# AGENDA

## CITY COUNCIL
## REGULAR MEETING

**December 13, 2016**
**4:00 PM**
**City Council Chamber**
One Civic Center Plaza
Irvine, CA 92606

Beth Krom
Councilmember

Jeffrey Lalloway
Councilmember

Lynn Schott
Councilmember

Christina Shea
Councilmember

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**Speaker's Card/Request to Speak:** If you would like to address the City Council on a scheduled agenda item – including a Consent Calendar item, a Regular Council 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. The Request to Speak Form assists the Mayor in ensuring that all persons wishing to address the City Council are recognized. It also ensures the accurate identification of meeting participants in the City Council minutes. Your name will be called at the time the matter is heard by the City Council. 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), 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 or the City Council during the course of the meeting, so please stay alert.

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**CALL TO ORDER**

**ROLL CALL**

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

## 1. COUNCIL BUSINESS

### *1.1 CERTIFY RESULTS OF THE GENERAL MUNICIPAL ELECTION HELD ON NOVEMBER 8, 2016*

**ACTION:**

1) Receive and file the Certificate of Results for the General Municipal Election held on November 8, 2016 for City Councilmember and Mayoral candidates.
2) Adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, RECITING THE FACT OF THE GENERAL MUNICIPAL ELECTION HELD ON NOVEMBER 8, 2016, DECLARING THE RESULT AND SUCH OTHER MATTERS AS PROVIDED BY LAW

## 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.

## 2. CONSENT CALENDAR

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 November 22, 2016.

### *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 WARRANT AND WIRE TRANSFER RESOLUTION - AT&T*

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

### *2.4 TREASURER'S REPORT FOR THE QUARTER ENDED SEPTEMBER 30, 2016*

**ACTION:**
Receive and file the Treasurer's Report for the quarter ended September 30, 2016.

### *2.5 CITY OF IRVINE INVESTMENT POLICY FOR CALENDAR YEAR 2017*

**ACTION:**
Adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ADOPTING THE CITY'S ANNUAL INVESTMENT POLICY FOR CALENDAR YEAR 2017

### *2.6 RESOLUTION CONTINUING SUPPLEMENTAL MILITARY LEAVE BENEFITS FOR CITY EMPLOYEES CALLED INTO ACTIVE MILITARY DUTY*

**ACTION:**
Adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, CONTINUING TEMPORARY SUPPLEMENTAL MILITARY BENEFITS, EFFECTIVE JANUARY 1, 2017, FOR FULL-TIME CITY EMPLOYEES CALLED INTO ACTIVE MILITARY DUTY

### *2.7 ADOPTION OF AMENDMENTS TO CITY OF IRVINE CONFLICT OF INTEREST CODE AND ADOPT THE SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY'S 2016 BIENNIAL NOTICE*

**ACTION:**
1) Adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, AMENDING THE CITY'S CONFLICT OF INTEREST CODE AND LIST OF DESIGNATED EMPLOYEES
2) Adopt the City of Irvine as Successor Agency to the Dissolved Irvine Redevelopment Agency's 2016 Biennial Notice.

### *2.8 QUITCLAIM OF ACCESS AND UTILITY EASEMENTS IN GREAT PARK NEIGHBORHOODS (PLANNING AREA 51)*

**ACTION:**
Authorize the Mayor to execute nine quitclaim deeds relinquishing easements on private property no longer needed for public access and utility purposes.

### *2.9 APPROVAL OF PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS FOR FREEWAY TRAIL LIGHTING IMPROVEMENTS FROM SAN DIEGO CREEK TO CULVER DRIVE*

**ACTION:**
1) Approve the plans, specifications and contract documents for Freeway Trail Lighting Improvements, Capital Improvement Project 341302.
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.

### *2.10 NOTICE OF REVIEW AND PENDING APPROVAL FOR TRACT MAPS IN IRVINE BUSINESS COMPLEX*

**ACTION:**
Receive and file.

### *2.11 APPROVAL OF PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS FOR HARVARD COMMUNITY PARK FACILITY IMPROVEMENTS*

**ACTION:**
1) Approve the plans, specifications and contract documents for the Harvard Community Park Facility Improvements, Capital Improvement Project 361702.
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.

### *2.12 COMMUNITY PARTNERSHIP FUND GRANT NOMINATIONS*

**ACTION:**

1) Approve Councilmember Shea's request for Community Partnership Fund Grant nomination to The Raise Foundation in the amount of $500 in support of program costs.
2) Authorize the City Manager to prepare and sign the funding agreement listed in Action 1.

## CITY MANAGER'S REPORT

## ANNOUNCEMENTS/COMMITTEE REPORTS/COUNCIL REPORTS

Announcements, Committee Reports and Council 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.

## PUBLIC COMMENTS (Limited to 3 minutes per speaker)

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.

## RECESS

## RECONVENE TO THE CITY COUNCIL MEETING - 5 P.M.

## PLEDGE OF ALLEGIANCE - IRVINE POLICE COLOR GUARD

## INVOCATION

## MUSICAL PRESENTATION

## ADMINISTRATION OF OATH OF OFFICE FOR NEWLY ELECTED MAYOR AND CITY COUNCILMEMBERS

## CITY COUNCIL COMMENTS

## CITY COUNCIL REORGANIZATION - SELECTION OF MAYOR PRO TEMPORE

## ADJOURNMENT TO RECEPTION - 6 P.M.

## NOTICE TO THE PUBLIC

## LIVE BROADCASTING AND REBROADCASTING

Regular City Council 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 meeting), Sundays at 11 a.m., Wednesdays at 7 p.m., and Thursdays at 10 a.m. until the next City Council 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 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 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 meeting). Staff reports can also be downloaded from the City's website at *cityofirvine.org* beginning the Friday prior to the scheduled City Council 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 (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 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 public meeting.

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. 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 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 90$^{th}$ 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 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
- City's web page at www.ci.irvine.ca.us

I hereby certify that the agenda for the Regular City Council meeting was posted in accordance with law in the posting book located in the Public Safety Lobby of City Hall, One Civic Center Plaza, Irvine, California on December 8, 2016 by 8:00pm as well as on the City's web page.

Molly McLaughlin, CMC
City Clerk

# 1.1

# REQUEST FOR CITY COUNCIL ACTION

**MEETING DATE:** DECEMBER 13, 2016

**TITLE:** CERTIFY RESULTS OF THE GENERAL MUNICIPAL ELECTION HELD ON NOVEMBER 8, 2016

City Clerk

City Manager

## RECOMMENDED ACTION

1) Receive and file the Certificate of Results for the General Municipal Election held on November 8, 2016 for City Councilmember and Mayoral candidates.

2) Adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, RECITING THE FACT OF THE GENERAL MUNICIPAL ELECTION HELD ON NOVEMBER 8, 2016, DECLARING THE RESULT AND SUCH OTHER MATTERS AS PROVIDED BY LAW

## EXECUTIVE SUMMARY

In accordance with the provisions of the Irvine City Charter and the California Elections Code, a General Municipal Election was held on November 8, 2016 for the purpose of electing a Mayor and two Members of the City Council. The City's election was consolidated with the Statewide General Election and the Orange County Registrar of Voters provided necessary election services.

The Orange County Registrar of Voters (ROV) completed its final canvass of the election returns and provided a Certificate of Election Results on December 6, 2016. The Elections Code requires the City Council to certify the election results no later than the next regularly scheduled City Council meeting following the ROV's final canvass. The City Clerk is submitting the subject resolution for adoption to certify the election results for the above-described City offices.

## COMMISSION/BOARD/COMMITTEE RECOMMENDATION

Not applicable.

**ANALYSIS**

On June 14, 2016, the City Council adopted resolutions pertaining to the upcoming November 8, 2016, General Municipal Election including Resolution No. 16-56, requesting that the Orange County Board of Supervisors consolidate the General Municipal Election with the November 8, 2016 Statewide General Election providing election services through the Registrar of Voters' office.

*Voting Center – October 30 through November 7*

The City of Irvine partnered with the ROV to provide members of the public an opportunity to vote early between October 30 and November 7, including weekends. All registered Orange County residents were able to cast their ballots at the full-service Voting Center which provided a convenient alternative to Election Day voting. The City of Irvine was the busiest Voting Center in the County for the last two days of early voting and the only Voting Center to process over 1,000 voters in one day.

The City accommodated 4,424 walk-in voters during the early voting timeframe. In addition to early voting, for the first time, the City also served as a secure drive-through ballot drop-off site. The ballot drop-off site proved to be very successful and well-received by the public, resulting in 2,571 vote-by-mail ballots dropped off at the secure location. Total number of ballots cast during early voting was 6,995, of which 5,086 ballots were specific to the City of Irvine.

*Voter Outreach and Turnout*

A strategic voter outreach plan was developed in collaboration with the Public Information Office to educate the public on voter registration deadlines, "active" versus "inactive" voters and the development of specific messaging for the Voting Center. Voter turnout for the November 8, 2016 General Municipal Election for the City of Irvine was 80%, the third highest voter turnout recorded since the City's incorporation. Comparatively, in the 2012 Presidential Election, overall turnout was 41%.

*Final Canvass*

The final canvass indicates the following candidates were elected to office:

| | |
|---|---|
| Mayor: | Donald P. Wagner (Two-year term) |
| Member of the City Council: | Christina L. Shea (Four-year term) |
| Member of the City Council: | Melissa Fox (Four-year term) |

The City Council's adoption of the proposed resolution is required to certify the City's election results (Attachment 1). The official canvass of the election, which is attached to and a part of the subject resolution (Exhibit A), contains a report of the numbers of votes cast for each candidate. Subsequent to adoption of the resolution, at the December 13

City Council meeting, the newly elected Mayor and Councilmembers will be sworn into office, followed by the selection of a Mayor Pro Tem for the ensuing year.

**ALTERNATIVES CONSIDERED**

Not applicable. The City Charter requires that the election be held and the results be reported to and certified by the City Council by the next regularly scheduled City Council Meeting following the ROV's official canvass of the returns.

**FINANCIAL IMPACT**

The Fiscal Year 2016-17 City Clerk Budget includes $180,000 to cover election services performed by the ROV for the November 8, 2016 General Municipal Election. Staff anticipates that final expenditures will be within the budgeted amount.

**REPORT PREPARED BY** Molly McLaughlin, City Clerk

**ATTACHMENTS**

Resolution Certifying Election including Exhibit A

CITY COUNCIL RESOLUTION NO. 16-XX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, RECITING THE FACT OF THE GENERAL MUNICIPAL ELECTION HELD ON NOVEMBER 8, 2016, DECLARING THE RESULT AND SUCH OTHER MATTERS AS PROVIDED BY LAW

WHEREAS, a General Municipal Election was held and conducted in the City of Irvine, California, on Tuesday, November 8, 2016, as required by law; and

WHEREAS, notice of the election was given in time, form and manner as provided by law; that voting precincts were properly established; that election officers were appointed and that in all respects the election was held and conducted and the votes were cast, received and canvassed and the returns made and declared in time, form and manner as required by the provisions of the Elections Code of the State of California for the holding of elections in charter cities; and

WHEREAS, pursuant to City Council Resolution No. 16-56 adopted on June 14, 2016, the Orange County Registrar of Voters canvassed the returns of the election and has certified the results to this City Council, the results are received, attached and made a part hereof as Exhibit A.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, DOES RESOLVE, DECLARE, DETERMINE AND ORDER AS FOLLOWS:

SECTION 1 That the whole number of votes cast in the precincts except vote-by-mail ballots was 35,618; the whole number of vote-by-mail votes cast in the City was 54,641; and the whole number of early voting ballots cast was 5,086, making a total of 95,345 votes cast in the City and hereby attached as Exhibit A.

SECTION 2. That the names of persons voted for at the election for Mayor are as follows: Donald P. Wagner, Katherine Daigle, Gang Chen, David Chey and Mary Ann Gaido.

That the names of persons voted for at the election for Member of the City Council are as follows: Farrah N. Khan, Anthony Kuo, Christina L. Shea, Courtney Santos, Ian Daelucian, Matthew Ehorn, Hyunjoung “Genii” Ahn, Anila Ali, Dale Cheema, Melissa Fox and Shiva Farivar.



ATTACHMENT

SECTION 3. That the number of votes given at each precinct and the number of votes given in the City to each of the persons named above for the respective offices for which the persons were candidates, as listed in Exhibit A attached.

SECTION 4. The City Council does declare and determine that Donald P. Wagner was elected as Mayor for a full term of two years; and Christina L. Shea and Melissa Fox were elected as Members of the City Council for a full term of four years.

SECTION 5. The City Clerk shall enter on the records of the City Council of the City, a statement of the result of the election, showing: (1) the whole number of votes cast in the City; (2) the names of the persons voted for; (3) for what office each person was voted for; (4) the number of votes given at each precinct to each person, and (5) the total number of votes given to each person.

SECTION 6. That the City Clerk shall immediately make and deliver to each of the persons so elected a Certificate of Election signed by the City Clerk and authenticated; that the City Clerk shall also administer to each person elected the Oath of Office prescribed in the Constitution of the State of California and shall have them subscribe to it and file it in the office of the City Clerk; and that each and all of the persons so elected shall then be inducted into the respective office to which they have been elected.

SECTION 7. That 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 13th day of December, 2016.

_____
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 13th day of December, 2016.

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

_____
CITY CLERK OF THE CITY OF IRVINE

# CERTIFICATE OF REGISTRAR OF VOTERS TO RESULT OF THE CANVASS OF THE GENERAL ELECTION RETURNS

*STATE OF CALIFORNIA)*
*)ss.*
*COUNTY OF ORANGE )*

I, Neal Kelley, Registrar of Voters of Orange County, do hereby certify the following to be a full, true and correct Statement of the Vote of the election listed below, consolidated with the Presidential General Election held on November 8, 2016.

CITY OF IRVINE
MAYOR

| | |
|---|---|
| DONALD P. WAGNER | 30,002 |
| MARY ANN GAIDO | 26,278 |
| GANG CHEN | 11,816 |
| KATHERINE DAIGLE | 8,299 |
| DAVID CHEY | 3,206 |

CITY COUNCIL

| | |
|---|---|
| CHRISTINA L. SHEA | 28,072 |
| MELISSA FOX | 24,023 |
| ANTHONY KUO | 21,301 |
| FARRAH N. KHAN | 16,487 |
| ANILA ALI | 10,011 |
| SHIVA FARIVAR | 9,799 |
| DALE CHEEMA | 8,844 |
| COURTNEY SANTOS | 6,758 |
| MATTHEW EHORN | 4,988 |
| HYUNJOUNG "GENII" AHN | 4,651 |
| IAN DAELUCIAN | 4,349 |

| | |
|---|---|
| EARLY VOTING BALLOTS CAST: | 5,086 |
| PRECINCT BALLOTS CAST: | 35,618 |
| VOTE-BY-MAIL BALLOTS CAST: | 54,641 |
| TOTAL BALLOTS CAST: | 95,345 |

I hereby certify that the number of votes cast for each candidate is as set forth above and appears in the Certified Statement of the Vote.

WITNESS my hand and Official Seal this 6th day of December, 2016.

NEAL KELLEY
Registrar of Voters
Orange County

EXHIBIT A

**REGISTRAR OF VOTERS**
1300 South Grand Avenue, Bldg. C
Santa Ana, California 92705
(714) 567-7600
FAX (714) 567-7627
ocvote.com

**NEAL KELLEY**
Registrar of Voters

Mailing Address:
P.O. Box 11298
Santa Ana, California 92711

December 6, 2016

Dear City Clerk:

I am enclosing the Certification of the Registrar of Voters to Result of the Canvass of the General Election Returns and a copy of the abstract for the municipal election for your city, held in consolidation with the Presidential General Election on November 8, 2016.

If you have any questions, please feel free to contact me at (714) 567-7568 or Marcia.Nielsen@rov.ocgov.com.

Sincerely,

Marcia Nielsen
Interim Candidate and Voter Services Manager

:mn

Enclosures

CERTIFIED STATEMENT OF THE VOTES CAST

at the

PRESIDENTIAL GENERAL ELECTION

November 8, 2016

in the

County of Orange, State of California

FILED _____, 2016

ALEX PADILLA, SECRETARY OF STATE

BY _____ DEPUTY

State of California)
) ss
County of Orange)

*I, Neal Kelley, Registrar of Voters of Orange County, do hereby certify that the within is a true and correct statement of the votes cast in this county at the Presidential General Election, as determined by the canvass of the returns of said election.*

*I further certify the results of the 1 percent manual tally contained no discrepancies between the machine count and the manual tally.*

*WITNESS my hand and Official Seal*

THIS 6TH DAY OF December, 2016

_____, REGISTRAR OF VOTERS

COUNTY OF ORANGE CALIFORNIA

| 78 | CITY OF IRVINE Mayor | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Registration | Ballots Cast | Turnout (%) | | CITY OF IRVINE Mayor DONALD P. WAGNER | KATHERINE DAIGLE | GANG CHEN | DAVID CHEY | MARY ANN GAIDO | | | | | | | |
| 59001 | 4 | 1 | 25.0 | | 0 | 0 | 0 | 0 | 0 | | | | | | | |
| 59002 | 932 | 727 | 78.0 | | 208 | 79 | 97 | 41 | 156 | | | | | | | |
| 59003 | 1,443 | 1,220 | 84.5 | | 480 | 67 | 123 | 37 | 364 | | | | | | | |
| 59005 | 778 | 585 | 75.2 | | 182 | 53 | 74 | 23 | 172 | | | | | | | |
| 59006 | 613 | 487 | 79.4 | | 155 | 44 | 65 | 14 | 141 | | | | | | | |
| 59007 | 2,065 | 1,608 | 77.9 | | 463 | 171 | 175 | 86 | 382 | | | | | | | |
| 59009 | 1,992 | 1,491 | 74.8 | | 404 | 151 | 183 | 56 | 399 | | | | | | | |
| 59011 | 1,240 | 1,050 | 84.7 | | 360 | 80 | 130 | 25 | 351 | | | | | | | |
| 59014 | 643 | 528 | 82.1 | | 113 | 41 | 58 | 9 | 239 | | | | | | | |
| 59015 | 936 | 780 | 83.3 | | 227 | 52 | 66 | 31 | 301 | | | | | | | |
| 59016 | 1,405 | 1,159 | 82.5 | | 376 | 100 | 115 | 43 | 363 | | | | | | | |
| 59018 | 1,459 | 1,275 | 87.4 | | 446 | 81 | 102 | 34 | 469 | | | | | | | |
| 59019 | 1,638 | 1,069 | 65.3 | | 198 | 102 | 129 | 46 | 253 | | | | | | | |
| 59020 | 941 | 773 | 82.1 | | 262 | 73 | 98 | 17 | 227 | | | | | | | |
| 59021 | 1,221 | 989 | 81.0 | | 271 | 93 | 148 | 36 | 266 | | | | | | | |
| 59022 | 769 | 669 | 87.0 | | 239 | 37 | 76 | 17 | 236 | | | | | | | |
| 59026 | 1,896 | 1,531 | 80.7 | | 549 | 143 | 186 | 45 | 425 | | | | | | | |
| 59027 | 1,691 | 1,380 | 81.6 | | 421 | 79 | 150 | 28 | 499 | | | | | | | |
| 59030 | 785 | 669 | 85.2 | | 258 | 55 | 63 | 16 | 184 | | | | | | | |
| 59032 | 862 | 759 | 88.1 | | 266 | 55 | 85 | 11 | 252 | | | | | | | |
| 59033 | 1,814 | 1,478 | 81.5 | | 523 | 106 | 167 | 32 | 462 | | | | | | | |
| 59034 | 1,097 | 919 | 83.8 | | 364 | 60 | 94 | 34 | 247 | | | | | | | |
| 59036 | 1,839 | 1,578 | 85.8 | | 543 | 134 | 129 | 27 | 546 | | | | | | | |
| 59037 | 1,280 | 1,103 | 86.2 | | 388 | 78 | 168 | 19 | 311 | | | | | | | |
| 59038 | 702 | 593 | 84.5 | | 255 | 35 | 63 | 13 | 157 | | | | | | | |
| 59039 | 943 | 742 | 78.7 | | 214 | 71 | 90 | 13 | 226 | | | | | | | |
| 59041 | 861 | 735 | 85.4 | | 269 | 52 | 99 | 17 | 218 | | | | | | | |
| 59042 | 791 | 622 | 78.6 | | 167 | 46 | 99 | 23 | 198 | | | | | | | |
| 59043 | 1,251 | 1,119 | 89.4 | | 538 | 91 | 94 | 24 | 251 | | | | | | | |
| 59044 | 1,604 | 1,341 | 83.6 | | 557 | 99 | 117 | 36 | 401 | | | | | | | |
| 59045 | 907 | 761 | 83.9 | | 313 | 56 | 60 | 17 | 236 | | | | | | | |
| 59047 | 872 | 764 | 87.6 | | 310 | 58 | 66 | 10 | 208 | | | | | | | |
| 59048 | 771 | 634 | 82.2 | | 186 | 62 | 85 | 23 | 175 | | | | | | | |
| 59054 | 990 | 812 | 82.0 | | 253 | 88 | 99 | 23 | 233 | | | | | | | |
| 59055 | 892 | 772 | 86.5 | | 273 | 71 | 83 | 18 | 224 | | | | | | | |
| 59058 | 2,104 | 1,881 | 89.4 | | 223 | 70 | 130 | 24 | 1226 | | | | | | | |
| 59061 | 1,132 | 936 | 82.7 | | 377 | 54 | 94 | 10 | 311 | | | | | | | |
| 59062 | 1,119 | 810 | 72.4 | | 225 | 91 | 104 | 36 | 188 | | | | | | | |
| 59063 | 882 | 762 | 86.4 | | 313 | 49 | 59 | 15 | 229 | | | | | | | |
| 59064 | 710 | 610 | 85.9 | | 238 | 32 | 53 | 19 | 211 | | | | | | | |
| 59065 | 793 | 644 | 81.2 | | 217 | 52 | 75 | 24 | 148 | | | | | | | |
| 59071 | 1,002 | 802 | 80.0 | | 229 | 81 | 121 | 31 | 197 | | | | | | | |
| 59072 | 1,776 | 1,417 | 79.8 | | 510 | 110 | 146 | 46 | 406 | | | | | | | |
| 59074 | 739 | 519 | 70.2 | | 111 | 56 | 80 | 15 | 132 | | | | | | | |
| 59075 | 1,793 | 1,370 | 76.4 | | 496 | 117 | 143 | 32 | 361 | | | | | | | |
| 59079 | 883 | 777 | 88.0 | | 252 | 74 | 88 | 27 | 215 | | | | | | | |
| 59081 | 726 | 557 | 76.7 | | 197 | 45 | 52 | 18 | 171 | | | | | | | |
| 59082 | 1,007 | 842 | 83.6 | | 298 | 46 | 80 | 12 | 287 | | | | | | | |
| 59084 | 0 | 1 | 0.0 | | 0 | 0 | 0 | 1 | 0 | | | | | | | |
| 59088 | 1,842 | 1,458 | 79.2 | | 543 | 93 | 194 | 53 | 390 | | | | | | | |
| 59089 | 1,130 | 900 | 79.6 | | 349 | 60 | 111 | 24 | 252 | | | | | | | |
| 59090 | 1,890 | 1,457 | 77.1 | | 491 | 141 | 194 | 53 | 347 | | | | | | | |
| 59092 | 1,648 | 1,350 | 81.9 | | 463 | 111 | 171 | 44 | 362 | | | | | | | |
| 59097 | 951 | 749 | 78.8 | | 267 | 55 | 120 | 22 | 192 | | | | | | | |
| 59098 | 1,314 | 1,136 | 86.5 | | 295 | 116 | 171 | 25 | 330 | | | | | | | |
| 59099 | 1,483 | 1,091 | 74.6 | | 271 | 130 | 137 | 60 | 249 | | | | | | | |
| 59100 | 1,680 | 1,314 | 78.2 | | 393 | 115 | 160 | 52 | 365 | | | | | | | |
| 59101 | 916 | 706 | 77.1 | | 185 | 59 | 108 | 15 | 206 | | | | | | | |
| 59103 | 901 | 589 | 65.4 | | 153 | 57 | 90 | 26 | 163 | | | | | | | |
| 59105 | 989 | 806 | 81.5 | | 259 | 103 | 75 | 21 | 248 | | | | | | | |

