, LLP

Jeffrey T. Melching, City Attorney

PRETEND CITY, THE CHILDREN'S MUSEUM OF ORANGE COUNTY, a California public benefit corporation

Dated: August 2nd, 2017

("Museum")

By: *Janetia Bolton*

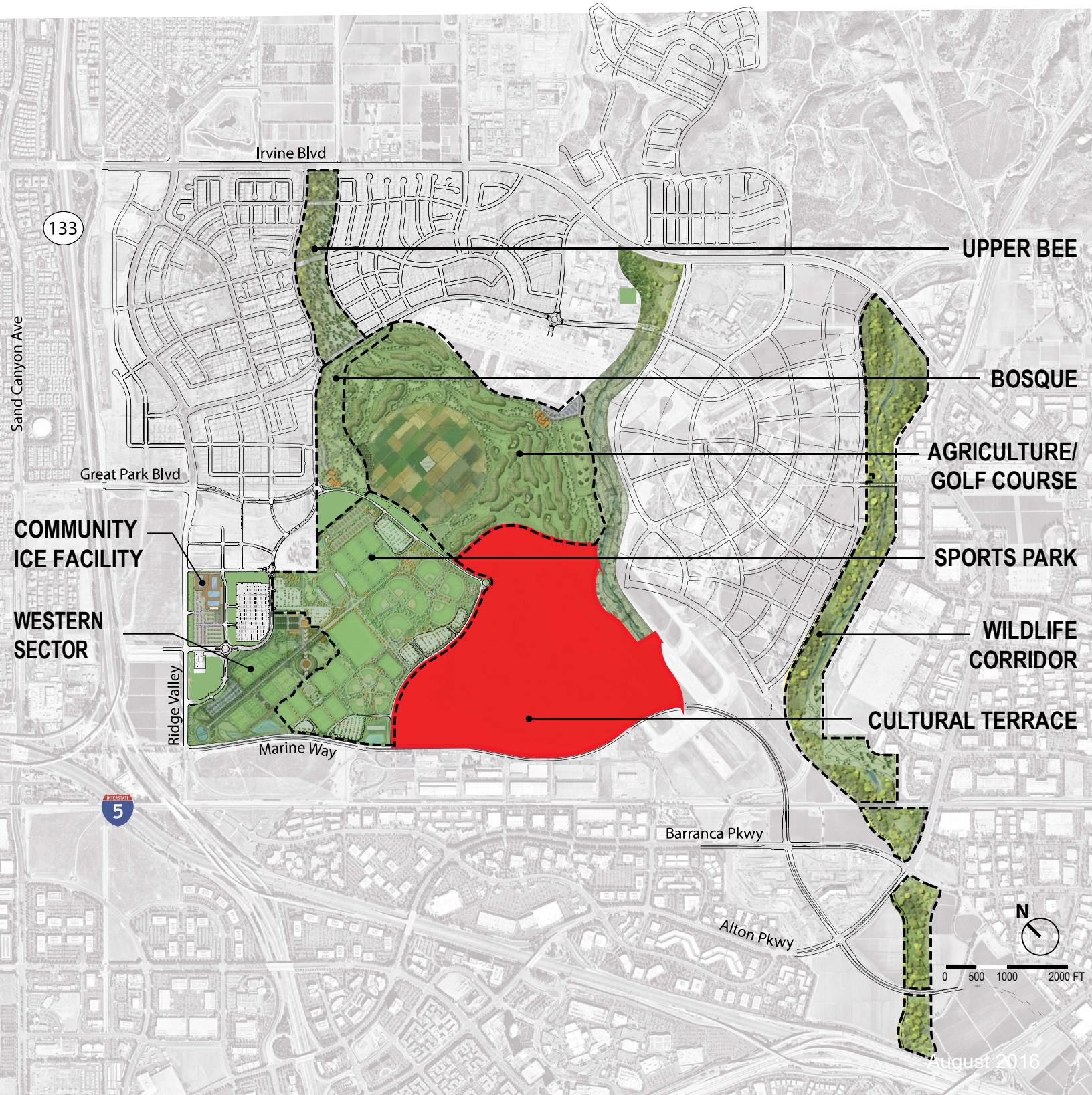
Its: *Executive Director*

By: _____

Title: _____

Its: _____

MAP OF CULTURAL TERRACE



PROPOSED CATALYTIC INVESTMENT: Healthy Child Development Resources

The Commission's Current Investment

In 2007, the Commission convened the Pathways Leadership Committee to guide a community-focused planning effort intended to strengthen the pathway for young children receiving or in need of developmental and behavioral services in Orange County. The Committee developed priorities and specific strategies and action steps related to managing and improving developmental services.

Today, the Commission supports several programs including Pretend City and other direct service providers to perform developmental screenings for young children and other activities related to optimizing early childhood development. The Commission has also spearheaded efforts to improve the quality and reliability of screenings. Pretend City has undertaken a multi-year initiative in partnership with the Commission; however, it is in leased space and needs to relocate to a permanent facility.

How will a Catalytic Investment impact the Community?

1. Leverages existing partnership to create sustainable platform for developmental screening, establishing Pretend City as the hub to manage, improve and provide continued innovation for healthy child development.
2. Creates permanent resource center for parents and families to promote healthy child development, including immunizations.
3. Consolidates current multiple agreements for developmental services under a single master contract.

Supporting Documentation

1. Multiple studies, policy statement, and data related to early identification of developmental delays (Centers for Disease Control and Prevention, American Academy of Pediatrics, Pediatrics in Review, the Commonwealth Fund)
2. UCLA Center for Healthier Children, Families and Communities report on Building a Model System of Developmental Services in Orange County.
3. First 5 California Special Needs Project: Orange County Demonstration Site Year 2 Case Study, LEAPS: Learning, Early Intervention, And Parent Support.
4. Reports from Pretend City and Grantees

The Case for Investing

There is clear evidence that screening leads to the early identification of developmental delays. According to research, a community will save \$13 for every \$1 invested in early intervention. However, the CDC reports that less than 50% of children experiencing delays are identified as having a problem before starting school.

| Healthy Child Development Resources for Children and Families Terms and Conditions | |
|---|--|
| Existing Program Overview | Commission is in the fourth year of a multi-year partnership with Pretend City, the Children’s Museum of Orange County (Pretend City), to promote healthy child development through developmental screenings. Recently the partnership was expanded to include immunizations. Commission also supports a Developmental Screening Advisory Board and direct service providers serving the entire county. |