| 78 | CITY OF IRVINE Mayor | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Registration | Ballots Cast | Turnout (%) | | CITY OF IRVINE Mayor DONALD P. WAGNER | KATHERINE DAIGLE | GANG CHEN | DAVID CHEY | MARY ANN GAIDO | | | | | | | |
| 59106 | 1,371 | 1,193 | 87.0 | | 419 | 118 | 120 | 49 | 328 | | | | | | | |
| 59108 | 219 | 160 | 73.1 | | 33 | 21 | 25 | 6 | 27 | | | | | | | |
| 59111 | 1,162 | 964 | 83.0 | | 299 | 89 | 102 | 20 | 296 | | | | | | | |
| 59113 | 1,880 | 1,143 | 60.8 | | 192 | 123 | 227 | 52 | 225 | | | | | | | |
| 59118 | 1,572 | 1,328 | 84.5 | | 504 | 120 | 149 | 37 | 351 | | | | | | | |
| 59124 | 1,753 | 1,429 | 81.5 | | 548 | 100 | 145 | 50 | 405 | | | | | | | |
| 59125 | 885 | 748 | 84.5 | | 234 | 66 | 108 | 35 | 199 | | | | | | | |
| 59127 | 1,197 | 956 | 79.9 | | 341 | 106 | 135 | 33 | 233 | | | | | | | |
| 59129 | 1,632 | 1,323 | 81.1 | | 410 | 155 | 135 | 54 | 282 | | | | | | | |
| 59131 | 1,997 | 1,538 | 77.0 | | 363 | 220 | 192 | 83 | 321 | | | | | | | |
| 59132 | 1,441 | 1,158 | 80.4 | | 395 | 106 | 118 | 29 | 275 | | | | | | | |
| 59133 | 1,190 | 899 | 75.5 | | 116 | 79 | 111 | 33 | 293 | | | | | | | |
| 59134 | 0 | 0 | 0.0 | | 0 | 0 | 0 | 0 | 0 | | | | | | | |
| 59138 | 0 | 0 | 0.0 | | 0 | 0 | 0 | 0 | 0 | | | | | | | |
| 59141 | 1,674 | 1,397 | 83.5 | | 516 | 110 | 185 | 64 | 297 | | | | | | | |
| 59143 | 789 | 592 | 75.0 | | 191 | 62 | 82 | 20 | 131 | | | | | | | |
| 59144 | 1,573 | 1,366 | 86.8 | | 491 | 123 | 147 | 72 | 272 | | | | | | | |
| 59146 | 1,969 | 1,532 | 77.8 | | 461 | 155 | 212 | 70 | 370 | | | | | | | |
| 59147 | 788 | 633 | 80.3 | | 235 | 47 | 83 | 19 | 157 | | | | | | | |
| 59148 | 638 | 517 | 81.0 | | 150 | 67 | 66 | 17 | 118 | | | | | | | |
| 59149 | 2,618 | 2,069 | 79.0 | | 587 | 227 | 309 | 85 | 437 | | | | | | | |
| 59150 | 2 | 1 | 50.0 | | 0 | 0 | 0 | 0 | 0 | | | | | | | |
| 59152 | 1,349 | 1,048 | 77.7 | | 391 | 78 | 137 | 54 | 229 | | | | | | | |
| 59153 | 1,033 | 779 | 75.4 | | 203 | 84 | 111 | 40 | 171 | | | | | | | |
| 59154 | 1,331 | 1,062 | 79.8 | | 294 | 94 | 168 | 29 | 299 | | | | | | | |
| 59156 | 860 | 589 | 68.9 | | 113 | 58 | 79 | 40 | 127 | | | | | | | |
| 59161 | 706 | 566 | 80.2 | | 51 | 53 | 72 | 19 | 206 | | | | | | | |
| 59162 | 0 | 0 | 0.0 | | 0 | 0 | 0 | 0 | 0 | | | | | | | |
| 59163 | 295 | 246 | 83.4 | | 72 | 14 | 44 | 11 | 55 | | | | | | | |
| 59164 | 895 | 678 | 75.8 | | 199 | 69 | 100 | 35 | 138 | | | | | | | |
| 59165 | 0 | 1 | 0.0 | | 0 | 0 | 1 | 0 | 0 | | | | | | | |
| 59166 | 828 | 550 | 66.4 | | 153 | 73 | 52 | 27 | 128 | | | | | | | |
| 59168 | 2,289 | 1,835 | 80.2 | | 533 | 169 | 300 | 71 | 462 | | | | | | | |
| 59170 | 92 | 69 | 75.0 | | 28 | 4 | 5 | 2 | 9 | | | | | | | |
| 59171 | 13 | 11 | 84.6 | | 2 | 0 | 0 | 2 | 0 | | | | | | | |
| 59172 | 1,821 | 1,381 | 75.8 | | 360 | 157 | 171 | 63 | 315 | | | | | | | |
| 59601 | 1,071 | 862 | 80.5 | | 237 | 65 | 132 | 26 | 226 | | | | | | | |
| 59602 | 3,570 | 2,845 | 79.7 | | 827 | 251 | 547 | 107 | 657 | | | | | | | |
| 59603 | 2,513 | 1,925 | 76.6 | | 510 | 145 | 384 | 71 | 462 | | | | | | | |
| 59701 | 2,281 | 1,623 | 71.2 | | 420 | 114 | 249 | 65 | 393 | | | | | | | |
| 59702 | 2,561 | 2,122 | 82.9 | | 738 | 215 | 221 | 67 | 426 | | | | | | | |
| **Early Voting Totals** | 119,195 | 5,086 | 4.3 | | 1260 | 484 | 590 | 167 | 1927 | | | | | | | |
| **Absentee Totals** | 119,195 | 54,641 | 45.8 | | 18309 | 4189 | 6615 | 1609 | 15282 | | | | | | | |
| **Election Day Totals** | 119,195 | 35,618 | 29.9 | | 10433 | 3626 | 4611 | 1430 | 9069 | | | | | | | |
| **Grand Totals** | 119,195 | 95,345 | 80.0 | | 30002 | 8299 | 11816 | 3206 | 26278 | | | | | | | |

| Early Voting Totals 78 | CITY OF IRVINE Mayor | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Registration | Ballots Cast | Turnout (%) | | CITY OF IRVINE Mayor DONALD P. WAGNER | KATHERINE DAIGLE | GANG CHEN | DAVID CHEY | MARY ANN GAIDO | | | | | | | |
| Orange County | 119,195 | 5,086 | 4.3 | | 1260 | 484 | 590 | 167 | 1927 | | | | | | | |
| 45th Congressional District | 119,195 | 5,086 | 4.3 | | 1260 | 484 | 590 | 167 | 1927 | | | | | | | |
| 37th Senate District | 119,195 | 5,086 | 4.3 | | 1260 | 484 | 590 | 167 | 1927 | | | | | | | |
| 68th Assembly District | 44,484 | 1,664 | 3.7 | | 467 | 145 | 183 | 58 | 616 | | | | | | | |
| 74th Assembly District | 74,711 | 3,422 | 4.6 | | 793 | 339 | 407 | 109 | 1311 | | | | | | | |
| 3rd Supervisorial District | 110,753 | 4,773 | 4.3 | | 1191 | 449 | 551 | 153 | 1820 | | | | | | | |
| 5th Supervisorial District | 8,442 | 313 | 3.7 | | 69 | 35 | 39 | 14 | 107 | | | | | | | |
| County Board of Education Trustee Area 3 | 119,195 | 5,086 | 4.3 | | 1260 | 484 | 590 | 167 | 1927 | | | | | | | |
| Irvine | 119,195 | 5,086 | 4.3 | | 1260 | 484 | 590 | 167 | 1927 | | | | | | | |
| Irvine Ranch Water District | 119,195 | 5,086 | 4.3 | | 1260 | 484 | 590 | 167 | 1927 | | | | | | | |
| Irvine Unified School District | 105,754 | 4,546 | 4.3 | | 1114 | 416 | 532 | 144 | 1764 | | | | | | | |
| Irvine Unified School District Facilities | 77,855 | 3,475 | 4.5 | | 852 | 302 | 385 | 104 | 1407 | | | | | | | |
| Laguna Beach Unified School District | 0 | 0 | 0.0 | | 0 | 0 | 0 | 0 | 0 | | | | | | | |
| Municipal Water District Of Orange | 119,195 | 5,086 | 4.3 | | 1260 | 484 | 590 | 167 | 1927 | | | | | | | |
| Municipal Water District of Orange County | 92,966 | 4,129 | 4.4 | | 981 | 400 | 480 | 136 | 1584 | | | | | | | |
| Municipal Water District of Orange County | 26,229 | 957 | 3.6 | | 279 | 84 | 110 | 31 | 343 | | | | | | | |
| Orange County Water District | 109,485 | 4,570 | 4.2 | | 1140 | 421 | 518 | 146 | 1765 | | | | | | | |
| Orange County Water District Division 5 | 94,421 | 3,882 | 4.1 | | 941 | 350 | 438 | 127 | 1539 | | | | | | | |
| Orange County Water District Division 7 | 15,064 | 686 | 4.6 | | 199 | 71 | 80 | 19 | 226 | | | | | | | |
| Orange Unified School District | 0 | 1 | 0.0 | | 0 | 0 | 1 | 0 | 0 | | | | | | | |
| Orange Unified School District Trustee | 0 | 1 | 0.0 | | 0 | 0 | 1 | 0 | 0 | | | | | | | |
| Rancho Santiago Community College | 3,102 | 158 | 5.1 | | 30 | 23 | 21 | 7 | 52 | | | | | | | |
| Rancho Santiago Community College | 3,102 | 157 | 5.1 | | 30 | 23 | 20 | 7 | 52 | | | | | | | |
| Rancho Santiago Community College | 0 | 1 | 0.0 | | 0 | 0 | 1 | 0 | 0 | | | | | | | |
| Saddleback Valley Unified School District | 2 | 0 | 0.0 | | 0 | 0 | 0 | 0 | 0 | | | | | | | |
| Santa Ana College Imp Dist No. 1 of | 3,102 | 157 | 5.1 | | 30 | 23 | 20 | 7 | 52 | | | | | | | |
| Santa Ana Unified School District | 3,102 | 157 | 5.1 | | 30 | 23 | 20 | 7 | 52 | | | | | | | |
| School Facilities Improv. Dist. No. 2008-1 | 219 | 9 | 4.1 | | 3 | 4 | 0 | 0 | 0 | | | | | | | |
| School Facilities Improv. Dist. No. 2012-1 | 9,442 | 344 | 3.6 | | 112 | 40 | 34 | 13 | 95 | | | | | | | |
| Silverado-Modjeska Recreation and Park | 0 | 0 | 0.0 | | 0 | 0 | 0 | 0 | 0 | | | | | | | |
| South Orange County Community College | 116,093 | 4,928 | 4.2 | | 1230 | 461 | 569 | 160 | 1875 | | | | | | | |
| South Orange County Community College | 68,505 | 3,135 | 4.6 | | 748 | 294 | 363 | 96 | 1224 | | | | | | | |
| South Orange County Community College | 5,424 | 216 | 4.0 | | 76 | 25 | 23 | 8 | 54 | | | | | | | |
| South Orange County Community College | 38,813 | 1,457 | 3.8 | | 375 | 129 | 169 | 51 | 554 | | | | | | | |
| State Board of Equalization (4th District) | 119,195 | 5,086 | 4.3 | | 1260 | 484 | 590 | 167 | 1927 | | | | | | | |
| Tustin Unified School District | 10,337 | 382 | 3.7 | | 116 | 45 | 37 | 16 | 111 | | | | | | | |
| UCI Campus precincts | 8,398 | 307 | 3.7 | | 47 | 23 | 38 | 13 | 111 | | | | | | | |
| **Early Voting Totals** | 119,195 | 5,086 | 4.3 | | 1260 | 484 | 590 | 167 | 1927 | | | | | | | |

| Absentee Totals 78 | CITY OF IRVINE Mayor | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Registration | Ballots Cast | Turnout (%) | | CITY OF IRVINE Mayor DONALD P. WAGNER | KATHERINE DAIGLE | GANG CHEN | DAVID CHEY | MARY ANN GAIDO | | | | | | | |
| Orange County | 119,195 | 54,641 | 45.8 | | 18309 | 4189 | 6615 | 1609 | 15282 | | | | | | | |
| 45th Congressional District | 119,195 | 54,641 | 45.8 | | 18309 | 4189 | 6615 | 1609 | 15282 | | | | | | | |
| 37th Senate District | 119,195 | 54,641 | 45.8 | | 18309 | 4189 | 6615 | 1609 | 15282 | | | | | | | |
| 68th Assembly District | 44,484 | 20,861 | 46.9 | | 7451 | 1520 | 2744 | 665 | 5310 | | | | | | | |
| 74th Assembly District | 74,711 | 33,780 | 45.2 | | 10858 | 2669 | 3871 | 944 | 9972 | | | | | | | |
| 3rd Supervisorial District | 110,753 | 50,534 | 45.6 | | 16884 | 3830 | 6115 | 1495 | 14335 | | | | | | | |
| 5th Supervisorial District | 8,442 | 4,107 | 48.6 | | 1425 | 359 | 500 | 114 | 947 | | | | | | | |
| County Board of Education Trustee Area 3 | 119,195 | 54,641 | 45.8 | | 18309 | 4189 | 6615 | 1609 | 15282 | | | | | | | |
| Irvine | 119,195 | 54,641 | 45.8 | | 18309 | 4189 | 6615 | 1609 | 15282 | | | | | | | |
| Irvine Ranch Water District | 119,195 | 54,641 | 45.8 | | 18309 | 4189 | 6615 | 1609 | 15282 | | | | | | | |
| Irvine Unified School District | 105,754 | 48,595 | 46.0 | | 16253 | 3663 | 5855 | 1364 | 13922 | | | | | | | |
| Irvine Unified School District Facilities | 77,855 | 35,683 | 45.8 | | 12117 | 2631 | 3948 | 950 | 10789 | | | | | | | |
| Laguna Beach Unified School District | 0 | 0 | 0.0 | | 0 | 0 | 0 | 0 | 0 | | | | | | | |
| Municipal Water District Of Orange | 119,195 | 54,641 | 45.8 | | 18309 | 4189 | 6615 | 1609 | 15282 | | | | | | | |
| Municipal Water District of Orange County | 92,966 | 42,330 | 45.5 | | 13909 | 3313 | 4934 | 1200 | 12206 | | | | | | | |
| Municipal Water District of Orange County | 26,229 | 12,311 | 46.9 | | 4400 | 876 | 1681 | 409 | 3076 | | | | | | | |
| Orange County Water District | 109,485 | 50,331 | 46.0 | | 17009 | 3819 | 6022 | 1440 | 14183 | | | | | | | |
| Orange County Water District Division 5 | 94,421 | 43,563 | 46.1 | | 14593 | 3297 | 5151 | 1184 | 12525 | | | | | | | |
| Orange County Water District Division 7 | 15,064 | 6,768 | 44.9 | | 2416 | 522 | 871 | 256 | 1658 | | | | | | | |
| Orange Unified School District | 0 | 0 | 0.0 | | 0 | 0 | 0 | 0 | 0 | | | | | | | |
| Orange Unified School District Trustee | 0 | 0 | 0.0 | | 0 | 0 | 0 | 0 | 0 | | | | | | | |
| Rancho Santiago Community College | 3,102 | 1,450 | 46.7 | | 426 | 152 | 171 | 69 | 365 | | | | | | | |
| Rancho Santiago Community College | 3,102 | 1,450 | 46.7 | | 426 | 152 | 171 | 69 | 365 | | | | | | | |
| Rancho Santiago Community College | 0 | 0 | 0.0 | | 0 | 0 | 0 | 0 | 0 | | | | | | | |
| Saddleback Valley Unified School District | 2 | 0 | 0.0 | | 0 | 0 | 0 | 0 | 0 | | | | | | | |
| Santa Ana College Imp Dist No. 1 of | 3,102 | 1,450 | 46.7 | | 426 | 152 | 171 | 69 | 365 | | | | | | | |
| Santa Ana Unified School District | 3,102 | 1,450 | 46.7 | | 426 | 152 | 171 | 69 | 365 | | | | | | | |
| School Facilities Improv. Dist. No. 2008-1 | 219 | 138 | 63.0 | | 28 | 16 | 22 | 6 | 26 | | | | | | | |
| School Facilities Improv. Dist. No. 2012-1 | 9,442 | 4,232 | 44.8 | | 1511 | 342 | 536 | 160 | 919 | | | | | | | |
| Silverado-Modjeska Recreation and Park | 0 | 0 | 0.0 | | 0 | 0 | 0 | 0 | 0 | | | | | | | |
| South Orange County Community College | 116,093 | 53,191 | 45.8 | | 17883 | 4037 | 6444 | 1540 | 14917 | | | | | | | |
| South Orange County Community College | 68,505 | 31,291 | 45.7 | | 10275 | 2397 | 3519 | 828 | 9437 | | | | | | | |
| South Orange County Community College | 5,424 | 2,406 | 44.4 | | 891 | 161 | 297 | 101 | 508 | | | | | | | |
| South Orange County Community College | 38,813 | 17,983 | 46.3 | | 6223 | 1342 | 2424 | 556 | 4575 | | | | | | | |
| State Board of Equalization (4th District) | 119,195 | 54,641 | 45.8 | | 18309 | 4189 | 6615 | 1609 | 15282 | | | | | | | |
| Tustin Unified School District | 10,337 | 4,596 | 44.5 | | 1630 | 374 | 589 | 176 | 995 | | | | | | | |
| UCI Campus precincts | 8,398 | 2,952 | 35.2 | | 417 | 194 | 345 | 89 | 1226 | | | | | | | |
| **Absentee Totals** | 119,195 | 54,641 | 45.8 | | 18309 | 4189 | 6615 | 1609 | 15282 | | | | | | | |

| Grand Totals 78 | CITY OF IRVINE Mayor | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Registration | Ballots Cast | Turnout (%) | | CITY OF IRVINE Mayor DONALD P. WAGNER | KATHERINE DAIGLE | GANG CHEN | DAVID CHEY | MARY ANN GAIDO | | | | | | | |
| Orange County | 119,195 | 95,345 | 80.0 | | 30002 | 8299 | 11816 | 3206 | 26278 | | | | | | | |
| 45th Congressional District | 119,195 | 95,345 | 80.0 | | 30002 | 8299 | 11816 | 3206 | 26278 | | | | | | | |
| 37th Senate District | 119,195 | 95,345 | 80.0 | | 30002 | 8299 | 11816 | 3206 | 26278 | | | | | | | |
| 68th Assembly District | 44,484 | 35,781 | 80.4 | | 12146 | 2987 | 4751 | 1270 | 9033 | | | | | | | |
| 74th Assembly District | 74,711 | 59,564 | 79.7 | | 17856 | 5312 | 7065 | 1936 | 17245 | | | | | | | |
| 3rd Supervisorial District | 110,753 | 88,538 | 79.9 | | 27836 | 7618 | 11027 | 2959 | 24709 | | | | | | | |
| 5th Supervisorial District | 8,442 | 6,807 | 80.6 | | 2166 | 681 | 789 | 247 | 1569 | | | | | | | |
| County Board of Education Trustee Area 3 | 119,195 | 95,345 | 80.0 | | 30002 | 8299 | 11816 | 3206 | 26278 | | | | | | | |
| Irvine | 119,195 | 95,345 | 80.0 | | 30002 | 8299 | 11816 | 3206 | 26278 | | | | | | | |
| Irvine Ranch Water District | 119,195 | 95,345 | 80.0 | | 30002 | 8299 | 11816 | 3206 | 26278 | | | | | | | |
| Irvine Unified School District | 105,754 | 84,720 | 80.1 | | 26565 | 7269 | 10519 | 2715 | 23928 | | | | | | | |
| Irvine Unified School District Facilities | 77,855 | 62,489 | 80.3 | | 19876 | 5171 | 7248 | 1870 | 18668 | | | | | | | |
| Laguna Beach Unified School District | 0 | 0 | 0.0 | | 0 | 0 | 0 | 0 | 0 | | | | | | | |
| Municipal Water District Of Orange | 119,195 | 95,345 | 80.0 | | 30002 | 8299 | 11816 | 3206 | 26278 | | | | | | | |
| Municipal Water District of Orange County | 92,966 | 74,328 | 80.0 | | 22843 | 6564 | 8968 | 2414 | 21110 | | | | | | | |
| Municipal Water District of Orange County | 26,229 | 21,017 | 80.1 | | 7159 | 1735 | 2848 | 792 | 5168 | | | | | | | |
| Orange County Water District | 109,485 | 87,734 | 80.1 | | 27797 | 7549 | 10823 | 2871 | 24419 | | | | | | | |
| Orange County Water District Division 5 | 94,421 | 75,858 | 80.3 | | 23740 | 6484 | 9319 | 2377 | 21572 | | | | | | | |
| Orange County Water District Division 7 | 15,064 | 11,876 | 78.8 | | 4057 | 1065 | 1504 | 494 | 2847 | | | | | | | |
| Orange Unified School District | 0 | 1 | 0.0 | | 0 | 0 | 1 | 0 | 0 | | | | | | | |
| Orange Unified School District Trustee | 0 | 1 | 0.0 | | 0 | 0 | 1 | 0 | 0 | | | | | | | |
| Rancho Santiago Community College | 3,102 | 2,389 | 77.0 | | 686 | 255 | 287 | 126 | 553 | | | | | | | |
| Rancho Santiago Community College | 3,102 | 2,388 | 77.0 | | 686 | 255 | 286 | 126 | 553 | | | | | | | |
| Rancho Santiago Community College | 0 | 1 | 0.0 | | 0 | 0 | 1 | 0 | 0 | | | | | | | |
| Saddleback Valley Unified School District | 2 | 1 | 50.0 | | 0 | 0 | 0 | 0 | 0 | | | | | | | |
| Santa Ana College Imp Dist No. 1 of | 3,102 | 2,388 | 77.0 | | 686 | 255 | 286 | 126 | 553 | | | | | | | |
| Santa Ana Unified School District | 3,102 | 2,388 | 77.0 | | 686 | 255 | 286 | 126 | 553 | | | | | | | |
| School Facilities Improv. Dist. No. 2008-1 | 219 | 161 | 73.5 | | 33 | 21 | 25 | 7 | 27 | | | | | | | |
| School Facilities Improv. Dist. No. 2012-1 | 9,442 | 7,557 | 80.0 | | 2572 | 706 | 910 | 330 | 1659 | | | | | | | |
| Silverado-Modjeska Recreation and Park | 0 | 0 | 0.0 | | 0 | 0 | 0 | 0 | 0 | | | | | | | |
| South Orange County Community College | 116,093 | 92,956 | 80.1 | | 29336 | 8044 | 11529 | 3080 | 25725 | | | | | | | |
| South Orange County Community College | 68,505 | 54,801 | 80.0 | | 16827 | 4705 | 6413 | 1673 | 16233 | | | | | | | |
| South Orange County Community College | 5,424 | 4,361 | 80.4 | | 1551 | 384 | 521 | 217 | 926 | | | | | | | |
| South Orange County Community College | 38,813 | 31,083 | 80.1 | | 10101 | 2703 | 4242 | 1082 | 7873 | | | | | | | |
| State Board of Equalization (4th District) | 119,195 | 95,345 | 80.0 | | 30002 | 8299 | 11816 | 3206 | 26278 | | | | | | | |
| Tustin Unified School District | 10,337 | 8,235 | 79.7 | | 2771 | 775 | 1010 | 365 | 1797 | | | | | | | |
| UCI Campus precincts | 8,398 | 6,147 | 73.2 | | 893 | 485 | 748 | 214 | 2330 | | | | | | | |
| **Early Voting Totals** | 119,195 | 5,086 | 4.3 | | 1260 | 484 | 590 | 167 | 1927 | | | | | | | |
| **Absentee Totals** | 119,195 | 54,641 | 45.8 | | 18309 | 4189 | 6615 | 1609 | 15282 | | | | | | | |
| **Election Day Totals** | 119,195 | 35,618 | 29.9 | | 10433 | 3626 | 4611 | 1430 | 9069 | | | | | | | |
| **Grand Totals** | 119,195 | 95,345 | 80.0 | | 30002 | 8299 | 11816 | 3206 | 26278 | | | | | | | |

| 79 | CITY OF IRVINE Member, City Council | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Registration | Ballots Cast | Turnout (%) | | CITY OF IRVINE Member, City Vote for 2 FARRAH N. KHAN | ANTHONY KUO | CHRISTINA L. SHEA | COURTNEY SANTOS | IAN DAELUCIAN | MATTHEW EHORN | HYUNJOUNG "GENIE" AHN | ANILA ALI | DALE CHEEMA | MELISSA FOX | SHIVA FARIVAR | |
| 59001 | 4 | 1 | 25.0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 59002 | 932 | 727 | 78.0 | | 112 | 128 | 172 | 84 | 30 | 42 | 58 | 91 | 50 | 142 | 74 | |
| 59003 | 1,443 | 1,220 | 84.5 | | 186 | 354 | 463 | 63 | 53 | 46 | 75 | 110 | 93 | 351 | 111 | |
| 59005 | 778 | 585 | 75.2 | | 91 | 91 | 183 | 65 | 25 | 47 | 40 | 94 | 65 | 137 | 54 | |
| 59006 | 613 | 487 | 79.4 | | 95 | 109 | 157 | 42 | 20 | 25 | 21 | 51 | 35 | 142 | 41 | |
| 59007 | 2,065 | 1,608 | 77.9 | | 270 | 282 | 411 | 92 | 86 | 117 | 68 | 144 | 128 | 399 | 171 | |
| 59009 | 1,992 | 1,491 | 74.8 | | 285 | 281 | 379 | 143 | 77 | 100 | 86 | 185 | 107 | 348 | 140 | |
| 59011 | 1,240 | 1,050 | 84.7 | | 152 | 294 | 360 | 47 | 44 | 42 | 34 | 135 | 101 | 293 | 168 | |
| 59014 | 643 | 528 | 82.1 | | 94 | 93 | 111 | 33 | 28 | 28 | 16 | 71 | 45 | 168 | 111 | |
| 59015 | 936 | 780 | 83.3 | | 127 | 137 | 211 | 46 | 34 | 52 | 24 | 93 | 77 | 247 | 156 | |
| 59016 | 1,405 | 1,159 | 82.5 | | 189 | 282 | 372 | 90 | 44 | 57 | 41 | 139 | 116 | 307 | 114 | |
| 59018 | 1,459 | 1,275 | 87.4 | | 173 | 361 | 440 | 47 | 52 | 43 | 28 | 136 | 123 | 392 | 187 | |
| 59019 | 1,638 | 1,069 | 65.3 | | 369 | 92 | 136 | 145 | 38 | 83 | 70 | 83 | 35 | 155 | 80 | |
| 59020 | 941 | 773 | 82.1 | | 166 | 167 | 257 | 54 | 29 | 63 | 42 | 83 | 56 | 219 | 82 | |
| 59021 | 1,221 | 989 | 81.0 | | 200 | 178 | 284 | 73 | 71 | 67 | 42 | 97 | 80 | 252 | 94 | |
| 59022 | 769 | 669 | 87.0 | | 110 | 192 | 268 | 25 | 28 | 27 | 16 | 58 | 69 | 222 | 61 | |
| 59026 | 1,896 | 1,531 | 80.7 | | 214 | 443 | 541 | 114 | 65 | 73 | 76 | 155 | 115 | 437 | 125 | |
| 59027 | 1,691 | 1,380 | 81.6 | | 254 | 317 | 401 | 90 | 53 | 65 | 43 | 153 | 101 | 390 | 210 | |
| 59030 | 785 | 669 | 85.2 | | 100 | 181 | 229 | 38 | 28 | 35 | 18 | 81 | 87 | 174 | 41 | |
| 59032 | 862 | 759 | 88.1 | | 154 | 199 | 278 | 46 | 26 | 33 | 39 | 68 | 68 | 231 | 68 | |
| 59033 | 1,814 | 1,478 | 81.5 | | 181 | 402 | 495 | 103 | 70 | 76 | 58 | 118 | 307 | 360 | 178 | |
| 59034 | 1,097 | 919 | 83.8 | | 133 | 261 | 357 | 23 | 44 | 36 | 24 | 84 | 109 | 260 | 115 | |
| 59036 | 1,839 | 1,578 | 85.8 | | 245 | 377 | 474 | 54 | 69 | 81 | 27 | 111 | 315 | 471 | 287 | |
| 59037 | 1,280 | 1,103 | 86.2 | | 172 | 343 | 371 | 81 | 31 | 50 | 64 | 120 | 86 | 251 | 95 | |
| 59038 | 702 | 593 | 84.5 | | 76 | 176 | 186 | 39 | 25 | 22 | 22 | 52 | 72 | 170 | 87 | |
| 59039 | 943 | 742 | 78.7 | | 128 | 156 | 206 | 63 | 22 | 35 | 21 | 69 | 112 | 185 | 72 | |
| 59041 | 861 | 735 | 85.4 | | 122 | 187 | 248 | 47 | 30 | 28 | 42 | 81 | 73 | 210 | 87 | |
| 59042 | 791 | 622 | 78.6 | | 121 | 142 | 182 | 46 | 32 | 45 | 34 | 73 | 56 | 149 | 50 | |
| 59043 | 1,251 | 1,119 | 89.4 | | 118 | 339 | 507 | 70 | 40 | 47 | 26 | 95 | 137 | 307 | 60 | |
| 59044 | 1,604 | 1,341 | 83.6 | | 179 | 368 | 469 | 49 | 41 | 60 | 48 | 87 | 319 | 434 | 140 | |
| 59045 | 907 | 781 | 86.1 | | 101 | 215 | 298 | 39 | 27 | 34 | 27 | 62 | 75 | 239 | 70 | |
| 59047 | 872 | 764 | 87.6 | | 114 | 230 | 293 | 27 | 29 | 32 | 13 | 61 | 49 | 186 | 69 | |
| 59048 | 771 | 634 | 82.2 | | 103 | 128 | 178 | 50 | 43 | 38 | 33 | 61 | 66 | 147 | 50 | |
| 59054 | 990 | 812 | 82.0 | | 135 | 202 | 257 | 51 | 31 | 37 | 33 | 85 | 102 | 219 | 94 | |
| 59055 | 892 | 772 | 86.5 | | 125 | 182 | 234 | 41 | 35 | 28 | 33 | 72 | 165 | 205 | 55 | |
| 59056 | 2,104 | 1,881 | 89.4 | | 814 | 179 | 250 | 115 | 91 | 66 | 41 | 224 | 49 | 951 | 369 | |
| 59061 | 1,132 | 936 | 82.7 | | 121 | 270 | 372 | 46 | 33 | 49 | 29 | 83 | 97 | 274 | 97 | |
| 59062 | 1,119 | 810 | 72.4 | | 149 | 131 | 190 | 89 | 40 | 45 | 35 | 128 | 51 | 190 | 67 | |
| 59063 | 882 | 762 | 86.4 | | 79 | 235 | 315 | 28 | 30 | 31 | 32 | 56 | 93 | 200 | 109 | |
| 59064 | 710 | 610 | 85.9 | | 106 | 189 | 241 | 24 | 24 | 19 | 29 | 43 | 48 | 199 | 54 | |
| 59065 | 793 | 644 | 81.2 | | 92 | 144 | 199 | 50 | 21 | 35 | 43 | 59 | 47 | 166 | 49 | |
| 59071 | 1,002 | 802 | 80.0 | | 180 | 128 | 212 | 95 | 41 | 41 | 40 | 103 | 64 | 169 | 65 | |
| 59072 | 1,776 | 1,417 | 79.8 | | 223 | 335 | 464 | 98 | 52 | 68 | 70 | 166 | 109 | 379 | 155 | |
| 59074 | 739 | 519 | 70.2 | | 116 | 68 | 97 | 63 | 45 | 36 | 36 | 49 | 20 | 103 | 61 | |
| 59075 | 1,793 | 1,370 | 76.4 | | 198 | 329 | 469 | 56 | 56 | 71 | 49 | 148 | 210 | 338 | 147 | |
| 59079 | 883 | 777 | 88.0 | | 117 | 171 | 256 | 50 | 38 | 43 | 34 | 59 | 139 | 193 | 93 | |
| 59081 | 726 | 557 | 76.7 | | 74 | 137 | 186 | 44 | 20 | 27 | 29 | 54 | 47 | 154 | 54 | |
| 59082 | 1,007 | 842 | 83.6 | | 121 | 223 | 287 | 27 | 44 | 38 | 23 | 73 | 72 | 256 | 98 | |
| 59084 | 0 | 1 | 0.0 | | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | |
| 59088 | 1,842 | 1,458 | 79.2 | | 237 | 430 | 504 | 86 | 40 | 66 | 97 | 140 | 127 | 349 | 132 | |
| 59089 | 1,130 | 900 | 79.6 | | 124 | 298 | 321 | 28 | 24 | 31 | 47 | 93 | 92 | 237 | 91 | |
| 59090 | 1,890 | 1,457 | 77.1 | | 232 | 316 | 481 | 129 | 82 | 65 | 72 | 173 | 121 | 340 | 148 | |
| 59092 | 1,648 | 1,350 | 81.9 | | 225 | 411 | 454 | 64 | 50 | 71 | 66 | 130 | 154 | 341 | 125 | |
| 59097 | 951 | 749 | 78.8 | | 121 | 224 | 246 | 41 | 37 | 39 | 58 | 98 | 68 | 166 | 88 | |
| 59098 | 1,314 | 1,136 | 86.5 | | 210 | 212 | 284 | 88 | 57 | 63 | 58 | 145 | 107 | 242 | 123 | |
| 59099 | 1,463 | 1,091 | 74.6 | | 221 | 145 | 218 | 103 | 69 | 69 | 48 | 113 | 68 | 252 | 110 | |
| 59100 | 1,680 | 1,314 | 78.2 | | 232 | 254 | 373 | 85 | 53 | 61 | 80 | 147 | 113 | 305 | 140 | |
| 59101 | 916 | 706 | 77.1 | | 112 | 160 | 195 | 47 | 30 | 28 | 33 | 97 | 63 | 164 | 102 | |
| 59103 | 901 | 589 | 65.4 | | 131 | 92 | 156 | 68 | 23 | 36 | 21 | 92 | 45 | 129 | 55 | |
| 59105 | 989 | 806 | 81.5 | | 123 | 192 | 263 | 69 | 34 | 42 | 24 | 86 | 137 | 203 | 93 | |

November 08, 2016

| 79 | CITY OF IRVINE Member, City Council | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Registration | Ballots Cast | Turnout (%) | | CITY OF IRVINE Member, City Vote for 2 FARRAH N. KHAN | ANTHONY KUO | CHRISTINA L. SHEA | COURTNEY SANTOS | IAN DAELUCIAN | MATTHEW EHORN | HYUNJOUNG "GENII" AHN | ANILA ALI | DALE CHEEMA | MELISSA FOX | SHIVA FARIVAR | |
| 59106 | 1,371 | 1,193 | 87.0 | | 169 | 338 | 394 | 60 | 61 | 62 | 43 | 93 | 211 | 289 | 124 | |
| 59108 | 219 | 160 | 73.1 | | 31 | 16 | 30 | 12 | 10 | 11 | 7 | 14 | 13 | 27 | 18 | |
| 59111 | 1,162 | 964 | 83.0 | | 150 | 206 | 270 | 74 | 40 | 51 | 28 | 94 | 116 | 283 | 104 | |
| 59113 | 1,880 | 1,143 | 60.8 | | 301 | 99 | 159 | 178 | 49 | 111 | 73 | 134 | 50 | 138 | 95 | |
| 59118 | 1,572 | 1,328 | 84.5 | | 209 | 279 | 488 | 128 | 62 | 63 | 42 | 108 | 149 | 418 | 81 | |
| 59124 | 1,753 | 1,429 | 81.5 | | 235 | 405 | 540 | 102 | 67 | 54 | 80 | 138 | 102 | 376 | 100 | |
| 59125 | 885 | 748 | 84.5 | | 140 | 144 | 232 | 68 | 51 | 50 | 31 | 75 | 83 | 221 | 56 | |
| 59127 | 1,197 | 956 | 79.9 | | 147 | 232 | 328 | 95 | 41 | 59 | 51 | 95 | 81 | 243 | 88 | |
| 59129 | 1,632 | 1,323 | 81.1 | | 200 | 257 | 389 | 88 | 64 | 69 | 42 | 158 | 104 | 280 | 133 | |
| 59131 | 1,997 | 1,538 | 77.0 | | 288 | 217 | 281 | 134 | 81 | 111 | 71 | 179 | 102 | 307 | 158 | |
| 59132 | 1,441 | 1,158 | 80.4 | | 201 | 266 | 336 | 57 | 51 | 45 | 73 | 107 | 93 | 280 | 112 | |
| 59133 | 1,190 | 899 | 75.5 | | 294 | 48 | 87 | 113 | 84 | 74 | 35 | 108 | 28 | 193 | 82 | |
| 59134 | 0 | 0 | 0.0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 59138 | 0 | 0 | 0.0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 59141 | 1,674 | 1,397 | 83.5 | | 236 | 369 | 416 | 99 | 54 | 66 | 94 | 136 | 140 | 303 | 130 | |
| 59143 | 789 | 592 | 75.0 | | 104 | 103 | 159 | 59 | 25 | 36 | 24 | 71 | 66 | 145 | 36 | |
| 59144 | 1,573 | 1,366 | 86.8 | | 216 | 299 | 429 | 87 | 54 | 79 | 74 | 146 | 104 | 327 | 132 | |
| 59146 | 1,969 | 1,532 | 77.8 | | 272 | 320 | 422 | 123 | 71 | 76 | 100 | 175 | 98 | 356 | 155 | |
| 59147 | 788 | 633 | 80.3 | | 106 | 179 | 210 | 30 | 23 | 19 | 54 | 60 | 46 | 155 | 64 | |
| 59148 | 638 | 517 | 81.0 | | 91 | 99 | 131 | 74 | 28 | 32 | 32 | 59 | 33 | 115 | 42 | |
| 59149 | 2,618 | 2,069 | 79.0 | | 313 | 445 | 520 | 139 | 105 | 109 | 137 | 245 | 130 | 493 | 166 | |
| 59150 | 2 | 1 | 50.0 | | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | |
| 59152 | 1,349 | 1,048 | 77.7 | | 150 | 276 | 334 | 55 | 46 | 39 | 110 | 100 | 81 | 261 | 112 | |
| 59153 | 1,033 | 779 | 75.4 | | 159 | 112 | 172 | 75 | 61 | 50 | 27 | 86 | 61 | 135 | 91 | |
| 59154 | 1,331 | 1,062 | 79.8 | | 151 | 261 | 327 | 71 | 33 | 53 | 63 | 148 | 77 | 206 | 141 | |
| 59158 | 880 | 589 | 66.9 | | 174 | 62 | 91 | 73 | 27 | 51 | 46 | 51 | 19 | 77 | 51 | |
| 59161 | 706 | 586 | 80.2 | | 160 | 19 | 73 | 86 | 45 | 38 | 18 | 69 | 22 | 111 | 53 | |
| 59162 | 0 | 0 | 0.0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 59163 | 295 | 246 | 83.4 | | 34 | 53 | 70 | 20 | 15 | 11 | 17 | 18 | 20 | 58 | 17 | |
| 59164 | 895 | 678 | 75.8 | | 98 | 179 | 173 | 52 | 27 | 30 | 38 | 50 | 67 | 160 | 51 | |
| 59165 | 0 | 1 | 0.0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 59166 | 828 | 550 | 66.4 | | 92 | 84 | 143 | 78 | 23 | 35 | 34 | 53 | 37 | 141 | 35 | |
| 59168 | 2,289 | 1,835 | 80.2 | | 338 | 460 | 459 | 124 | 82 | 81 | 115 | 242 | 133 | 429 | 180 | |
| 59170 | 92 | 69 | 75.0 | | 8 | 13 | 24 | 8 | 5 | 5 | 3 | 6 | 6 | 11 | 4 | |
| 59171 | 13 | 11 | 84.6 | | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | |
| 59172 | 1,821 | 1,381 | 75.8 | | 200 | 248 | 345 | 94 | 80 | 91 | 65 | 137 | 76 | 313 | 134 | |
| 59601 | 1,071 | 862 | 80.5 | | 166 | 188 | 243 | 55 | 42 | 32 | 63 | 105 | 55 | 204 | 65 | |
| 59602 | 3,570 | 2,845 | 79.7 | | 498 | 644 | 751 | 180 | 146 | 149 | 220 | 367 | 208 | 682 | 254 | |
| 59603 | 2,513 | 1,925 | 76.6 | | 389 | 436 | 499 | 118 | 93 | 91 | 131 | 234 | 120 | 447 | 168 | |
| 59701 | 2,281 | 1,623 | 71.2 | | 364 | 249 | 384 | 152 | 78 | 113 | 88 | 187 | 94 | 286 | 177 | |
| 59702 | 2,561 | 2,122 | 82.9 | | 249 | 552 | 721 | 85 | 92 | 91 | 90 | 185 | 185 | 461 | 207 | |
| **Early Voting Totals** | 119,195 | 5,086 | 4.3 | | 1299 | 788 | 1153 | 357 | 229 | 286 | 192 | 788 | 463 | 1482 | 759 | |
| **Absentee Totals** | 119,195 | 54,641 | 45.8 | | 8541 | 13254 | 17488 | 3712 | 2455 | 2650 | 2779 | 5308 | 5217 | 14424 | 5401 | |
| **Election Day Totals** | 119,195 | 35,618 | 29.9 | | 6647 | 7259 | 9431 | 2689 | 1665 | 2052 | 1680 | 3915 | 3164 | 8117 | 3639 | |
| **Grand Totals** | 119,195 | 95,345 | 80.0 | | 16487 | 21301 | 28072 | 6758 | 4349 | 4988 | 4651 | 10011 | 8844 | 24023 | 9799 | |