| Proposed Catalytic Investment | Establish a permanent and expanded Healthy Child Development platform anchored around: <ol style="list-style-type: none"> 1. A permanent facility for Pretend City, a resource center for parents and families and provider training capacity 2. Consolidate current grants for individual service providers under a single master agreement 3. Implement an expanded 10-year service payback agreement for countywide services |
| Terms of Funding | |
| Commission Financial Contribution | \$5.5 million catalytic investment. Funds can be utilized for permanent facility and will be paid back with countywide services and on-site programs and space allocations. |
| Service Payback | In addition to current service payback plan (developmental screening and community education), expanded scope for 10 years. <ol style="list-style-type: none"> 1. Expanded hours and access 2. Countywide developmental screening and healthy development services – Maintain all current service levels for 3 years minimum to allow for redesign of service delivery system 3. Utilization of facilities as resource center and training site 4. Provision of office space and meeting space for Commission staff and programs |
| Administrative Partners and Implementing Partner | Pretend City will be the lead entity. Implementing partners: <ol style="list-style-type: none"> 1. Commission designated Developmental Screening Collaborative (e.g. American Academy of Pediatrics, Help Me Grow – Orange County) 2. Family Support Network 3. Commission grantees |
| Funding Security | Two stage implementation: <ol style="list-style-type: none"> 1. Prior to establishment of a new facility, funds to be held by fiscal sponsor approved by Commission 2. Once established, the permanent facility can be utilized for security by placing the Commission first on the deed or using the facility as security for a letter of credit, or combination thereof. <p>*As service payback is credited to the project, any letters of credit on file may be reduced proportionately. *Pretend City will also be given the option of transferring some or all of the current letters of credit obligations to the new facility, assuming there is sufficient equity in the building, to allow for maximum liquidity.</p> |
| Programmatic Oversight | New Facility: Commission would review and approve: <ul style="list-style-type: none"> • Proposed projects for consistency with Commission directive and outcomes as described in this term sheet • Description of program services and intended outcome for clients once facility is operational • Construction and operating budgets <p>Operation Phase and countywide services:</p> <ul style="list-style-type: none"> • Require grantee participation in Commission’s web-based data reporting systems • Commission staff and/or consultants will conduct site visits |