November 08, 2016

| Early Voting Totals 79 | CITY OF IRVINE Member, City Council | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Registration | Ballots Cast | Turnout (%) | | CITY OF IRVINE Member, City Vote for 2 FARRAH N. KHAN | ANTHONY KUO | CHRISTINA L. SHEA | COURTNEY SANTOS | IAN DAELUCIAN | MATTHEW EHORN | HYUNJOUNG "GENII" AHN | ANILA ALI | DALE CHEEMA | MELISSA FOX | SHIVA FARIVAR | |
| Orange County | 119,195 | 5,086 | 4.3 | | 1299 | 788 | 1153 | 357 | 229 | 286 | 192 | 788 | 463 | 1482 | 759 | |
| 45th Congressional District | 119,195 | 5,086 | 4.3 | | 1299 | 788 | 1153 | 357 | 229 | 286 | 192 | 788 | 463 | 1482 | 759 | |
| 37th Senate District | 119,195 | 5,086 | 4.3 | | 1299 | 788 | 1153 | 357 | 229 | 286 | 192 | 788 | 463 | 1482 | 759 | |
| 68th Assembly District | 44,484 | 1,664 | 3.7 | | 387 | 296 | 413 | 118 | 64 | 64 | 84 | 249 | 142 | 484 | 241 | |
| 74th Assembly District | 74,711 | 3,422 | 4.6 | | 912 | 492 | 740 | 239 | 165 | 222 | 108 | 539 | 321 | 998 | 518 | |
| 3rd Supervisorial District | 110,753 | 4,773 | 4.3 | | 1232 | 747 | 1078 | 336 | 223 | 284 | 180 | 741 | 440 | 1388 | 708 | |
| 5th Supervisorial District | 8,442 | 313 | 3.7 | | 67 | 41 | 75 | 21 | 6 | 22 | 12 | 47 | 23 | 94 | 53 | |
| County Board of Education Trustee Area 3 | 119,195 | 5,086 | 4.3 | | 1299 | 788 | 1153 | 357 | 229 | 286 | 192 | 788 | 463 | 1482 | 759 | |
| Irvine | 119,195 | 5,086 | 4.3 | | 1299 | 788 | 1153 | 357 | 229 | 286 | 192 | 788 | 463 | 1482 | 759 | |
| Irvine Ranch Water District | 119,195 | 5,086 | 4.3 | | 1299 | 788 | 1153 | 357 | 229 | 286 | 192 | 788 | 463 | 1482 | 759 | |
| Irvine Unified School District | 105,754 | 4,546 | 4.3 | | 1184 | 693 | 1027 | 324 | 201 | 255 | 168 | 717 | 422 | 1335 | 679 | |
| Irvine Unified School District Facilities | 77,855 | 3,475 | 4.5 | | 918 | 516 | 767 | 254 | 156 | 199 | 116 | 552 | 339 | 1058 | 544 | |
| Laguna Beach Unified School District | 0 | 0 | 0.0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Municipal Water District Of Orange | 119,195 | 5,086 | 4.3 | | 1299 | 788 | 1153 | 357 | 229 | 286 | 192 | 788 | 463 | 1482 | 759 | |
| Municipal Water District of Orange County | 92,986 | 4,129 | 4.4 | | 1093 | 607 | 919 | 290 | 204 | 249 | 140 | 644 | 376 | 1198 | 612 | |
| Municipal Water District of Orange County | 26,229 | 957 | 3.6 | | 206 | 181 | 234 | 67 | 25 | 37 | 52 | 144 | 87 | 284 | 147 | |
| Orange County Water District | 109,485 | 4,570 | 4.2 | | 1167 | 698 | 1036 | 330 | 205 | 253 | 175 | 715 | 429 | 1346 | 683 | |
| Orange County Water District Division 5 | 94,421 | 3,882 | 4.1 | | 1031 | 578 | 870 | 272 | 177 | 219 | 128 | 617 | 370 | 1172 | 571 | |
| Orange County Water District Division 7 | 15,064 | 688 | 4.6 | | 136 | 120 | 168 | 58 | 28 | 34 | 47 | 98 | 59 | 174 | 112 | |
| Orange Unified School District | 0 | 1 | 0.0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Orange Unified School District Trustee | 0 | 1 | 0.0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Rancho Santiago Community College | 3,102 | 158 | 5.1 | | 46 | 21 | 36 | 9 | 14 | 11 | 1 | 18 | 8 | 40 | 19 | |
| Rancho Santiago Community College | 3,102 | 157 | 5.1 | | 46 | 21 | 36 | 9 | 14 | 11 | 1 | 18 | 8 | 40 | 19 | |
| Rancho Santiago Community College | 0 | 1 | 0.0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Saddleback Valley Unified School District | 2 | 0 | 0.0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Santa Ana College Imp Dist No. 1 of | 3,102 | 157 | 5.1 | | 46 | 21 | 36 | 9 | 14 | 11 | 1 | 18 | 8 | 40 | 19 | |
| Santa Ana Unified School District | 3,102 | 157 | 5.1 | | 46 | 21 | 36 | 9 | 14 | 11 | 1 | 18 | 8 | 40 | 19 | |
| School Facilities Improv. Dist. No. 2008-1 | 219 | 9 | 4.1 | | 2 | 1 | 1 | 0 | 1 | 1 | 0 | 2 | 2 | 3 | 0 | |
| School Facilities Improv. Dist. No. 2012-1 | 9,442 | 344 | 3.6 | | 60 | 68 | 84 | 21 | 11 | 17 | 22 | 46 | 30 | 93 | 58 | |
| Silverado-Modjeska Recreation and Park | 0 | 0 | 0.0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| South Orange County Community College | 116,093 | 4,928 | 4.2 | | 1253 | 767 | 1117 | 348 | 215 | 275 | 191 | 770 | 455 | 1442 | 740 | |
| South Orange County Community College | 68,505 | 3,135 | 4.6 | | 826 | 451 | 678 | 229 | 149 | 196 | 98 | 496 | 302 | 928 | 493 | |
| South Orange County Community College | 5,424 | 216 | 4.0 | | 37 | 44 | 50 | 16 | 9 | 13 | 17 | 25 | 18 | 61 | 40 | |
| South Orange County Community College | 38,813 | 1,457 | 3.8 | | 386 | 246 | 358 | 94 | 56 | 61 | 71 | 229 | 119 | 415 | 193 | |
| State Board of Equalization (4th District) | 119,195 | 5,086 | 4.3 | | 1299 | 788 | 1153 | 357 | 229 | 286 | 192 | 788 | 463 | 1482 | 759 | |
| Tustin Unified School District | 10,337 | 382 | 3.7 | | 69 | 74 | 90 | 24 | 14 | 20 | 23 | 53 | 33 | 107 | 61 | |
| UCI Campus precincts | 8,398 | 307 | 3.7 | | 104 | 19 | 32 | 27 | 18 | 23 | 13 | 44 | 10 | 71 | 45 | |
| Early Voting Totals | 119,195 | 5,086 | 4.3 | | 1299 | 788 | 1153 | 357 | 229 | 286 | 192 | 788 | 463 | 1482 | 759 | |

| Absentee Totals 79 | CITY OF IRVINE Member, City Council | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Registration | Ballots Cast | Turnout (%) | | CITY OF IRVINE Member, City Vote for 2 FARRAH N. KHAN | ANTHONY KUO | CHRISTINA L. SHEA | COURTNEY SANTOS | IAN DAELUCIAN | MATTHEW EHORN | HYUNJOUNG "GENIE" AHN | ANILA ALI | DALE CHEEMA | MELISSA FOX | SHIVA FARIVAR | |
| Orange County | 119,195 | 54,641 | 45.8 | | 8541 | 13254 | 17488 | 3712 | 2455 | 2650 | 2779 | 5308 | 5217 | 14424 | 5401 | |
| 45th Congressional District | 119,195 | 54,641 | 45.8 | | 8541 | 13254 | 17488 | 3712 | 2455 | 2650 | 2779 | 5308 | 5217 | 14424 | 5401 | |
| 37th Senate District | 119,195 | 54,641 | 45.8 | | 8541 | 13254 | 17488 | 3712 | 2455 | 2650 | 2779 | 5308 | 5217 | 14424 | 5401 | |
| 68th Assembly District | 44,484 | 20,861 | 46.9 | | 3111 | 5667 | 6994 | 1362 | 877 | 922 | 1337 | 2017 | 1616 | 5439 | 1719 | |
| 74th Assembly District | 74,711 | 33,780 | 45.2 | | 5430 | 7587 | 10494 | 2350 | 1578 | 1728 | 1442 | 3291 | 3601 | 8985 | 3682 | |
| 3rd Supervisorial District | 110,753 | 50,534 | 45.6 | | 8009 | 12197 | 16072 | 3507 | 2280 | 2466 | 2585 | 4898 | 4866 | 13469 | 5002 | |
| 5th Supervisorial District | 8,442 | 4,107 | 48.6 | | 532 | 1057 | 1416 | 205 | 175 | 184 | 194 | 410 | 349 | 955 | 399 | |
| County Board of Education Trustee Area 3 | 119,195 | 54,641 | 45.8 | | 8541 | 13254 | 17488 | 3712 | 2455 | 2650 | 2779 | 5308 | 5217 | 14424 | 5401 | |
| Irvine | 119,195 | 54,641 | 45.8 | | 8541 | 13254 | 17488 | 3712 | 2455 | 2650 | 2779 | 5308 | 5217 | 14424 | 5401 | |
| Irvine Ranch Water District | 119,195 | 54,641 | 45.8 | | 8541 | 13254 | 17488 | 3712 | 2455 | 2650 | 2779 | 5308 | 5217 | 14424 | 5401 | |
| Irvine Unified School District | 105,754 | 48,595 | 46.0 | | 7637 | 11811 | 15644 | 3269 | 2190 | 2352 | 2373 | 4766 | 4713 | 12968 | 4846 | |
| Irvine Unified School District Facilities | 77,855 | 35,683 | 45.8 | | 5658 | 8597 | 11690 | 2472 | 1622 | 1752 | 1552 | 3351 | 3779 | 9846 | 3695 | |
| Laguna Beach Unified School District | 0 | 0 | 0.0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Municipal Water District Of Orange | 119,195 | 54,641 | 45.8 | | 8541 | 13254 | 17488 | 3712 | 2455 | 2650 | 2779 | 5308 | 5217 | 14424 | 5401 | |
| Municipal Water District of Orange County | 92,986 | 42,330 | 45.5 | | 6665 | 9891 | 13385 | 2925 | 1941 | 2090 | 1933 | 4166 | 4268 | 11213 | 4390 | |
| Municipal Water District of Orange County | 26,229 | 12,311 | 46.9 | | 1876 | 3363 | 4103 | 787 | 514 | 560 | 846 | 1142 | 949 | 3211 | 1011 | |
| Orange County Water District | 109,485 | 50,331 | 46.0 | | 7878 | 12290 | 16272 | 3429 | 2260 | 2404 | 2548 | 4902 | 4855 | 13340 | 4998 | |
| Orange County Water District Division 5 | 94,421 | 43,563 | 46.1 | | 6828 | 10548 | 13949 | 2895 | 1943 | 2094 | 2116 | 4235 | 4340 | 11661 | 4438 | |
| Orange County Water District Division 7 | 15,064 | 6,768 | 44.9 | | 1050 | 1742 | 2323 | 534 | 317 | 310 | 432 | 667 | 515 | 1679 | 560 | |
| Orange Unified School District | 0 | 0 | 0.0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Orange Unified School District Trustee | 0 | 0 | 0.0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Rancho Santiago Community College | 3,102 | 1,450 | 46.7 | | 227 | 262 | 383 | 109 | 82 | 84 | 61 | 144 | 131 | 360 | 163 | |
| Rancho Santiago Community College | 3,102 | 1,450 | 46.7 | | 227 | 262 | 383 | 109 | 82 | 84 | 61 | 144 | 131 | 360 | 163 | |
| Rancho Santiago Community College | 0 | 0 | 0.0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Saddleback Valley Unified School District | 2 | 0 | 0.0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Santa Ana College Imp Dist No. 1 of | 3,102 | 1,450 | 46.7 | | 227 | 262 | 383 | 109 | 82 | 84 | 61 | 144 | 131 | 360 | 163 | |
| Santa Ana Unified School District | 3,102 | 1,450 | 46.7 | | 227 | 262 | 383 | 109 | 82 | 84 | 61 | 144 | 131 | 360 | 163 | |
| School Facilities Improv. Dist. No. 2008-1 | 219 | 138 | 63.0 | | 26 | 14 | 29 | 11 | 9 | 9 | 6 | 12 | 11 | 22 | 16 | |
| School Facilities Improv. Dist. No. 2012-1 | 9,442 | 4,232 | 44.8 | | 632 | 1072 | 1360 | 300 | 173 | 198 | 325 | 380 | 329 | 1012 | 363 | |
| Silverado-Modjeska Recreation and Park | 0 | 0 | 0.0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| South Orange County Community College | 116,093 | 53,191 | 45.8 | | 8314 | 12992 | 17105 | 3603 | 2373 | 2566 | 2716 | 5164 | 5086 | 14064 | 5238 | |
| South Orange County Community College | 68,505 | 31,291 | 45.7 | | 5043 | 7241 | 10008 | 2174 | 1430 | 1549 | 1351 | 3032 | 3376 | 8478 | 3372 | |
| South Orange County Community College | 5,424 | 2,406 | 44.4 | | 330 | 626 | 809 | 158 | 96 | 113 | 177 | 212 | 196 | 595 | 205 | |
| South Orange County Community College | 38,813 | 17,983 | 46.3 | | 2722 | 4720 | 5815 | 1165 | 778 | 817 | 1101 | 1780 | 1368 | 4632 | 1512 | |
| State Board of Equalization (4th District) | 119,195 | 54,641 | 45.8 | | 8541 | 13254 | 17488 | 3712 | 2455 | 2650 | 2779 | 5308 | 5217 | 14424 | 5401 | |
| Tustin Unified School District | 10,337 | 4,596 | 44.5 | | 677 | 1181 | 1461 | 334 | 183 | 214 | 345 | 398 | 373 | 1096 | 392 | |
| UCI Campus precincts | 8,398 | 2,952 | 35.2 | | 876 | 235 | 416 | 335 | 168 | 186 | 134 | 320 | 80 | 900 | 379 | |
| **Absentee Totals** | 119,195 | 54,641 | 45.8 | | 8541 | 13254 | 17488 | 3712 | 2455 | 2650 | 2779 | 5308 | 5217 | 14424 | 5401 | |

| Grand Totals 79 | CITY OF IRVINE Member, City Council | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Registration | Ballots Cast | Turnout (%) | | CITY OF IRVINE Member, City Vote for 2 FARRAH N. KHAN | ANTHONY KUO | CHRISTINA L. SHEA | COURTNEY SANTOS | IAN DAELUCIAN | MATTHEW EHORN | HYUNJOUNG "GENII" AHN | ANILA ALI | DALE CHEEMA | MELISSA FOX | SHIVA FARIVAR | |
| Orange County | 119,195 | 95,345 | 80.0 | | 16487 | 21301 | 28072 | 6758 | 4349 | 4988 | 4651 | 10011 | 8844 | 24023 | 9799 | |
| 45th Congressional District | 119,195 | 95,345 | 80.0 | | 16487 | 21301 | 28072 | 6758 | 4349 | 4988 | 4651 | 10011 | 8844 | 24023 | 9799 | |
| 37th Senate District | 119,195 | 95,345 | 80.0 | | 16487 | 21301 | 28072 | 6758 | 4349 | 4988 | 4651 | 10011 | 8844 | 24023 | 9799 | |
| 68th Assembly District | 44,484 | 35,781 | 80.4 | | 5767 | 8944 | 11121 | 2444 | 1506 | 1661 | 2165 | 3805 | 2828 | 8992 | 3197 | |
| 74th Assembly District | 74,711 | 59,564 | 79.7 | | 10720 | 12357 | 16951 | 4314 | 2843 | 3327 | 2486 | 6206 | 6016 | 15031 | 6602 | |
| 3rd Supervisorial District | 110,753 | 88,538 | 79.9 | | 15554 | 19722 | 25933 | 6397 | 4036 | 4648 | 4367 | 9299 | 8293 | 22503 | 9069 | |
| 5th Supervisorial District | 8,442 | 6,807 | 80.6 | | 933 | 1579 | 2139 | 361 | 313 | 340 | 284 | 712 | 551 | 1520 | 730 | |
| County Board of Education Trustee Area 3 | 119,195 | 95,345 | 80.0 | | 16487 | 21301 | 28072 | 6758 | 4349 | 4988 | 4651 | 10011 | 8844 | 24023 | 9799 | |
| Irvine | 119,195 | 95,345 | 80.0 | | 16487 | 21301 | 28072 | 6758 | 4349 | 4988 | 4651 | 10011 | 8844 | 24023 | 9799 | |
| Irvine Ranch Water District | 119,195 | 95,345 | 80.0 | | 16487 | 21301 | 28072 | 6758 | 4349 | 4988 | 4651 | 10011 | 8844 | 24023 | 9799 | |
| Irvine Unified School District | 105,754 | 84,720 | 80.1 | | 14723 | 19012 | 25115 | 5963 | 3858 | 4423 | 3982 | 8964 | 7991 | 21577 | 8767 | |
| Irvine Unified School District Facilities | 77,855 | 62,489 | 80.3 | | 11083 | 13896 | 18855 | 4541 | 2838 | 3306 | 2683 | 6427 | 6361 | 16482 | 6646 | |
| Laguna Beach Unified School District | 0 | 0 | 0.0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Municipal Water District Of Orange | 119,195 | 95,345 | 80.0 | | 16487 | 21301 | 28072 | 6758 | 4349 | 4988 | 4651 | 10011 | 8844 | 24023 | 9799 | |
| Municipal Water District of Orange County | 92,986 | 74,328 | 80.0 | | 13079 | 15989 | 21578 | 5342 | 3468 | 4016 | 3296 | 7848 | 7166 | 18781 | 7922 | |
| Municipal Water District of Orange County | 26,229 | 21,017 | 80.1 | | 3408 | 5312 | 6494 | 1416 | 881 | 972 | 1356 | 2163 | 1678 | 5242 | 1877 | |
| Orange County Water District | 109,485 | 87,734 | 80.1 | | 15216 | 19751 | 26086 | 6222 | 3974 | 4540 | 4260 | 9263 | 8251 | 22251 | 9060 | |
| Orange County Water District Division 5 | 94,421 | 75,858 | 80.3 | | 13257 | 16958 | 22342 | 5252 | 3437 | 3955 | 3533 | 7958 | 7305 | 19421 | 7974 | |
| Orange County Water District Division 7 | 15,064 | 11,876 | 78.8 | | 1959 | 2793 | 3724 | 970 | 537 | 585 | 727 | 1305 | 946 | 2830 | 1086 | |
| Orange Unified School District | 0 | 1 | 0.0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Orange Unified School District Trustee | 0 | 1 | 0.0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Rancho Santiago Community College | 3,102 | 2,389 | 77.0 | | 429 | 394 | 583 | 167 | 147 | 167 | 95 | 230 | 189 | 534 | 262 | |
| Rancho Santiago Community College | 3,102 | 2,388 | 77.0 | | 429 | 394 | 583 | 167 | 147 | 167 | 95 | 230 | 189 | 534 | 262 | |
| Rancho Santiago Community College | 0 | 1 | 0.0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Saddleback Valley Unified School District | 2 | 1 | 50.0 | | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | |
| Santa Ana College Imp Dist No. 1 of | 3,102 | 2,388 | 77.0 | | 429 | 394 | 583 | 167 | 147 | 167 | 95 | 230 | 189 | 534 | 262 | |
| Santa Ana Unified School District | 3,102 | 2,388 | 77.0 | | 429 | 394 | 583 | 167 | 147 | 167 | 95 | 230 | 189 | 534 | 262 | |
| School Facilities Improv. Dist. No. 2008-1 | 219 | 161 | 73.5 | | 32 | 16 | 30 | 12 | 10 | 11 | 7 | 14 | 13 | 28 | 18 | |
| School Facilities Improv. Dist. No. 2012-1 | 9,442 | 7,557 | 80.0 | | 1236 | 1716 | 2201 | 576 | 317 | 368 | 536 | 766 | 597 | 1752 | 719 | |
| Silverado-Modjeska Recreation and Park | 0 | 0 | 0.0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| South Orange County Community College | 116,093 | 92,956 | 80.1 | | 16058 | 20907 | 27489 | 6591 | 4202 | 4821 | 4556 | 9781 | 8655 | 23489 | 9537 | |
| South Orange County Community College | 68,505 | 54,801 | 80.0 | | 9628 | 11751 | 16088 | 3996 | 2528 | 2939 | 2294 | 5722 | 5605 | 14104 | 6049 | |
| South Orange County Community College | 5,424 | 4,361 | 80.4 | | 694 | 1028 | 1322 | 319 | 177 | 219 | 312 | 435 | 362 | 1032 | 409 | |
| South Orange County Community College | 38,813 | 31,083 | 80.1 | | 5096 | 7461 | 9275 | 2078 | 1374 | 1512 | 1793 | 3342 | 2416 | 7723 | 2830 | |
| State Board of Equalization (4th District) | 119,195 | 95,345 | 80.0 | | 16487 | 21301 | 28072 | 6758 | 4349 | 4988 | 4651 | 10011 | 8844 | 24023 | 9799 | |
| Tustin Unified School District | 10,337 | 8,235 | 79.7 | | 1334 | 1895 | 2374 | 628 | 344 | 398 | 574 | 816 | 664 | 1912 | 770 | |
| UCI Campus precincts | 8,398 | 6,147 | 73.2 | | 1912 | 499 | 796 | 710 | 334 | 421 | 283 | 669 | 201 | 1625 | 730 | |
| **Early Voting Totals** | 119,195 | 5,086 | 4.3 | | 1299 | 788 | 1153 | 357 | 229 | 286 | 192 | 788 | 463 | 1482 | 759 | |
| **Absentee Totals** | 119,195 | 54,641 | 45.8 | | 8541 | 13254 | 17488 | 3712 | 2455 | 2650 | 2779 | 5308 | 5217 | 14424 | 5401 | |
| **Election Day Totals** | 119,195 | 35,618 | 29.9 | | 6647 | 7259 | 9431 | 2689 | 1665 | 2052 | 1680 | 3915 | 3164 | 8117 | 3639 | |
| **Grand Totals** | 119,195 | 95,345 | 80.0 | | 16487 | 21301 | 28072 | 6758 | 4349 | 4988 | 4651 | 10011 | 8844 | 24023 | 9799 | |

# 2.1

# REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: DECEMBER 13, 2016

TITLE: MINUTES

City Clerk

RECOMMENDED ACTION:

Approve the minutes of a regular meeting of the Irvine City Council held on November 22, 2016.

Steven Choi
Mayor

Lynn Schott
Mayor Pro Tempore

Beth Krom
Councilmember

Jeffrey Lalloway
Councilmember

Christina Shea
Councilmember

# MINUTES

# CITY COUNCIL
# REGULAR MEETING

**November 22, 2016**
**4:00 PM**
**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 4:03 p.m. on November 22, 2016 in the City Council Chamber, Irvine Civic Center, One Civic Center Plaza, Irvine, California; Mayor Choi presiding.

## ROLL CALL

| | | | |
|---|---|---|---|
| Present: | 5 | Councilmember: | Beth Krom |
| | | Councilmember: | Jeffrey Lalloway |
| | | Councilmember: | Christina Shea |
| | | Mayor Pro Tempore: | Lynn Schott |
| | | Mayor: | Steven Choi |

## CITY MANAGER'S REPORT

There was no report.

## ANNOUNCEMENTS/COMMITTEE REPORTS/COUNCIL REPORTS

Councilmember Shea expressed her appreciation to Mayor Choi and Councilmember Krom for their service to the community for the last 12 and 16 years respectively.

Mayor Choi announced that the annual Winter Wonderland event will be held from 3-8 p.m. on Sunday, December 4 at the Irvine Civic Center. Santa Claus, a holiday concert, train rides and other activities will be available. Mayor Choi will also attend to light the annual tree.

## 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. 1.6. City Attorney Melching further noted that while a representation and warranty by the City as to the City's financial condition was included, a representation as to the Irvine Company's financial condition was also inadvertently included, and therefore, such reference was removed and approved by all attorneys involved in the letter of credit process.

## 1. CONSENT CALENDAR

**ACTION: Moved by Councilmember Krom, seconded by Councilmember Shea, and unanimously carried to approve Consent Calendar Item Nos. 1.1 through 1.17, with the exception of Item No. 1.13, which was removed for separate discussion. Councilmember Krom abstained on Item No. 1.3.**

### *1.1 MINUTES*

**ACTION:**
Approved the minutes of a regular meeting of the Irvine City Council held on November 8, 2016.

### *1.2 WARRANT AND WIRE TRANSFER RESOLUTION*

**ACTION:**
Adopted RESOLUTION NO. 16-87 - 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

### *1.3 WARRANT AND WIRE TRANSFER RESOLUTION - AT&T*

**ACTION:**
Adopted RESOLUTION NO. 16-88 - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ALLOWING CERTAIN CLAIMS AND DEMANDS OF AT&T AND SPECIFYING THE FUNDS OUT OF WHICH THE SAME ARE TO BE PAID

Councilmember Krom abstained.

### *1.4 AIR QUALITY IMPROVEMENT SPECIAL REVENUE FUND AUDIT FOR THE FISCAL YEAR ENDED JUNE 30, 2016*

**ACTION:**
Received and filed.

### *1.5 ANNUAL ASSEMBLY BILL 1600 DEVELOPMENT FEE REPORT FOR FISCAL YEAR 2015-16*

**ACTION:**
Received and filed.

### *1.6 LETTER OF CREDIT EXTENSIONS FOR TWO ASSESSMENT DISTRICTS*

**ACTION:**

1) Adopted RESOLUTION NO. 16-89 – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, APPROVING THE EXTENSION OF THE STATED EXPIRATION DATE FOR AN EXISTING LETTER OF CREDIT FOR THE REASSESSMENT DISTRICT NO. 04-20 LIMITED OBLIGATION IMPROVEMENT BONDS, ADJUSTABLE RATE SERIES A, APPROVING THE FORM OF AND AUTHORIZING THE EXECUTION AND DELIVERY OF AN AMENDMENT NO. 1 TO REIMBURSEMENT, CREDIT AND SECURITY AGREEMENT, AN AMENDMENT NO. 1 TO LETTER AGREEMENT, AND AUTHORIZING THE EXECUTION OF NECESSARY DOCUMENTS AND CERTIFICATES AND RELATED ACTIONS
2) Adopted RESOLUTION NO. 16-90 – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, APPROVING THE EXTENSION OF THE STATED EXPIRATION DATE OF AN EXISTING LETTER OF CREDIT FOR THE ASSESSMENT DISTRICT NO. 93-14 LIMITED OBLIGATION IMPROVEMENT BONDS, ADJUSTABLE RATE SERIES, APPROVING THE FORM OF AND AUTHORIZING THE EXECUTION AND DELIVERY OF AN AMENDMENT NO. 1 TO AMENDED AND RESTATED REIMBURSEMENT, CREDIT AND SECURITY AGREEMENT, AND AN AMENDMENT NO. 1 TO AMENDED AND RESTATED LETTER AGREEMENT, AND AUTHORIZING THE EXECUTION OF NECESSARY DOCUMENTS AND CERTIFICATES AND RELATED ACTIONS

**As amended** per the errata memo dated November 22, 2016.

### *1.7 COMPREHENSIVE ANNUAL FINANCIAL REPORT FOR THE FISCAL YEAR ENDED JUNE 30, 2016 AND AUDITORS' COMMUNICATION*

**ACTION:**
Received and filed.

### *1.8 FISCAL YEAR 2015-16 MEASURE M2 EXPENDITURE REPORT*

**ACTION:**
Adopted RESOLUTION NO. 16-91 – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ADOPTING THE FISCAL YEAR 2015-16 MEASURE M2 EXPENDITURE REPORT FOR THE CITY OF IRVINE

### *1.9 SINGLE AUDIT OF FEDERALLY ASSISTED GRANT PROGRAMS FOR THE FISCAL YEAR ENDED JUNE 30, 2016*

**ACTION:**
Received and filed.

### *1.10 ORANGE COUNTY GREAT PARK CORPORATION AUDITED FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED JUNE 30, 2016*

**ACTION:**
Received and filed.

(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*

* Directors Krom and Shea were absent when the item was submitted to the Great Park Board; however, both voted in the affirmative at the City Council meeting.

### *1.11 ORANGE COUNTY GREAT PARK FUNDS FINANCIAL STATEMENT AUDIT – FISCAL YEAR 2015-16*

**ACTION:**
Received and filed.

(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*

* Directors Krom and Shea were absent when the item was submitted to the Great Park Board; however, both voted in the affirmative at the City Council meeting.

### *1.12 AMENDMENT TO LEASE AGREEMENT WITH IRVINE ICE FOUNDATION ENABLING CONSTRUCTION AND OPERATION OF ICE FACILITY AT THE ORANGE COUNTY GREAT PARK*

**ACTION:**
Authorize the Mayor to execute Amendment No. 1 to the Ground Lease by and between the City of Irvine and Irvine Ice Foundation enabling construction and operation of an ice facility on City-owned property.

(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*

* Directors Krom and Shea were absent when the item was submitted to the Great Park Board; however, both voted in the affirmative at the City Council meeting.

### *1.13 CONTRACT AWARD AND BUDGET APPROPRIATION FOR PUBLIC OUTREACH RELATED TO FUTURE ORANGE COUNTY GREAT PARK AMENITIES*

This item was removed for separate discussion by Councilmember Shea due to her absence at the Orange County Great Park Board meeting earlier in the day; and expressed her opposition to the approval of the proposed contracts based on prior outreach efforts over the years and the overall cost to conduct additional outreach.

City Council discussion included: prior discussion and approval by the Orange County Great Park Board (Board) earlier in the day; noted the length of time since prior outreach was conducted; reiterated that new ideas from the community may be helpful to the new Board and City Council; suggested consideration of changing regular Board meeting dates and times that were more favorable to the public and to avoid time constraints with City Council meetings; and suggested that outreach efforts be in parallel with the Federal census.

**ACTION: Moved by Councilmember Schott, seconded by Councilmember Lalloway, to:**

1) Authorize the City Manager to execute a contract with Simon Wong Engineering for public engagement related to future Orange County Great Park amenities.
2) Authorize the City Manager to execute a contract with True North Research, Inc. for telephone surveys related to future Orange County Great Park amenities.
3) Approve a budget adjustment appropriating funds in the amount of $240,755 from the Orange County Great Park Fund 180 unallocated fund balance to the City Manager's Office Communication Services Section 017 budget for public outreach related to future Orange County Great Park amenities.

**The motion carried as follows:**

| | | | |
|---|---|---|---|
| AYES: | 4 | COUNCILMEMBERS: | Krom, Lalloway, Schott, and Choi |
| NOES: | 1 | COUNCILMEMBERS: | Shea |
| ABSENT: | 0 | COUNCILMEMBERS: | None |

### *1.14 AMENDMENT NO. 1 TO SPECIAL COUNSEL AGREEMENT WITH LARSON O'BRIEN, LLP EXTENDING IT TO DECEMBER 31, 2017*

**ACTION:**
Authorized the City Manager to execute Amendment No. 1 to the contract with Larson O'Brien, LLP, extending it to December 31, 2017.

### *1.15 CITY OF IRVINE HOUSING SUCCESSOR TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY ANNUAL REPORT*

**ACTION:**
1) Received and authorized submittal of the Housing Successor Annual Report to the State Department of Housing and Community Development.
2) Authorized posting the Housing Successor Annual Report on the City's website.

### *1.16 AGREEMENT WITH IRVINE RANCH WATER DISTRICT ALLOWING ENCROACHMENT ONTO CITY EASEMENT LOCATED IN EASTWOOD VILLAGE FOR A NEW MULTI-ZONE RECYCLED WATER PUMP FACILITY*

**ACTION:**
Approved and authorized the Mayor to execute the Agreement for Water Pump Facility with Irvine Ranch Water District.

### *1.17 COMMUNITY PARTNERSHIP FUND GRANT NOMINATIONS*

**ACTION:**
1) Approved Mayor Choi's request for Community Partnership Fund Grant nomination to Crean Lutheran High School in the amount of $1,000 in support of its capital project fund.
2) Authorized the City Manager to prepare and sign the funding agreement listed in Action 1.

## 2. COUNCIL BUSINESS

### *2.1 CONSIDERATION OF MAYOR CHOI'S REQUEST FOR APPROVAL AND AUTHORIZATION OF A MATCHING SPONSORSHIP FOR CREAN LUTHERAN HIGH SCHOOL*

This item was agendized at the request of Mayor Choi, who requested City Council consideration of a $25,000 1:1 matching grant to support Crean Lutheran High School's capital fundraising effort.

ACTION: Moved by Mayor Choi, seconded by Councilmember Shea, to:

> Approve Mayor Choi's proposal approving a $25,000 1:1 matching grant for the Crean Lutheran High School expansion capital plan.

Carrie O'Malley, Irvine resident, and Brian Underwood, representing Crean Lutheran High School, spoke in support.

City Council discussion included: whether the proposal fit within the criteria to use public funds to support non-profit organizations, and developing a policy of how the City could expend such funding; suggested broader discussion at a later date to include a list of different types of organizations in which the City could provide financial support; noted similar requests in the past and a prior suggestion to set-aside funding as part of the annual budget process; expressed concern with setting precedence to take similar actions in the future; noted that the City provides free space for non-profit groups at community centers; expressed concern that these types of proposals were not a responsible use of public funds; clarified that Crean High School should not be considered as a religious institution for purposes of the proposed request; noted the City's continued dedication and commitment to education; expressed concern about supporting private educational institutions; and re-examining the criteria and formula for Community Partnership Grant nominations as part of the annual budget process.

Prior to the vote, Councilmember Krom suggested that staff also look into other cities in Orange County and throughout California that provide public support for religious private schools.

**ACTION: A substitute motion was made by Mayor Pro Tempore Schott, seconded by Councilmember Krom, to:**

> Table the item until the beginning of the year, and ask staff to return with information to assist the City Council in better understanding the private school community, including the number of Irvine students that attend the Irvine based private schools; and provide ideas and suggestions of how the City may assist families and students that attend private schools within the City of Irvine.

**The motion carried as follows:**

| | | | |
|---|---|---|---|
| AYES: | 4 | COUNCILMEMBERS: | Krom, Lalloway, Schott, and Shea |
| NOES: | 1 | COUNCILMEMBERS: | Choi |
| ABSENT: | 0 | COUNCILMEMBERS: | None |

Councilmember Shea left the meeting at 4:49 p.m.

**PUBLIC COMMENTS**

The following individuals spoke in opposition to the proposed Southern California Edison Safari substation on Wald Street:

Paul Wang
Bill Klassen, Irvine resident
Doug Bender
Zeki Kayiran
Jane Klassen, Irvine resident
Arie Goldberg
Norman Voo
Randy Keifer

Randy Kiefer spoke in support of improving bicycle infrastructure in the City of Irvine.

Michael Klubniken spoke about past and recent actions taken by the Orange County Board of Supervisors.

The following individuals submitted a Request to Speak but did not speak:

Betsy Lindsay
Mike Aguirre
Sorab Charna

**RECESS**

Mayor Choi recessed the City Council meeting at 5:17 p.m.

**RECONVENE**

Mayor Choi reconvened the City Council meeting at 5:35 p.m. Councilmember Shea was not present.

## PLEDGE OF ALLEGIANCE - IRVINE POLICE COLOR GUARD

Deputy Police Chief Engen introduced the Irvine Police Color Guard and led the Pledge of Allegiance.

## INVOCATION

Mayor Choi invited Rabbi Martha Tilchin representing Jewish Collaborative of Orange County to provide the invocation.

## MUSICAL PRESENTATION

Mayor Choi introduced Catherine Song, who performed the National Anthem.

## 3. PRESENTATIONS

### *3.1 Presentations to Outgoing Mayor Steven Choi and Councilmember Beth Krom*

Mayor Pro Tempore Schott presented videos highlighting the accomplishments of Mayor Choi and Councilmember Krom over the last 12 and 16 years, respectively, and presented each with gifts in appreciation for their years of dedicated service to the Irvine community. Councilmember Lalloway expressed his appreciation to Mayor Choi and Councilmember Krom as well.

The following individuals commended Mayor Choi and Councilmember Krom for their service to the community:

- Todd Spitzer, Supervisor, County of Orange
- John Nielsen, Board Chair, Orange County Sanitation District
- Dr. Gregory Franklin, Superintendent, Tustin Unified School District
- John Withers, Director, Irvine Ranch Water District
- Kate Klimow, Vice Chair of Governmental Affairs, Irvine Chamber of Commerce
- Kevin Gilhooley, Regional Affairs Officer, Southern California Association of Governments
- Jose Martinez, representing Donald P. Wagner, California Assemblymember
- Hannah Hess, representing Mimi Walters, California Assemblywoman

Mayor Pro Tempore Schott noted that Superintendent Terry Walker and Boardmembers from the Irvine Unified School District could not attend due to family holiday commitments; however, they extended their regrets and best wishes to both Mayor Choi and Councilmember Krom.

Bok Lin Kim, Korean Master Artist, expressed her appreciation to Mayor Choi and City Councilmembers for their service to the community.

**ADJOURNMENT TO RECEPTION**

**By consensus of those members present (Councilmember Shea absent), the City Council meeting was adjourned at 7:15 p.m. to a reception in the Main Lobby.**

_____
MAYOR OF THE CITY OF IRVINE

_____ December 13, 2016
CITY CLERK OF THE CITY OF IRVINE

# 2.2

# REQUEST FOR CITY COUNCIL ACTION

**MEETING DATE:** December 13, 2016

**TITLE:** WARRANT AND WIRE TRANSFER RESOLUTION

Director of Financial 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 November 16, 2016 through December 6, 2016 in accordance with Section 2-7-211 of the Irvine Municipal Code.

**ATTACHMENT** Warrant and Wire Transfer Resolution

CITY COUNCIL RESOLUTION NO. 16-___

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 13th day of December 2016.

_____
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 13th day of December 2016.

| | |
|---|---|
| AYES: | COUNCILMEMBERS: |
| NOES: | COUNCILMEMBERS: |
| ABSENT: | COUNCILMEMBERS: |
| ABSTAIN: | COUNCILMEMBERS: |

_____
CITY CLERK OF THE CITY OF IRVINE



ATTACHMENT

11/16/2016 through 11/22/2016

# REGISTER OF DEMANDS AND WARRANTS

| Fund | Fund Description | Amount |
|---|---|---|
| 001 | GENERAL FUND | 827,982.94 |
| 004 | PAYROLL CLEARING FUND | 2,131,065.52 |
| 005 | DEVELOPMENT SERVICES FUND | 111,094.25 |
| 007 | SCHOOL SUPPORT FUND | 100,000.00 |
| 024 | BUILDING & SAFETY FUND | 196,541.32 |
| 027 | DEVELOPMENT ENGINEERING FUND | 58,009.00 |
| 111 | GAS TAX FUND | 8,742.05 |
| 113 | FEES & EXACTIONS FUND | 50,000.00 |
| 119 | LIGHTING, LANDSCAPE & PARK MNT | 304,965.01 |
| 126 | SENIOR SERVICES FUND | 553.80 |
| 128 | OFFICE ON AGING PROGRAMS FUND | 3,007.48 |
| 130 | AB2766 - AIR QUALITY IMPROVMNT | 13,991.52 |
| 132 | SLURRY SEAL SUR CHG FUND | 1,332,571.85 |
| 155 | COMMUNITY SERVICES PROGRAMS | 3,900.00 |
| 180 | ORANGE COUNTY GREAT PARK | 49,849.44 |
| 204 | CFD 2013-3 GREAT PARK | 32,499.50 |
| 250 | CAPITAL IMPROV PROJ FUND - CIR | 6,181.00 |
| 260 | CAPITAL IMPROV PROJ-NON CIRC | 26,151.33 |
| 271 | IRVINE BUSINESS COMPLEX | 2,004.68 |
| 286 | GREAT PARK DEVELOPMENT FUND | 2,860.00 |
| 501 | INVENTORY | 7,317.53 |
| 570 | INSURANCE FUND | 39,553.23 |
| 574 | FLEET SERVICES FUND | 471,648.82 |
| 578 | TELEPHONE,MAIL,DUPLIC SRV FUND | 9,535.59 |
| 580 | CIVIC CENTER MAINT & OPERAT'NS | 34,684.65 |
| | **GRAND TOTAL** | **5,824,710.51** |

11/23/2016 through 11/29/2016

# REGISTER OF DEMANDS AND WARRANTS

| Fund | Fund Description | Amount |
|---|---|---|
| 001 | GENERAL FUND | 119,442.61 |
| 004 | PAYROLL CLEARING FUND | 35,818.62 |
| 005 | DEVELOPMENT SERVICES FUND | 47,682.73 |
| 024 | BUILDING & SAFETY FUND | 87,563.84 |
| 114 | HOME GRANT | 1,130.00 |
| 119 | LIGHTING, LANDSCAPE & PARK MNT | 15,714.83 |
| 125 | COMM DEVELOP BLOCK GRANT FUND | 15,413.76 |
| 128 | OFFICE ON AGING PROGRAMS FUND | 441.00 |
| 130 | AB2766 - AIR QUALITY IMPROVMNT | 4,205.25 |
| 155 | COMMUNITY SERVICES PROGRAMS | 22.50 |
| 180 | ORANGE COUNTY GREAT PARK | 24,724.00 |
| 214 | AD 93-14 IRVINE SPECTRUM 6 | 4,876.00 |
| 219 | AD 04-20 PORTOLA SPRINGS | 3,392.00 |
| 220 | AD 05-21 ORCHARD HILLS | 8,268.00 |
| 260 | CAPITAL IMPROV PROJ-NON CIRC | 393,161.88 |
| 286 | GREAT PARK DEVELOPMENT FUND | 15,302.94 |
| 501 | INVENTORY | 1,997.03 |
| 570 | INSURANCE FUND | 212,352.94 |
| 574 | FLEET SERVICES FUND | 35,334.45 |
| 578 | TELEPHONE,MAIL,DUPLIC SRV FUND | 7,844.60 |
| 579 | STRATEGIC TECHNOLOGY PLAN FUND | 6,400.08 |
| 580 | CIVIC CENTER MAINT & OPERAT'NS | 450.00 |
| 714 | REASSESSMENT 12-1 FIXED RATE | 1,852,713.12 |
| 716 | RAD 13-1 FIXED RATE | 1,236,499.41 |
| 726 | AD10-23 SERIES B FR LAGUNA ALT | 37,754.26 |
| 730 | 11-24 FIXED RT CYPRESS VILLAGE | 551,820.53 |
| 731 | AD07-22 GROUP 4 FIXED RATE | 452,425.33 |
| 732 | RAD 04-20 GROUP 3 FIXED RATE | 122,969.21 |
| 744 | CFD 2013-3 GREAT PARK | 1,251,739.23 |
| 745 | CFD 2005-2R COLUMBUS GROVE SP | 139,157.92 |
| 746 | CFD 2004-1 CENTRAL PARK | 155,104.00 |
| 772 | RAD 15-1 FIXED RATE | 910,690.06 |
| 773 | RAD 15-2 FIXED RATE | 785,152.27 |
| 777 | RAD 05-21 G1 FIXED RATE | 431,210.12 |
| 778 | RAD 04-20 G4 FIXED RATE | 98,091.60 |
| | **GRAND TOTAL** | **9,066,866.12** |