CHILDREN AND FAMILIES COMMISSION OF ORANGE COUNTY

RESOLUTION NO. 12-007 C&FC

February 1, 2012

A RESOLUTION OF THE CHILDREN AND FAMILIES COMMISSION OF ORANGE COUNTY DIRECTING THE EXECUTIVE DIRECTOR OR DESIGNEE AND COMMISSION COUNSEL TO PREPARE AND NEGOTIATE THE FINAL FORM OF AGREEMENT FCI-PCD-02 WITH PRETEND CITY, THE CHILDREN'S MUSEUM OF ORANGE COUNTY, AND, AUTHORIZING APPROVAL AND EXECUTION OF SUCH AGREEMENT ON BEHALF OF THE COMMISSION

WHEREAS, in order to facilitate the creation and implementation of an integrated, comprehensive, and collaborative system of information and services to enhance optimal early childhood development, the legislature adopted legislation set forth in the California Children and Families Act of 1998, Health and Safety Code Section 130100, *et seq.* (as amended, the "Act") implementing the Children and Families First Initiative passed by the California electorate in November, 1998 and establishing the California Children and Families Commission and County Children and Families Commissions, including this Children and Families Commission of Orange County ("Commission"); and

WHEREAS, Commission adopted its Strategic Plan to define how funds authorized under the Act and allocated to the Commission should best be used to meet the critical needs of Orange County's children prenatal to five years of age as codified in the Act; and

WHEREAS, the Executive Director and Commission Counsel have prepared a standard Master Agreement for Services ("Master Agreement") which was approved by the Commission; and

WHEREAS, Commission desires to authorize the Executive Director or designee and Commission Counsel to prepare and negotiate Agreement No. FCI-PCD-02 with Pretend City, The Children's Museum of Orange County, to provide Healthy Child Development services for Orange County's children 0 - 5, in an amount not to exceed \$5,500,000 for a period of ten (10) years beginning on or about February 1, 2012; and

WHEREAS, Commission has reviewed the staff report relating to the scope of services to be provided and hereby finds and determines that the proposed Agreement is in furtherance of and consistent with the Commission's Strategic Plan; and

WHEREAS, Commission desires to authorize the Commission Chair and Commission Clerk to enter into Agreement FCI-PCD-02 with Pretend City, The Children's Museum of Orange County, in an amount not to exceed \$5,500,000 for a period of ten (10) years beginning on or about February 1, 2012.

NOW, THEREFORE BE IT RESOLVED BY THE COMMISSIONERS OF THE CHILDREN AND FAMILIES COMMISSION OF ORANGE COUNTY AS FOLLOWS:

Section 1 Commission finds and determines the foregoing Recitals are true and correct and are a substantive part of this Resolution.

Section 2 Commission authorizes the Executive Director or designee and Commission Counsel to prepare and negotiate the terms, conditions and final form of Agreement FCI-PCD-02 with Pretend City, The Children's Museum of Orange County, in an amount not to exceed \$5,500,000 for a period of ten (10) years beginning on or about February 1, 2012, to provide Healthy Child Development services for Orange County's children 0 - 5 consistent with the staff report for this Agenda Item and scope of services referenced therein.