11/30/2016 through 12/6/2016

# REGISTER OF DEMANDS AND WARRANTS

| Fund | Fund Description | Amount |
|---|---|---|
| 001 | GENERAL FUND | 507,880.43 |
| 004 | PAYROLL CLEARING FUND | 991,714.54 |
| 005 | DEVELOPMENT SERVICES FUND | 48,971.23 |
| 009 | REVENUE CLEARING FUND | 15,069.30 |
| 024 | BUILDING & SAFETY FUND | 16,447.84 |
| 027 | DEVELOPMENT ENGINEERING FUND | 4,930.00 |
| 113 | FEES & EXACTIONS FUND | 453.60 |
| 114 | HOME GRANT | 3,440.00 |
| 119 | LIGHTING, LANDSCAPE & PARK MNT | 111,774.55 |
| 125 | COMM DEVELOP BLOCK GRANT FUND | 1,339.98 |
| 128 | OFFICE ON AGING PROGRAMS FUND | 10,199.55 |
| 132 | SLURRY SEAL SUR CHG FUND | 21,290.50 |
| 145 | STRUCTURAL FIRE FUND | 5.79 |
| 180 | ORANGE COUNTY GREAT PARK | 63,087.15 |
| 250 | CAPITAL IMPROV PROJ FUND - CIR | 192,977.50 |
| 260 | CAPITAL IMPROV PROJ-NON CIRC | 80,214.34 |
| 270 | NORTH IRVINE TRANSP MITIGATION | 144,772.50 |
| 501 | INVENTORY | 21,307.95 |
| 570 | INSURANCE FUND | 19,541.83 |
| 574 | FLEET SERVICES FUND | 16,841.63 |
| 578 | TELEPHONE,MAIL,DUPLIC SRV FUND | 47,673.25 |
| 579 | STRATEGIC TECHNOLOGY PLAN FUND | 553,778.02 |
| 714 | REASSESSMENT 12-1 FIXED RATE | 1,520,085.29 |
| 715 | AD 13-25 FIXED RATE | 1,484.00 |
| 716 | RAD 13-1 FIXED RATE | 1,004,448.59 |
| 717 | RAD 04-20 PORTOLA SPR VAR RT A | 2,735.36 |
| 718 | RAD 05-21 ORCHARD HLS VAR RT | 76.99 |
| 719 | REASSESSMENT 85-7A VARIABLE RT | 76.99 |
| 726 | AD10-23 SERIES B FR LAGUNA ALT | 32,215.57 |
| 730 | 11-24 FIXED RT CYPRESS VILLAGE | 407,127.22 |
| 731 | AD07-22 GROUP 4 FIXED RATE | 275,476.21 |
| 732 | RAD 04-20 GROUP 3 FIXED RATE | 82,302.42 |
| 744 | CFD 2013-3 GREAT PARK | 962,623.95 |
| 745 | CFD 2005-2R COLUMBUS GROVE SP | 131,705.52 |
| 746 | CFD 2004-1 CENTRAL PARK | 320,843.35 |
| 772 | RAD 15-1 FIXED RATE | 723,162.00 |
| 773 | RAD 15-2 FIXED RATE | 513,806.99 |
| 776 | AD93-14 SPECT 6N/SPECT 7 | 2,658.37 |
| 777 | RAD 05-21 G1 FIXED RATE | 415,611.97 |
| 778 | RAD 04-20 G4 FIXED RATE | 50,978.58 |
| 779 | RAD 04-20 G5 Fixed Rate | 1,484.00 |

11/30/2016 through 12/6/2016

# REGISTER OF DEMANDS AND WARRANTS

| Fund | Fund Description | Amount |
|---|---|---|
| | **GRAND TOTAL** | **9,322,614.85** |

# 2.3

# REQUEST FOR CITY COUNCIL ACTION

**MEETING DATE:** December 13, 2016

**TITLE:** WARRANT AND WIRE TRANSFER RESOLUTION – AT&T

Director of Financial Services

City Manager

**RECOMMENDED ACTION**

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

**EXECUTIVE SUMMARY**

Disbursements to AT&T for approved purchases and services are submitted to the City Council for review as part of the detailed register of claims. The action to ratify the disbursement of funds for the period of November 16, 2016 through December 6, 2016 is presented separately due to conflicts of interest by stockholders of AT&T.

**ATTACHMENT** Warrant and Wire Transfer Resolution – AT&T

CITY COUNCIL RESOLUTION NO. 16-___

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ALLOWING CERTAIN CLAIMS AND DEMANDS OF AT&T 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 13th day of December 2016.

_____
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 13th day of December 2016.

| | |
|---|---|
| AYES: | COUNCILMEMBERS: |
| NOES: | COUNCILMEMBERS: |
| ABSENT: | COUNCILMEMBERS: |
| ABSTAIN: | COUNCILMEMBERS: |

_____
CITY CLERK OF THE CITY OF IRVINE



ATTACHMENT

11/16/2016 through 11/22/2016

# REGISTER OF DEMANDS AND WARRANTS

| Fund | Fund Description | Amount |
|---|---|---|
| 578 | TELEPHONE,MAIL,DUPLIC SRV FUND | 26,921.62 |
| | **GRAND TOTAL** | **26,921.62** |

# 2.4

# REQUEST FOR CITY COUNCIL ACTION

**MEETING DATE:** DECEMBER 13, 2016

**TITLE:** TREASURER'S REPORT FOR THE QUARTER ENDED SEPTEMBER 30, 2016

Director of Financial Services

City Manager

## RECOMMENDED ACTION

Receive and file the Treasurer's Report for the quarter ended September 30, 2016.

## EXECUTIVE SUMMARY

This report provides a synopsis of investment activity for the City's three investment portfolios for the quarter ended September 30, 2016. The portfolios are managed by United American Capital Corporation (UACC) under the direction of the Treasurer and include the Irvine Pooled Investment Portfolio, Bond Proceeds Fund Portfolio and the Special District Funds Portfolio. The total market value for all three portfolios was $931.26 million as of September 30, 2016.

This report includes portfolio assets, allocations, average maturities, yields, and portfolio valuations for each of the three portfolios. A discussion of market conditions is provided to give additional perspective to these measurements.

## COMMISSION/BOARD/COMMITTEE RECOMMENDATION

On November 21, 2016, the Finance Commission reviewed the Treasurer's Report and voted 5-0, with all members present, to recommend the City Council receive and file the Treasurer's Report for the quarter ended September 30, 2016. At its November 16, 2016 Special Meeting, the Investment Advisory Committee voted 4-0-1 (Committee Members Carney, Gonzales, Greenberg, and Judd voting in favor, Chair Shanahan absent), to recommend the City Council receive and file the Treasurer's Report.

## ANALYSIS

The Treasurer's office is responsible for the investment of the City's three fixed income portfolios in conformance with the Investment Policy adopted annually by the City Council. In accordance with the Investment Policy, management of the Irvine Pooled Investment Portfolio, Bonds Proceeds Fund Portfolio and the Special Districts Funds Portfolio are delegated to a contract management firm, UACC, with full authority to execute investment transactions on behalf of the City. The Investment Policy is updated annually in

accordance with the California State Government Code. Treasurer's reports are provided at quarter end and fiscal year end to the Investment Advisory Committee, Finance Commission, and City Council. The report includes investment activity and performance for each of the City's portfolios. The primary objectives of investing public funds, in order of importance, are: safety of principal, liquidity of funds, and return on investment. All securities owned by the City are held in safekeeping by a third party custodial bank acting as the agent for the City rather than held by a securities dealer or investment management firm. Any trade executed with a broker/dealer is required to settle with the City's safekeeping agent on a delivery versus payment basis, where the delivery of a security to the appropriate party is made only after the funds have been sent in full as payment for the security.

Irvine Pooled Investment Portfolio

The Irvine Pooled Investment Portfolio contains funds invested for the daily operational requirements of the City and funds reserved for economic uncertainties, future rehabilitation and maintenance needs. The Irvine Pooled Investment Portfolio is a combination of several operational funds, including the City's Asset Management Plan and funds earmarked for the development of the Orange County Great Park.

As of September 30, 2016, the book value (purchase price of securities as recorded on the City's books) of the Irvine Pooled Investment Portfolio was $557.66 million and the average weighted yield to maturity was 1.06 percent. Fiscal year-to-date investment revenue (interest payments and capital gains) generated by the Irvine Pooled Investment Portfolio as of September 30, 2016 was $1.34 million. The following chart compares the Irvine Pooled Investment Portfolio statistics over a rolling 12-month period.

**Irvine Pooled Investment Portfolio**
**Rolling 12-Month Quarterly Comparison**

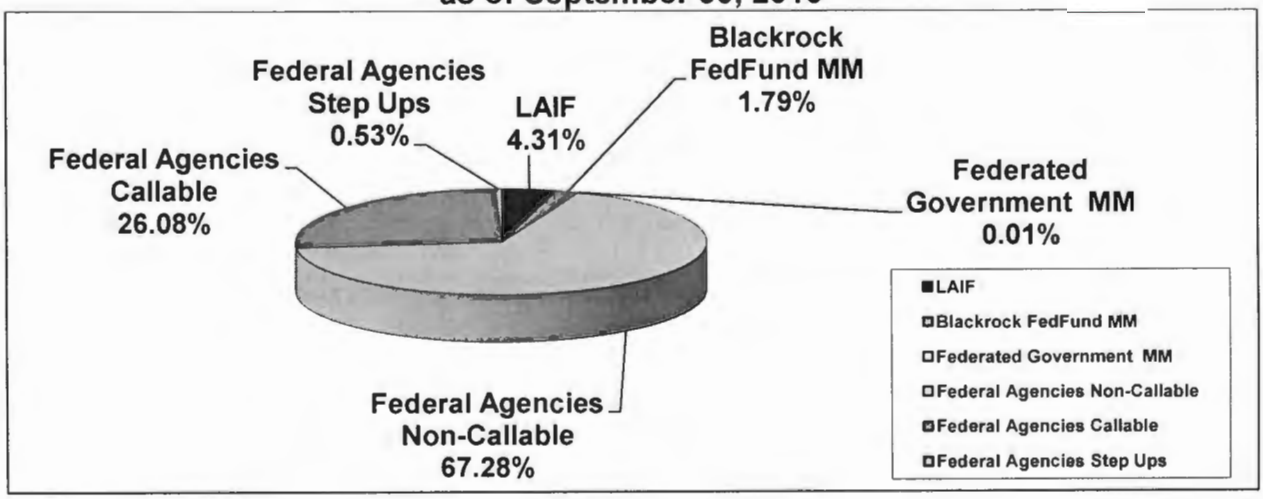
| | Sept 30, 2016 | June 30, 2016 | March 31, 2016 | Dec 31, 2015 |
|---|---|---|---|---|
| Book Value | $557,660,462 | $572,157,628 | $533,389,906 | $478,816,519 |
| Market Value | $559,208,937 | $574,913,200 | $535,191,367 | $477,843,844 |
| Unrealized Gain/(Loss) | $1,548,475 | $2,755,572 | $1,801,461 | ($972,675) |
| Unrealized Gain/(Loss) as % of Book Value | 0.28% | 0.48% | 0.34% | (0.20%) |
| Average Yield To Maturity | 1.06% | 1.03% | 1.05% | 1.01% |
| Liquidity 0 –6 months | 9.85% | 13.19% | 10.95% | 10.95% |
| Average Years To Maturity | 2.02 | 1.91 | 2.02 | 2.02 |
| Modified Duration (Years) | 1.98 | 1.84 | 1.98 | 1.97 |
| Fiscal Year to Date Income | $1,340,988 | $4,613,047 | $3,057,399 | $2,114,558 |

The Irvine Pooled Investment Portfolio's book value decreased by $14.49 million from the previous quarter due to the planned seasonal cyclical nature of the City's revenue stream and cash flow that often fluctuates $10 to $50 million each quarter. Portfolio yield to maturity increased for the quarter ended September 30, 2016 by 3 basis points to 1.06 percent. This was directly attributed to the increasing rate environment as maturing investments were reinvested into longer dated higher rate securities. With market rates increasing during the quarter ending September 30, 2016, the Irvine Pooled Investment Portfolio ended the quarter with an unrealized gain of $1.55 million as compared to $ 2.76 million on June 30, 2016. This is a normal result of the Irvine Pooled Investment Portfolio's modified duration of 1.98 years, and its price-sensitivity to changes in market interest rates.

To ensure the safety of the portfolio, investments that hold the highest credit quality are selected. The Irvine Pooled Investment Portfolio is comprised primarily of Federal Government sponsored entity debt, otherwise known as federal agency securities. Although federal agency securities were downgraded by Standard & Poor's to AA+ in August 2011, they continue to be regarded as among the safest securities in the global market. Two of the government sponsored agencies, Federal National Mortgage Association (Fannie Mae) and Federal Home Loan Mortgage Company (Freddie Mac), remain under conservatorship and carry an implicit guarantee by the Federal Government. In addition, both are carefully monitored by the City's investment manager and Treasurer to ensure the continued safety of the City's funds.

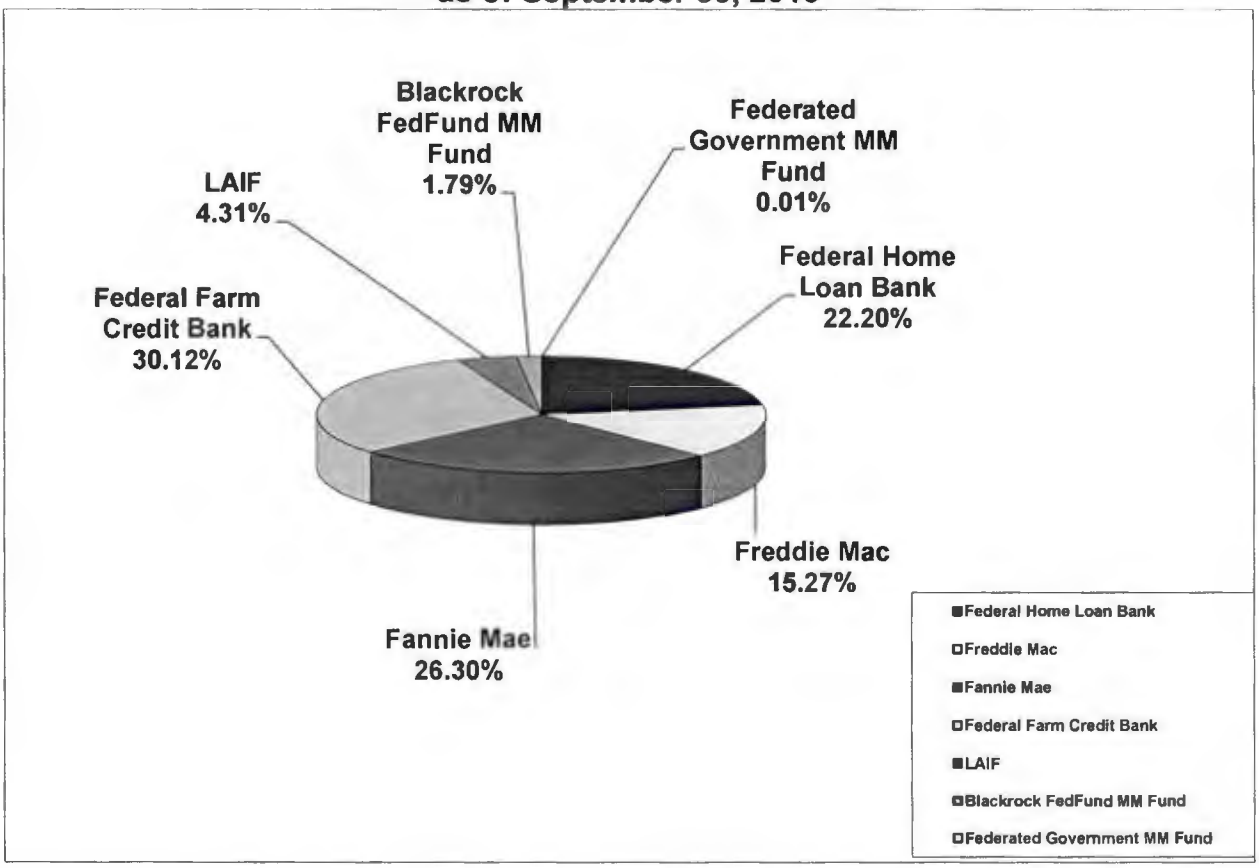
To manage liquidity, the Irvine Pooled Investment Portfolio is invested in Local Agency Investment Funds (LAIF), Federated Government Obligation money market fund, and the Blackrock FedFund money market fund. Chart 1 shows the asset allocation of the Irvine Pooled Investment Portfolio.

**Irvine Pooled Investment Portfolio**
**Chart 1 - Asset Allocation**
**as of September 30, 2016**



To diversify, the City purchases securities from several different federal agencies. The four Federal Government sponsored entities the City owns are Federal National Mortgage Association (Fannie Mae), Federal Home Loan Mortgage Corporation (Freddie Mac), Federal Home Loan Bank (Home Loan), and Federal Farm Credit Bank (Farm Credit). Chart 2 identifies portfolio holdings by issuer name.

**Irvine Pooled Investment Portfolio**
**Chart 2 - Allocation by Issuer Name**
**as of September 30, 2016**




Another key component in portfolio management is to ensure that the City has enough funds on hand to meet current expenses. As of September 30, 2016, the overnight to 6-month liquidity level for the Irvine Pooled Investment Portfolio was at 9.85 percent versus 13.19 percent last quarter. Chart 3, on the following page, is an aging of investment maturities up to 5 years (the maximum maturity allowable by policy and State code) of the Irvine Pooled Investment Portfolio.

**Irvine Pooled Investment Portfolio**
**Chart 3 - Aging of Maturing Investments (Maturity Value)**
**as of September 30, 2016**

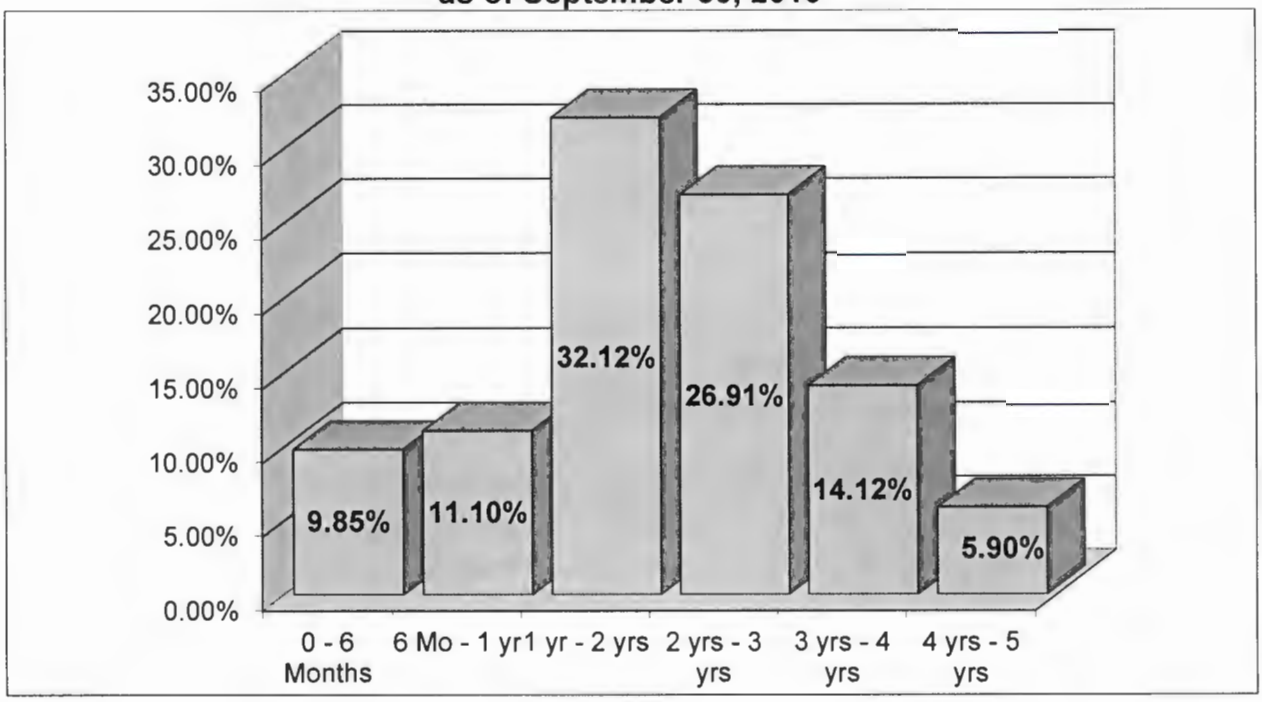
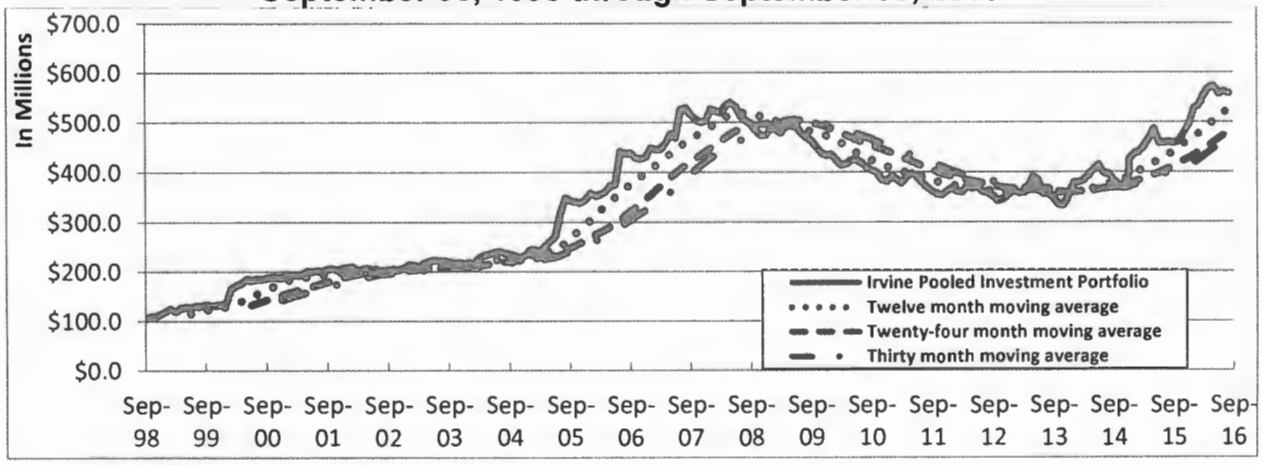
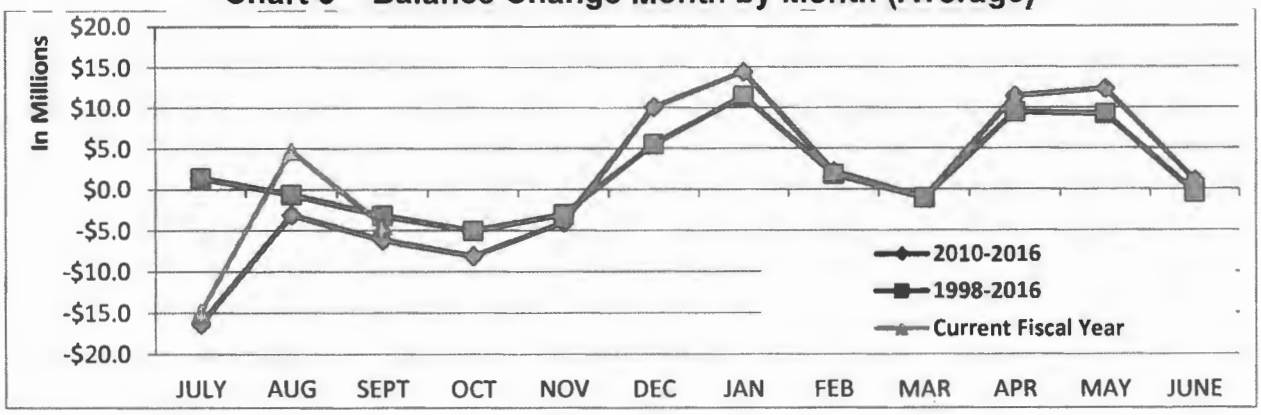



Chart 4 and Chart 5 show the volatility and cyclicality of the Irvine Pooled Investment Portfolio fund balance and cash flows between September 1998 and September 2016.