Section 3 The form of Agreement FCI-PCD-02 with Pretend City, The Children's Museum of Orange County, shall be substantially similar to the form of the standard Master Agreement, subject to minor, non-substantive revisions as reviewed and approved by the Executive Director. The approval by the Executive Director of Agreement FCI-PCD-02 shall be conclusively evidenced by the execution and delivery of the Agreement by the Commission Chair to the Commission Clerk.

Section 4 Commission hereby approves Agreement FCI-PCD-02 with Pretend City, The Children's Museum of Orange County, to provide Healthy Child Development services for Orange County's children 0 - 5 as specified in the February 1, 2012 staff report for this Agenda Item.

Section 5 The Commission Chair and the Clerk of the Commission are hereby authorized to execute and attest, respectively, the Agreement on behalf of the Commission.

Section 6 A copy of the final Agreement FCI-PCD-02 with Pretend City, The Children's Museum of Orange County, when executed by the Commission Chair and attested by the Clerk of the Commission shall be appended hereto as a part of Exhibit A to this Resolution. Exhibit A is hereby fully incorporated as a part of this Resolution by this reference and made a part hereof. The final executed Agreement shall be placed on file in the office of the Clerk of the Commission.

Section 7 In addition to the authorization of Section 2 above, the Executive Director (or his designee) is hereby authorized, on behalf of the Commission, (i) to sign all documents necessary and appropriate to carry out and implement the Agreement, (ii) to cause the issuance of warrants, (iii) to administer the Commission's obligations, responsibilities, and duties to be performed under such agreement, and (iv) during the term thereof to provide waivers, administrative interpretations, and minor modifications of the provisions of such agreement in the furtherance thereof.

Section 8 The Clerk of the Commission shall certify to the adoption of this Resolution.

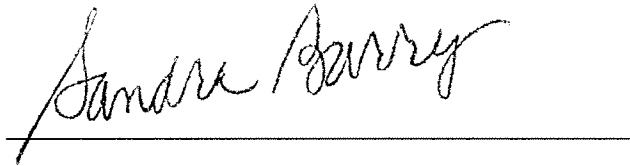
The foregoing resolution was passed and adopted by the following vote of the Children and Families Commission of Orange County on February 1, 2012 to wit:

AYES: Commissioners: Hewitt, Snyder, Barry, Campbell, Kochendorfer, Minon, Riley, and Handler (Alternate for Wilson)

NOES: Commissioner(s): None

EXCUSED: Commissioner(s): Cripe and Wilson

ABSTAINED: Commissioner(s): None

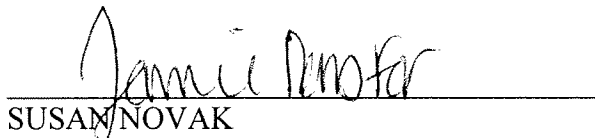


CHAIR

STATE OF CALIFORNIA)
)
COUNTY OF ORANGE)

I, SUSAN NOVAK, Interim Clerk of the Commission of Orange County, California, hereby certify that a copy of this document has been delivered to the Chair of the Commission and that the above and foregoing Resolution was duly and regularly adopted by the Children and Families Commission of Orange County.

IN WITNESS WHEREOF, I have hereto set my hand and seal.



SUSAN NOVAK
Interim Clerk of the Commission, Children and Families Commission
of Orange County, County of Orange, State of California

Resolution No: 12-007 C&FC

Agenda Date: February 1, 2012

Item No. 2 (C-5)



I certify that the foregoing is a true and correct copy of the Resolution adopted by the Children and Families Commission of Orange County.

SUSAN NOVAK, Interim Clerk of the Commission

By: _____
Deputy

EXHIBIT A TO RESOLUTION OF COMMISSION

(Attach copy of final executed Agreement FCI-PCD-02 with Pretend City, The Children's Museum
of Orange County)

5.5



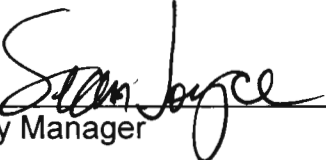
REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: AUGUST 8, 2017

TITLE: DESIGNATION OF VOTING DELEGATE FOR LEAGUE OF CALIFORNIA CITIES 2017 ANNUAL CONFERENCE



City Clerk



City Manager

RECOMMENDED ACTION

Appoint a member of the City Council to serve as the voting delegate for the Annual Business Meeting at the League of California Cities 2017 Annual Conference.

EXECUTIVE SUMMARY

On May 12, 2017, the City received the League of California Cities (League) annual request for a voting delegate to represent the City at the 2017 Annual Conference, scheduled for September 13 through September 15, 2017 in Sacramento. An important element of the Annual Conference is the Annual Business Meeting, at which time the voting delegates of member cities consider and take action on resolutions that establish League policy.

To vote at the Annual Business Meeting, the City Council must designate a voting delegate by formal action. The City Council may appoint up to two voting alternates, one of whom may vote in the event that the designated voting delegate is unable to serve in that capacity. The voting delegate and alternates must be registered to attend the conference, or at a minimum for one day when the Annual Business Meeting is held, scheduled for Friday, September 15. At the time of this writing, Councilmember Fox is known to be attending the conference.

FINANCIAL IMPACT

None.

REPORT PREPARED BY Molly McLaughlin, City Clerk

ATTACHMENT: League of California Cities Memo of May 3, 2017

RECEIVED
CITY OF IRVINE
CITY CLERK'S OFFICE



2017 MAY 14 10:35 AM
Suite 400 • Sacramento, California 95814
Phone: 916.658.8200 Fax: 916.658.8240
www.cacities.org

Council Action Advised by July 31, 2017

May 3, 2017

TO: Mayors, City Managers and City Clerks

**RE: DESIGNATION OF VOTING DELEGATES AND ALTERNATES
League of California Cities Annual Conference – September 13 – 15, Sacramento**

The League's 2017 Annual Conference is scheduled for September 13 – 15 in Sacramento. An important part of the Annual Conference is the Annual Business Meeting (during General Assembly), scheduled for 12:30 p.m. on Friday, September 15, at the Sacramento Convention Center. At this meeting, the League membership considers and takes action on resolutions that establish League policy.

In order to vote at the Annual Business Meeting, your city council must designate a voting delegate. Your city may also appoint up to two alternate voting delegates, one of whom may vote in the event that the designated voting delegate is unable to serve in that capacity.

Please complete the attached Voting Delegate form and return it to the League's office no later than Friday, September 1, 2017. This will allow us time to establish voting delegate/alternate records prior to the conference.

Please note the following procedures that are intended to ensure the integrity of the voting process at the Annual Business Meeting.

- **Action by Council Required.** Consistent with League bylaws, a city's voting delegate and up to two alternates must be designated by the city council. When completing the attached Voting Delegate form, please attach either a copy of the council resolution that reflects the council action taken, or have your city clerk or mayor sign the form affirming that the names provided are those selected by the city council. Please note that designating the voting delegate and alternates must be done by city council action and cannot be accomplished by individual action of the mayor or city manager alone.
- **Conference Registration Required.** The voting delegate and alternates must be registered to attend the conference. They need not register for the entire conference; they may register for Friday only. To register for the conference, please go to our website: www.cacities.org. In order to cast a vote, at least one voter must be present at the

ATTACHMENT

Business Meeting and in possession of the voting delegate card. Voting delegates and alternates need to pick up their conference badges before signing in and picking up the voting delegate card at the Voting Delegate Desk. This will enable them to receive the special sticker on their name badges that will admit them into the voting area during the Business Meeting.

- **Transferring Voting Card to Non-Designated Individuals Not Allowed.** The voting delegate card may be transferred freely between the voting delegate and alternates, but *only* between the voting delegate and alternates. If the voting delegate and alternates find themselves unable to attend the Business Meeting, they may *not* transfer the voting card to another city official.
- **Seating Protocol during General Assembly.** At the Business Meeting, individuals with the voting card will sit in a separate area. Admission to this area will be limited to those individuals with a special sticker on their name badge identifying them as a voting delegate or alternate. If the voting delegate and alternates wish to sit together, they must sign in at the Voting Delegate Desk and obtain the special sticker on their badges.