**Irvine Pooled Investment Portfolio**
**Chart 4 - Portfolio Balance**
**September 30, 1998 through September 30, 2016**

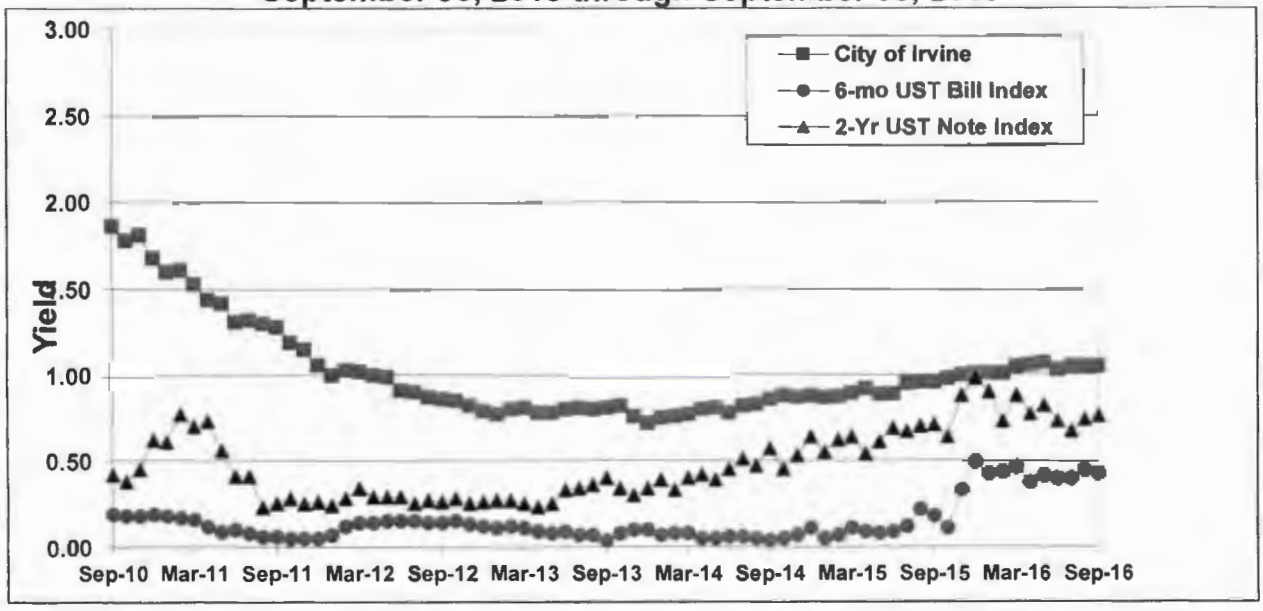


**Irvine Pooled Investment Portfolio**
**Chart 5 – Balance Change Month by Month (Average)**




To gauge performance, the City compares the Irvine Pooled Investment Portfolio's yield to maturity against two benchmarks set in the City's Annual Investment Policy; the 6-month United States Treasury (UST) Bill Index and 2-year UST Note Index. The benchmarks are used as a measure of the Irvine Pooled Investment Portfolio against market movement. Chart 6 compares the average yield to maturity of the Irvine Pooled Investment Portfolio to these benchmarks, and shows the spread (difference between the index and the yield to maturity) for the past six years. The Portfolio's yield is higher than the 6-month UST by 0.63 percent and higher than the 2-year UST by 0.30 percent.

**Irvine Pooled Investment Portfolio**
**Chart 6 - Yield to Maturity Compared to Assigned Benchmarks**
**September 30, 2010 through September 30, 2016**



Bond Proceeds Fund Portfolio

The Bond Proceeds Fund Portfolio contains special district construction and administration funds that are not held by a trustee. These include older bond issues, funds on hand to finance the City's special districts inspection and administration, and property assessments received from the County prior to being sent to the trustee. Investment strategy differs in the Bond Proceeds Fund Portfolio from the Irvine Pooled Investment Fund Portfolio due to the different cash needs between the two. The Bond Proceeds Fund Portfolio requires greater liquidity to meet debt service payments. The decrease in the portfolio balance from the prior fiscal year reflects a change in policy requiring the funds from special assessments received from the County of Orange to be transferred to the Trustee/Fiscal Agent accounts as soon as they are received. Fiscal year-to-date investment revenue (interest payments and capital gains) generated by the Bond Proceeds Fund Portfolio as of September 30, 2016 was $5,783.

**Bond Proceeds Portfolio**
**Rolling 12-Month Quarterly Comparison**

| | Sept 30, 2016 | June 30, 2016 | March 31, 2016 | Dec 31, 2015 |
|---|---|---|---|---|
| Book Value | $760,436 | $755,436 | $4,986,436 | $12,852,436 |
| Market Value | $760,669 | $755,905 | $4,987,538 | $12,841,987 |
| Unrealized Gain/(Loss) | $233 | $469 | $1,102 | ($10,449) |
| Unrealized Gain/(Loss) as % of Book Value | 0.03% | 0.06% | 0.02% | (0.08%) |
| Average Yield To Maturity | 0.63% | 0.58% | 0.51% | 0.40% |
| Liquidity 0 –6 months | 100.00% | 100.00% | 100.00% | 100.00% |
| Average Days To Maturity | 1 | 1 | 1 | 1 |
| Modified Duration in Days | 1 | 1 | 1 | 1 |
| Fiscal Year to Date Income | $5,783 | $51,224 | $41,277 | $33,966 |

Special District Funds Portfolio

The Special District Funds Portfolio contains project and reserve funds for 26 assessment district bond issues and four community facilities district bond issues. Investments in this Portfolio are made in accordance with each bond's indenture and the strategy is based on the cash flow needs of each district. The Special District Funds Portfolio must also remain very liquid to provide project funds, when needed, as well as meet debt service payment requirements. Fiscal year-to-date investment revenue (interest payments and capital gains) generated by the Special District Funds Portfolio as of September 30, 2016 was $292,016.

**Special District Funds Portfolio**
**Rolling 12-Month Quarterly Comparison**

| | Sept 30, 2016 | June 30, 2016 | March 31, 2016 | Dec 31, 2015 |
|---|---|---|---|---|
| Book Value | $371,479,758 | $285,890,825 | $290,492,013 | $335,498,764 |
| Market Value | $371,288,348 | $285,818,109 | $290,412,175 | $335,376,664 |
| Unrealized Gain/(Loss) | ($191,410) | ($72,716) | ($79,838) | ($122,100) |
| Unrealized Gain/(Loss) as % of Book Value | (0.05%) | (0.03%) | (0.03%) | (0.04%) |
| Average Yield To Maturity | 0.30% | 0.37% | 0.24% | 0.15% |
| Average Days To Maturity | 41 | 80 | 71 | 75 |
| Fiscal Year to Date Income | $292,016 | $695,259 | $463,659 | $188,223 |

Market Conditions

During the first quarter of FY 2016-17, interest rates increased with the yield curve flattening. The 6-month Treasury bill increased 8.10 basis points ending the period at 0.43 percent. Two-year Treasury notes increased 18.00 basis points to 0.76 percent, and the five-year Treasury note increased 15.00 basis points to 1.14 percent.

Financial markets continued to focus on economic data releases and their implications towards Federal Reserve Fund policy. The unemployment rate remained unchanged at 4.90 percent during the quarter as the under-employment rate increased slightly to 9.70 percent from 9.60 percent. Labor force participation increased to 62.80 percent from 62.70 percent and remains at levels not seen since 1978. The Federal Reserve Labor Market Conditions Index (LMCI) uses a weighted average of 19 monthly labor market indicators to gauge improvements in the labor market. The LMCI at -0.70, which has been a favored statistic of Federal Reserve chair Janet Yellen, has continued to show a declining trend since its January 2012 high of 12.00. The year over year comparison of average hourly earnings was reported at 2.40 percent by the Bureau of Labor Statistics. While steadily rising since the end of the financial crisis, average hourly earnings remain at the high end of the relatively narrow post-crisis range of 1.60 percent to 2.70 percent. The Federal Reserve is focused on full employment, price stability, and geo-economic stability. Federal Funds rate hike probabilities for December have risen from 9.20 percent as of June 30, 2016 to 59.3 percent as of September 30, 2016.

The economy advanced at a moderate pace in the third quarter, with a mild pickup in momentum coming predominantly from the household sector (especially retail, autos, food, and personal products), financial, housing, telecommunications and utilities. Frailty continues to linger in the restaurant, energy, manufacturing and export groups, while

transports have identified some mixed challenges, particularly in rails. "Election uncertainty" continued to delay business capital spending plans.

In conclusion, aging demographics, ballooning global debt, negative sovereign interest rates, and the presidential election will affect interest rates for the next fiscal quarter. While it is anticipated that the Federal Reserve will raise short term interest rates in December, future interest rate increases are expected to be gradual and data dependent.

## ALTERNATIVES CONSIDERED

None. The Treasurer's Report is intended to provide historical information about the City's investment portfolios. Pursuant to the City's Investment Policy, the Treasurer is required to submit quarterly Treasurer's reports to the City Council.

## FINANCIAL IMPACT

Fiscal year-to-date investment income for the Irvine Pooled Investment Portfolio, Bond Proceeds, and Special Districts portfolios totaled $1.64 million with investments structured for security and liquidity.

**REPORT PREPARED BY** Don Collins, City Treasurer

# 2.5

# REQUEST FOR CITY COUNCIL ACTION

**MEETING DATE:** DECEMBER 13, 2016

**TITLE:** CITY OF IRVINE INVESTMENT POLICY FOR CALENDAR YEAR 2017

Director of Financial Services

City Manager

## RECOMMENDED ACTION

Adopt – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ADOPTING THE CITY'S ANNUAL INVESTMENT POLICY FOR CALENDAR YEAR 2017

## EXECUTIVE SUMMARY

The City of Irvine Annual Investment Policy (Policy) provides specific criteria for the prudent investment of the City's funds. The policy applies to the following portfolios that are held by the City: the City's Pooled Investment Portfolio, Bond Proceeds Portfolio and the Special Districts Portfolios. In accordance with the Policy, the City Council is to review and adopt the Policy annually. The one proposed change to the Policy for calendar year 2017 incorporates a modification to the broker dealer qualification process to align the City's Policy with current industry standards by removing the Broker Dealer request for qualifications and instead utilize the investment manager's list of approved broker dealers. The approved broker dealers are in compliance with the Finance Industry Regulatory Authority and the U.S. Securities and Exchange Commission. Thus, while ensuring they are qualified, the pool of broker dealers from which the investment manager may engage is greatly increased. This will likely result in more investment options, improved availability of funds, and reduced investment costs.

## COMMISSION/BOARD/COMMITTEE RECOMMENDATION

On November 21, 2016, the Finance Commission reviewed the Annual Investment Policy and voted 5-0, with all members present, to recommend the City Council adopt the Policy for calendar year 2017.

The Investment Advisory Committee (IAC), at its meeting of November 16, 2016, reviewed the Policy and voted 4-0-1 (Committee Members Carney, Gonzales, Greenberg, and Judd voting in favor; Chair Shanahan absent) to recommend the City

Council adopt the 2017 Policy. Additionally, the Investment Advisory Committee recommended that the City Treasurer continue to annually certify that Broker Dealers have received, read, and understand the investment policy and to retain the existing policy language in the last paragraph of Section 12 Qualified Dealers. The Investment Advisory Committee's recommendation is incorporated in the proposed Policy.

**ANALYSIS**

Annually, the City Treasurer, investment manager, and staff review the Annual Investment Policy and recommend changes based on various factors including changes to legislation, investment management practices, the bond market and economy, or to conform to national and state investment policy standards. Proposed changes are presented to the Investment Advisory Committee and Finance Commission prior to presentation to the City Council for adoption (Attachment).

The Policy is based on State of California Government Code Sections 53600 through 53609 and 53630 through 53686. These laws, as well as guidelines set forth by the Association of Public Treasurers of the United States and Canada, the California Municipal Treasurers Association and the Government Finance Officers Association, have aided City staff in policy development. The State laws and established guidelines encompass a broad array of allowable investments and investment standards to suit the different needs of California's local agencies. The City's Policy is more conservative than what is allowed by State law as it further restricts the percentage of allowable credit investments.

The Policy applies to the City's Pooled Investment Portfolio, Bond Proceeds Portfolio and the Special Districts Portfolio. These portfolios encompass all funds under the oversight of the City Treasurer including the General Fund, Reserve Funds, Special Revenue Funds, Capital Project Funds, Debt Service Funds, Proprietary Funds, Trust and Agency Funds and other funds that may be created as needed.

There was one statutory change to Government Code Sections 53601.8 and 53635.8 (AB 283) this year regarding the use of private sector deposit placement services and the placement of funds in negotiable certificates of deposit. Existing law allowed for their use through January 1, 2017 and the change extends the existing authority to invest surplus funds in certificates of deposit or in another form of deposit until January 1, 2021. The City does not use private sector deposit placement services, therefore this change does not affect the City; however, the change is worth noting should the City decide in the future to change its Policy on the use of certificates of deposit.

Staff proposes utilizing the investment manager's approved list of broker dealers and eliminating the broker dealer request for qualification section in the Policy. The investment manager maintains a list of approved broker dealers that are in compliance with the Finance Industry Regulatory Authority and the U.S. Securities and Exchange Commission. These regulatory agencies require that broker dealers report their financial

condition monthly, adhere to securities law, and report any material changes that may affect the broker dealers operations. Broker dealers may, at any time, approach the investment manager, and once vetted for qualifications, be added to the approved list. This policy change will align the City of Irvine with current industry standards and increase the pool of qualified broker dealers. Under the current Policy the investment manager is limited to using broker dealers that have responded to and been approved through the City's request for qualifications process that is conducted once every three years. This has been problematic as brokers retire, dealers merge, or business plans shift, and the number of available broker dealers becomes more limited and costly.

The following is the summary of the proposed changes:

- Section 12 on Page 5 – Qualified Dealers. Updated language to remove the Request for Qualifications (RFQ) for broker/dealers.
- Removal of former Exhibit A Request for Qualifications Selection of Broker/Dealer Firms and related attachments.

## ALTERNATIVES CONSIDERED

The City Council could choose to further modify the Policy or to leave the existing Policy unchanged. Leaving the broker dealer request for qualifications section unchanged restricts the outside investment manager to a limited pool of broker dealers that have responded and been approved through the City's request for qualifications process. Any other proposed modifications to the Policy would need to be reviewed and analyzed.

## FINANCIAL IMPACT

There is no negative financial impact expected from the adoption of the proposed Policy. There will be no change in cost from the outside investment manager to monitor the broker dealers, as this function is included in the contract, and the City Treasurer will continue to monitor the City's investments to ensure compliance to the adopted Policy and legal codes, as well as annually certify that Broker Dealers have received, read, and understand the Policy. Access to more dealer inventories may provide more competitive pricing and lower transactional costs to the City.

**REPORT PREPARED BY** Don Collins, City Treasurer
Amy Roblyer, Senior Management Analyst

**ATTACHMENT** Resolution

CITY COUNCIL RESOLUTION NO. 16-

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ADOPTING THE CITY'S ANNUAL INVESTMENT POLICY FOR CALENDAR YEAR 2017

WHEREAS, the City Council of the City of Irvine recognizes the importance of economic and financial affairs with regard to the proper functioning of City Government and the well being of the citizens of Irvine; and

WHEREAS, the California Government Code requires that the City Council annually review the City's investment policy; and

WHEREAS, the City Council recognizes the need for the Treasurer of the City of Irvine to conduct the investment of City monies under certain parameters on a day-to-day basis; and

WHEREAS, Section 2-2-101(B) of the City of Irvine Charter authorizes the City Council of the City of Irvine to delegate authority to its City Treasurer to invest, reinvest, sell or exchange securities until such time as this delegation of authority is revoked; and

WHEREAS, the City Council has appointed an Investment Advisory Committee who have recommended that the City Council approve the Annual Investment Policy as submitted.

NOW, THEREFORE, the City Council of the City of Irvine DOES HEREBY RESOLVE AS FOLLOWS:

Section 1. The preceding recitals are all true and correct.

Section 2. That the City Council of the City of Irvine hereby delegates the authority to reinvest funds of the City of Irvine pursuant to all applicable laws, statutes, and regulations of the State of California as set forth in this Resolution.

Section 3. The City Council of the City of Irvine hereby adopts the attached Annual Investment Policy for Calendar Year 2017 (Exhibit A).

Section 4. This resolution shall take effect immediately upon its adoption.

ATTACHMENT

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 13th day of December 2016.

_____
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 on the 13th day of December, 2016.

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

ABSTAIN: COUNCILMEMBERS:

_____
CITY CLERK OF THE CITY OF IRVINE

# City of Irvine

# Annual Investment Policy
# Calendar Year 2017

**Don Collins**
**City Treasurer**

EXHIBIT A

# City of Irvine
# Annual Investment Policy
## Calendar Year 2017

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**CITY OF IRVINE**
**ANNUAL INVESTMENT POLICY**
**FOR CALENDAR YEAR 2017**

## *1. INTRODUCTION*

This statement of Investment Policy is intended to provide specific criteria for the prudent investment of City funds. The ultimate investment goal is to enhance the economic status of the City while protecting funds under management and meeting the daily cash flow demands of the City. This investment policy has been prepared in conformance with all pertinent existing laws of the State of California including California Government Code Sections 53600, et seq.

## *2. SCOPE*

This investment policy applies to the City's Irvine Pooled Investment Portfolio, Bond Proceeds Portfolio held by the City, and Special Districts Portfolio. These portfolios encompass all monies under the direct oversight of the Treasurer and include the General Fund, Reserve Funds, Special Revenue Funds, Debt Service Funds, Capital Project Funds, Proprietary Funds, Trust and Agency Funds, Successor Agency to the Dissolved Irvine Redevelopment Agency, and any other funds that may be created. These funds are accounted for in the City of Irvine's Comprehensive Annual Financial Report.

## *3. DELEGATION OF AUTHORITY*

Authority to manage the City of Irvine's investment program is derived from the Charter of the City of Irvine, Section 2-2-101(B). The authority of the City Council to invest or reinvest monies of the City has been delegated by the City Council to the City Treasurer for one year or until such time the delegation is revoked. The City Treasurer shall be responsible for all transactions undertaken and shall establish a system of controls to regulate the activities of subordinate officials, and their procedures in the absence of the City Treasurer. The City Treasurer may delegate daily investment activity, such as carrying out the Treasurer's investment instructions, confirming treasury transactions, and other routine activities.

The City Treasurer shall establish written investment policy procedures for the operation of the investment program consistent with this policy. The procedures should include reference to: safekeeping, master repurchase agreements, wire transfer agreements, banking service contracts and collateral/depository agreements. Such procedures shall include explicit delegation of authority to persons responsible for investment transactions. No person may engage in an investment transaction except as provided under the terms of this policy and the procedures established by the City Treasurer.

The Treasurer is responsible for the investment of bond proceeds whether held by the City or with a fiscal agent. The Bond Proceeds portfolio(s) shall be segregated from the Irvine Pooled Investment Portfolio of the City and will be structured with maturities (or maintain an average maturity) sufficient to meet construction draws, debt service payments and other short-term liabilities. For purposes of efficiency, the Treasurer may instruct each fiscal agent to purchase certain securities regarding the investment of bond proceeds in conformance with the permitted investment criteria documented in each bond indenture or guiding resolution. Where present, bond indenture and guiding resolution documentation for investment of Bond Proceeds and Special District funds will supersede the City of Irvine Investment Policy guidelines. The Investment Advisory Committee will be advised of any investments made outside of the Investment Policy, pursuant to bond indentures and/or guiding resolutions.

Currently, management of the Irvine Pooled Investment Portfolio, Bonds Proceeds Portfolio and Special Districts Portfolio has been delegated to a contract management firm that has full authority to execute investment transactions on behalf of the City. In the event the contract management firm is not able to execute investment transactions, the City Treasurer and Deputy City Treasurer has the authority to execute investment transactions.

## *4. ETHICS AND CONFLICTS OF INTEREST*

Officers and employees involved in the investment process shall refrain from personal business activity that conflicts with proper execution of the investment program or that impairs their ability to make impartial investment decisions. Employees and investment officials shall disclose any material financial interests that could be related to the performance of the City's investment policy annually with the California Fair Political Practices Commission or as necessary under the Political Reform Act and Government Code Section 1090 et seq.

## *5. PRUDENCE/PRUDENT INVESTOR STANDARD*

The Treasurer operates the City's pooled cash investment program under the Prudent Investor Standard, Government Code Section 53600.3, and applicable State laws. When investing, reinvesting, purchasing, acquiring, exchanging, selling, and managing public funds, the Treasurer shall act with care, skill, prudence, and diligence under the circumstances then prevailing, including, but not limited to, the general economic conditions and the anticipated needs of the City, that a prudent person acting in a

like capacity and familiarity with those matters would use in the conduct of funds of a like character and with like aims, to safeguard the principal and maintain the liquidity needs of the City. Within the limitations of this section and considering individual investments as part of an overall strategy, investments may be acquired and sold as authorized by law. This affords a broad spectrum of investment opportunities so long as the investment is deemed prudent and permissible by the State of California, various bond indentures and this policy. The Treasurer strives to invest 100 percent of idle funds.