The Voting Delegate Desk, located in the conference registration area of the Sacramento Convention Center, will be open at the following times: Wednesday, September 13, 8:00 a.m. – 6:00 p.m.; Thursday, September 14, 7:00 a.m. – 4:00 p.m.; and Friday, September 15, 7:30 a.m. – Noon. The Voting Delegate Desk will also be open at the Business Meeting on Friday, but will be closed during roll calls and voting.

The voting procedures that will be used at the conference are attached to this memo. Please share these procedures and this memo with your council and especially with the individuals that your council designates as your city's voting delegate and alternates.

Once again, thank you for completing the voting delegate and alternate form and returning it to the League office by Friday, September 1. If you have questions, please call Carly Shelby at (916) 658-8279.

Attachments:

- Annual Conference Voting Procedures
- Voting Delegate/Alternate Form

Annual Conference Voting Procedures

1. **One City One Vote.** Each member city has a right to cast one vote on matters pertaining to League policy.
2. **Designating a City Voting Representative.** Prior to the Annual Conference, each city council may designate a voting delegate and up to two alternates; these individuals are identified on the Voting Delegate Form provided to the League Credentials Committee.
3. **Registering with the Credentials Committee.** The voting delegate, or alternates, may pick up the city's voting card at the Voting Delegate Desk in the conference registration area. Voting delegates and alternates must sign in at the Voting Delegate Desk. Here they will receive a special sticker on their name badge and thus be admitted to the voting area at the Business Meeting.
4. **Signing Initiated Resolution Petitions.** Only those individuals who are voting delegates (or alternates), and who have picked up their city's voting card by providing a signature to the Credentials Committee at the Voting Delegate Desk, may sign petitions to initiate a resolution.
5. **Voting.** To cast the city's vote, a city official must have in his or her possession the city's voting card and be registered with the Credentials Committee. The voting card may be transferred freely between the voting delegate and alternates, but may not be transferred to another city official who is neither a voting delegate or alternate.
6. **Voting Area at Business Meeting.** At the Business Meeting, individuals with a voting card will sit in a designated area. Admission will be limited to those individuals with a special sticker on their name badge identifying them as a voting delegate or alternate.
7. **Resolving Disputes.** In case of dispute, the Credentials Committee will determine the validity of signatures on petitioned resolutions and the right of a city official to vote at the Business Meeting.



CITY: _____

2017 ANNUAL CONFERENCE
VOTING DELEGATE/ALTERNATE FORM

Please complete this form and return it to the League office by Friday, September 1, 2017. Forms not sent by this deadline may be submitted to the Voting Delegate Desk located in the Annual Conference Registration Area. Your city council may designate one voting delegate and up to two alternates.

In order to vote at the Annual Business Meeting (General Assembly), voting delegates and alternates must be designated by your city council. Please attach the council resolution as proof of designation. As an alternative, the Mayor or City Clerk may sign this form, affirming that the designation reflects the action taken by the council.

Please note: Voting delegates and alternates will be seated in a separate area at the Annual Business Meeting. Admission to this designated area will be limited to individuals (voting delegates and alternates) who are identified with a special sticker on their conference badge. This sticker can be obtained only at the Voting Delegate Desk.

1. VOTING DELEGATE

Name: _____

Title: _____

2. VOTING DELEGATE - ALTERNATE

Name: _____

Title: _____

3. VOTING DELEGATE - ALTERNATE

Name: _____

Title: _____

PLEASE ATTACH COUNCIL RESOLUTION DESIGNATING VOTING DELEGATE AND ALTERNATES.

OR

ATTEST: I affirm that the information provided reflects action by the city council to designate the voting delegate and alternate(s).

Name: _____ E-mail _____

Mayor or City Clerk _____ Phone: _____
(circle one) (signature)

Date: _____

Please complete and return by Friday, September 1, 2017

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