## *6. INTERNAL CONTROLS*

The Treasurer and Manager of Fiscal Services shall establish procedures that separate the internal responsibility for management and accounting of the investment portfolio. An analysis by an external independent auditor shall be conducted annually to review internal controls, account activity and compliance with policies and procedures.

## *7. INVESTMENT OBJECTIVES*

The City's cash management system is designed to accurately monitor and forecast revenues and expenditures, thus enabling the Treasurer to invest funds to the fullest extent possible. The Treasurer maintains a diversified portfolio to accomplish the primary objectives in the order of safety, liquidity, and yield.

Safety: The safety/risk associated with an investment refers to the potential loss of principal, accrued interest or a combination of these. The Treasurer seeks to mitigate credit risk by monitoring financial institutions with which he/she will do business, and by careful scrutiny of the credit worthiness of the investment instruments as well as the institutions. Such resources as a nationally recognized statistical-rating organization (NRSRO) services are utilized for this review. The Treasurer seeks to mitigate interest rate risk through diversification of instruments as well as maturities.

Liquidity: The portfolio will be structured with sufficient liquidity to allow the Treasurer to meet anticipated cash requirements. This will be accomplished through the purchase of a diversity of instruments to include those with active secondary markets, those that can match maturities to expected cash needs, and the State Local Agency Investment Fund (LAIF) with immediate withdrawal provisions.

Yield: A competitive market rate of return is the third objective of the investment program after the fundamental requirements of safety and liquidity have been met. The portfolio shall be managed to consistently attain a market rate of return throughout budgetary and economic cycles. Whenever possible, and consistent with risk limitations and prudent investment management, the City will seek to augment returns above the market average rate of return through the implementation of active portfolio management strategies.

## *8. PERFORMANCE EVALUATION*

Investment performance is continually monitored and evaluated by the City Treasurer. Investment portfolio reports are generated on a monthly and quarterly basis and submitted to the City Council, City Manager and Investment Advisory Committee. A quarterly Treasurer's report is also presented to the City Council, Finance Commission, and Investment Advisory Committee during respective regularly scheduled meetings.

The investment portfolio reports are to be submitted within 30 days of the end of the reporting period. The monthly average yield of the Irvine Pooled Investment Portfolio will be compared to the monthly average 6-month CMT (Constant Maturity Treasury) as calculated by the Federal Reserve Bank of New York. As an added reference, the monthly average yield of the Irvine Pooled Investment Portfolio will be compared to the monthly average 2-year CMT as calculated by the Federal Reserve Bank of New York.

## *9. DIVERSIFICATION*

The City will diversify use of investment instruments to avoid unreasonable risks inherent in over-investing in specific instruments, individual financial institutions, or maturities.

Market price volatility shall be controlled through maturity diversification, as well as ensuring adequate liquidity is available to meet cash flow requirements, thereby precluding the need to sell instruments at a market loss.

Risk of default will be controlled by acquiring instruments such as Government Securities, or by diversifying the portfolio within the constraints and parameters of Section 17 of this Policy, Authorized and Suitable Investments.

## *10. PORTFOLIO SEGREGATION*

Within the overall funds managed by the Treasurer, bond funds shall be segregated from the general City pool into their own pool and be invested in conformance with the permitted investment criteria documented in each bond indenture or guiding resolution. Furthermore, bond proceeds held by fiscal agents shall also be segregated and invested in accordance with each indenture.

The primary purpose of any separately managed bond proceeds portfolio is to structure investment maturities to meet current and future liabilities. The preservation of principal and the maintenance of liquidity are the most important factors regarding the investment of bond proceeds. Portfolio yield is not a primary factor since the portfolio structure, eligible investment assets and maturity restrictions are governed by draws and expenditure schedules of the issues. Performance will be based upon maximizing permitted positive arbitrage within the context of principal preservation as a first priority (pre-1986 Tax Reform Act issuances) or minimizing or eliminating negative arbitrage (yield-restricted issues).

## *11. BOND ISSUANCE ARBITRAGE REBATE*

The U.S. Tax Reform Act of 1986 requires the City to perform annual arbitrage calculations and rebate excess earnings to the U.S. Treasury for investment returns that exceed the allowable interest earnings limit of each bond issue. The arbitrage calculation process must be conducted for the investment of proceeds of bond issues sold after the effective date of this law. This arbitrage calculation will be contracted out to provide the necessary technical expertise to comply with this regulation. The City's investment position relative to the interest rate arbitrage restrictions is to have safety and the highest permitted return the law allows as the highest priority while ensuring the preservation of principal and liquidity.

## *12. QUALIFIED DEALERS*

The Treasurer shall transact business only with Registered Investment Advisors, national or state-chartered banks, savings and loans, and broker dealers. The dealers should be primary dealers regularly reporting to the New York Federal Reserve Bank, or approved regional or secondary market dealers that qualify under the Securities and Exchange Commission Rule 15C3-1 (uniform net capital rule).

The Treasurer may direct a fiscal agent to execute investment transactions on behalf of the City for funds held by that fiscal agent.

The City may purchase "prime" quality rated commercial paper from its direct issuer if it presents a higher return than in the secondary market.

The Treasurer shall send annually a copy of the current investment policy by electronic mail to all broker/dealers approved to do business with the City. Broker/dealers shall be required to provide a certification acknowledging receipt of the policy and their most recent audited financial statements upon receipt of policy. The Treasurer will monitor broker/dealers and their firms, to ensure they are in good standing with the appropriate regulatory agencies. The Treasurer will review financials and report back to the Investment Advisory Committee.

## *13. SAFEKEEPING OF SECURITIES*

To protect against losses caused by the collapse of individual securities dealers, all securities owned by the City, including collateral for repurchase agreements, shall be held in safekeeping by a third party bank trust department acting as agent for the City under the terms of a custody agreement or, in the case of funds held by the fiscal agent, the fiscal agent shall segregate and report securities held on the City's behalf. Any trade executed by a dealer is required to settle on a delivery versus payment basis with the City's safekeeping agent.

Fiscal agents in receipt of City of Irvine bond proceeds will settle security transactions on a delivery versus payment method based upon instructions provided by the Treasurer or the City's investment advisor. The fiscal agents will issue monthly custodian statements evidencing securities held in safekeeping, including the receipt of interest and maturity proceeds, the disbursement of funds for the purchase of securities, and the receipt of any sale proceeds.

## *14. COLLATERALIZATION*

All demand deposits, time deposits and repurchase agreements are to be fully collateralized with securities authorized by the California Government Code and the City.

1. The eligible collateral for repurchase agreements must be those investments authorized by Section 53651 of the California Government Code. The Treasurer may specify the type of eligible collateral for use in repurchase agreements. Eligible collateral must be in book entry form. Collateral is valued at current market plus accrued interest through the date of valuation.

   a. The cost value (book value) of collateral pledged for demand deposits must at all time be equal to or greater than the amount on deposit, plus accrued interest, in accordance with the following ratio:

   | | |
   |---|---|
   | U.S. Treasury Securities | 110% |

   b. The cost value (book value) of collateral pledged for repurchase agreements must at all time be equal to or greater than the par amount, plus accrued interest, with the following ratios:

   | | |
   |---|---|
   | U.S. Treasury Securities | 102% |
   | U.S. Government Agencies | 102% |

2. It is the policy of the City to require reports at least on a quarterly basis from institutions with which the Treasurer has pledged security interest. The Treasurer shall monitor the adequacy of collateralization to ensure that balances are collateralized in accordance with the ratios approved herein.

3. With regard to repurchase agreements, it is the policy of the City to initiate a margin call in the event pledged collateral falls below the appropriate ratio.

4. Collateralized investments and deposits often require substitution of collateral. Any broker or financial institution requesting substitution must contact the City for approval in the event the counterparty to the transaction is not authorized under agreement with the City to make substitutions.

## *15. MAXIMUM MATURITIES*

1. Pooled Investment Portfolio

   In accordance to California Government Code Section 53601, The City will not invest in any securities maturing more than five (5) years from the settlement date of purchase. If the Treasurer desires to make

investments longer than five years, express authority to make those investments, either specifically or as part of an investment program, must be approved by the City Council no less than three months prior to the investment. In no event will securities with maximum maturities beyond four years exceed 40 percent of the portfolio's total carrying cost at the time of purchase.

2. Bond Proceeds Portfolio/Special Districts Portfolio

The Bond Proceeds portfolio held by the City and/or fiscal agents will be structured with maturities sufficient to meet current and future disbursements and other liabilities consistent with the purpose of each bond issue. The Treasurer may match maturities to defined future liabilities or may structure the portfolio in such a manner as to maintain an average maturity and a defined liquidity percentage necessary to meet estimated liabilities. In no event will securities be purchased with final maturities that exceed a specifically defined future liquidity requirement (such as bond reserve fund availability requirement) or liability.

## *16. INVESTMENT POOLS/MONEY MARKET MUTUAL FUNDS*

A thorough investigation of any government sponsored pool and/or mutual fund is required prior to investing and on a continual basis. There shall be a questionnaire completed which will provide the following information:

- A description of eligible investment securities, and a written statement of investment policy and objectives.
- A description of interest calculations and how it is distributed, and how gains and losses are treated.
- A description of how the securities are safeguarded (including the settlement processes), and how often the securities are priced and the program audited.
- A description of who may invest in the program, how often, and what size of deposits and withdrawals are allowed.
- A schedule for receiving statements and portfolio listings.
- A description of how the pool/fund utilizes reserves, retained earnings, etc.
- A fee schedule, including when and how fees are assessed.
- The eligibility of the pool/fund to invest in bond proceeds and a description of its practices.

## *17. AUTHORIZED AND SUITABLE INVESTMENTS*

The City is governed by the California Government Code, Sections 53600 et seq. Within the context of these limitations and based on the cost at the time of purchase, the following investments are authorized as further limited herein:

Authorized Investment Summary Matrix

| Category | | Percent |
|---|---|---|
| A. | US Treasuries | no limit |
| B. | US Agencies | no limit |
| C. | Bankers' Acceptances | 25% |
| D. | Commercial Paper | 15% |
| E. | Repurchase Agreements | 25% |
| F. | Reverse Repurchase Agreements | 15% |
| G. | Local Agency Investment Fund (LAIF) | 25% |
| H. | Municipal Bonds | no limit |
| I. | Corporate Medium Term Notes | 15% |
| J. | Money Market Mutual Funds | 20% |
| K. | Supranationals | 10% |

A. United States Treasury Bills, Bonds, and Notes, or those for which the full faith and credit of the United States are pledged for payment of principal and interest. There is no limitation as to the percentage of the portfolio that can be invested in this category.

B. Obligations issued by United States Federal agencies or government-sponsored enterprise obligations, or other instruments, including those issued by or fully guaranteed as to principal and interest by federal agencies or United States government-sponsored enterprises. Although there is no percentage limitation on these issues, the "prudent investor" standard shall apply to investments from a single agency.

C. Bills of exchange or time drafts drawn on and accepted by a commercial bank, otherwise known as Bankers' Acceptances. Bankers' Acceptances purchased may not exceed 180 days to maturity or 25 percent of the cost (book) value of the portfolio. No more than $5 million may be invested in Bankers' Acceptances

issued by any one bank. Prior to the purchase of any Banker's Acceptance, the portfolio manager shall review the rating of the issuing bank. Bankers' Acceptances of issuing financial institutions shall have both a short and long term rating in the highest category by at least one nationally recognized rating agency at the time of purchase.

D. Commercial Paper ranked of "prime" quality of the highest ranking or of the highest letter and number rating as provided for by NRSRO and issued by a domestic corporation having assets in excess of $500 million. The commercial paper must also have an "A" or better rating for the issuer's debt, other than commercial paper, if any, as provided by a NRSRO. Purchase of commercial paper from corporations on negative credit watch by a major rating agency shall be prohibited. Purchases of eligible Commercial Paper may not exceed 270 days to maturity. Purchases of Commercial Paper may not exceed 15 percent of the cost value of the portfolio at time of purchase. No more than 3 percent of the cost value of the portfolio may be invested in Commercial Paper issued by any one corporation. Corporate Medium Term Note and bankers' acceptance holdings shall be considered when calculating the maximum dollar amount in any issuer name.

Upon any announcement of negative credit watch or downgrade by a major rating agency of any issue within the portfolio, the investment manager should contact the City Treasurer/City Manager and recommend a course of action. If at any time a security falls below "investment grade," the investment manager should obtain the best bid and take the necessary steps toward liquidation.

E. Repurchase agreements. The City may invest in repurchase agreements with banks and primary dealers with whom the City has entered into a master repurchase agreement that specifies terms and conditions of repurchase agreements. No more than 25 percent of the cost value of the portfolio may be invested in repurchase agreements at any time. The maturity of repurchase agreements shall not exceed 75 days.

The cost value of securities used as collateral for repurchase agreements shall be monitored daily by the Treasurer and will not be allowed to fall below the margin ratios specified in Section 14 (1)(b) of this policy. In order to conform with provisions of the Federal Bankruptcy Code which provides for the liquidation of securities held as collateral for repurchase agreements, the only securities

acceptable as collateral shall be securities that are direct obligations of, or that are fully guaranteed as to principal and interest by, the United States Government such as Treasury bills, Treasury notes or Treasury bonds with less than a five year maturity.

F. Reverse repurchase agreements. The City may invest in reverse repurchase agreements only with those banks and primary dealers with whom the City has entered into a master repurchase agreement outlining terms and conditions of repurchase and reverse repurchase agreements. The City may only invest in reverse repurchase agreements for the following purpose:

1. The City may enter into reverse repurchase agreements when funds obtained through the reverse can be reinvested in a higher yielding security to obtain additional interest income for the City at a spread deemed to be acceptable by the Treasurer under then prevailing market conditions. Reverse repurchase agreements entered into in accordance with this paragraph may not exceed 75 days to maturity and must be matched as to maturity and dollars invested with its corresponding reinvestment. No more than 15% of the cost value (book value) of the portfolio may be invested in reverse repurchase agreements.

2. Reverse repurchase agreements may be used for liquidity purposes when it is determined that the portfolio has sufficient additional collateral coming due within the term of the reverse repurchase agreement equal to or exceeding the amount of the reverse repurchase agreement.

G. The City may invest in the LAIF established by the State Treasurer for the benefit of local agencies up to the maximum permitted by State law, but not to exceed 25 percent of the cost value (book value) of the total portfolio exclusive of the fiscal agent cash portfolio.

H. Bonds issued by local agencies of the United States, including bonds payable solely out of the revenues from a revenue-producing property owned, controlled, or operated by the local agency or by a department, bond, agency, or authority of the local agency rated "AA" or better by a NRSRO. "AA" rated bonds shall be limited to 36 months maximum maturity and "AAA" rated bonds shall be limited to 60 months maximum maturity.

Upon any announcement of negative credit watch or downgrade

by a major rating agency of any issue within the portfolio, the investment manager should contact the City Treasurer/City Manager and recommend a course of action. If at any time a security falls below "investment grade," the investment manager should obtain the best bid and take the necessary steps toward liquidation.

I. Corporate medium term notes issued by a domestic corporation having assets in excess of $500 million and having an "AA" or better rating criteria at time of purchase on its long-term debentures as provided by a NRSRO. Purchase of corporate medium term notes from corporations on negative credit watch by a major rating agency shall be prohibited. "AA" rated medium term notes shall be limited to 36 months maximum maturity and "AAA" rated medium term notes shall be limited to 60 months maximum maturity. The aggregate total of all purchased medium term notes may not exceed 15 percent of the cost value of the portfolio. No more than 3 percent of the cost value of the portfolio may be invested in corporate medium term notes issued by any one corporation. Commercial Paper and bankers' acceptance holdings shall be considered when calculating the maximum percentage in any issuer name.

Upon any announcement of negative credit watch or downgrade by a major rating agency of any issue within the portfolio, the investment manager should contact the City Treasurer/City Manager and recommend a course of action. If at any time a security falls below "investment grade," the investment manager should obtain the best bid and take the necessary steps toward liquidation.

J. Money Market Mutual funds having a rating of "AAA" or an equivalent by no less than two NRSRO with no load and maintained at $1 par value. No more than 20 percent of the cost value of portfolio value at time of purchase, excluding the Special District Portfolio, should be invested in this category, and the City's investment in any specific mutual fund will not exceed 2 percent of that mutual fund's total assets.

K. Supranational securities of United States dollar denominated senior unsecured unsubordinated obligations issued or unconditionally guaranteed by the International Bank for Reconstruction and Development, International Finance Corporation, or Inter-American Development Bank, with a maximum remaining maturity of five years or less, and eligible for purchase and sale within the United States. Investments under this subdivision shall be rated "AAA" or better by

an NRSRO and shall not exceed 10 percent of the agency's moneys that may be invested pursuant to this section.

## *18. INELIGIBLE INVESTMENTS*

Investments not described herein including, but not limited to, equity securities such as common stocks, preferred stocks, convertibles, inverse floaters, range notes and interest-only strips that are derived from a pool of mortgages are prohibited from use in this portfolio. The City is prohibited from entering into a margin agreement and/or borrowing on margin.

## *19. INVESTMENT ADVISORY COMMITTEE*

The City has created a five-member Investment Advisory Committee as a standing Committee to advise the City on matters relating to the City's Investment Policy and the investment of City funds. The Committee meets at least quarterly with the Treasurer and City staff and reports directly to the City Council. Each Councilmember appoints one person to the Committee. The Committee member's term is concurrent with the term of the appointing Councilmember. The Committee will be governed by a set of Bylaws (Exhibit A) to be reviewed and approved annually.

## *20. PORTFOLIO REPORTING*

In accordance with California Government Code, Sections 53607 and 53646(b), the Treasurer shall provide on a monthly and quarterly basis (or as otherwise requested by the City Manager) an investment portfolio to the City Council. The report shall include a listing of each of the City's investments (a description that adequately describes the security), the purchase date, maturity date, cost basis, current cost value (book value), interest rate, weighted average maturity, current unrealized loss or gain and a listing of investment transactions that includes purchase/deposit and sale/withdrawal activity. Various investment types will be categorized and grouped in the same structure as the qualified investment categories identified in this policy. The portfolio report shall include a statement certifying the ability of the City to meet its expenditure requirements for the next six months, or provide an explanation as to why sufficient money shall, or may, not be available. The report will also include comments on the fixed income markets and economic conditions, and the effect, if any, on the portfolio structure and investment strategy. The report shall also detail all repurchase and reverse repurchase positions and associated liabilities.

The investment portfolio report shall include market value information for all investments. A monthly market value will be obtained for each security owned by the City. For purposes of reporting, the market value of each security may be obtained from the City's custodian bank or other pricing source(s) utilized by the City's designated investment management firm (registered investment advisor).

The City shall record interest revenue on a modified accrual basis of accounting that is typical for reporting and recording of interest earnings. Securities held by a fiscal agent shall also be recorded on a modified accrual basis of accounting. The Treasurer will report year-end investments in conformance with Governmental Accounting Standards Board Statement Nos. 31 and 40.

The Treasurer will provide a monthly reconciliation of all funds included in the investment portfolios. The reconciliation shall utilize all available information including the City's books, the Demand Deposit Bank account, the custodian's statement and the fiscal agent's statement.

## *21. REVIEW OF INVESTMENT PORTFOLIO*

The securities held by the City must be in compliance with Section 17, Authorized and Suitable Investments, at the time of purchase. The Treasurer shall review the portfolios quarterly to identify any securities that are no longer in compliance. The Treasurer shall report any major and critical incidences of noncompliance in the quarterly treasurer's report to the City Council and Investment Advisory Committee.

## *22. INVESTMENT POLICY ADOPTION*

The City Council shall review and adopt this Investment Policy by resolution annually.

## GLOSSARY

**AGENCIES** – Agencies of the Federal government set up to supply credit to various classes of institutions (e.g., S&L's, small business firms, students, farmers, housing agencies, etc.) Examples include Federal Home Loan Mortgage Corporation (FHLMC), Federal National Mortgage Association (FNMA), Federal Home Loan Bank (FHLB) and Federal Farm Credit Bank (FFCB).

**ASK/OFFER** – The price at which securities are offered. (The price at which a firm will sell a security to an investor)

**BANKERS' ACCEPTANCE (BA)** – A draft or bill of exchange accepted by a bank or trust company. The accepting institution guarantees payment of the bill as well as the issuer.

**BASIS POINT** – One one-hundredth of a percent (i.e., 0.01 percent)

**BEAR MARKET** – A period of generally pessimistic attitudes and declining market prices.

**BID PRICE** – The price at which a broker/dealer will buy securities from an investor.

**BOND EQUIVALENT YIELD** – The basis on which yields on notes and bonds are quoted.

**BOOK VALUE (COST VALUE)** – The purchase price of the security as recorded on the City's books.

**BROKER/DEALER** – An individual or firm acting as principal in a securities transaction.

**BULL MARKET** – A period of generally optimistic attitudes and increasing market prices.

**CALLABLES** – Securities that the issuer has the right to redeem prior to maturity.

**CERTIFICATE OF DEPOSIT (CD)** - A time deposit with a specific maturity evidenced by a certificate. Large denomination CD's are typically negotiable.

**CMT** – Constant Maturity Treasury – An index of the average yield on United States Treasury securities adjusted to a constant maturity.

**COLLATERAL** – Securities, evidence of deposit or other property which a borrower pledges to secure repayment of a loan. Also refers to securities pledged by a bank to secure deposits of public monies.

**COMPREHENSIVE ANNUAL FINANCIAL REPORT (CAFR)** - The official annual report of the City. It includes five combined statements for each individual fund and account group prepared in conformity with Generally Accepted Accounting Principles (GAAP). It also includes supporting schedules necessary to demonstrate compliance with finance-related legal and contractual provisions, extensive introductory material, and a detailed Statistical Section.

**CORPORATE MEDIUM TERM NOTE** – A security issued by a corporation doing business in the U.S. with a maturity not to exceed five years.

**COST VALUE (BOOK VALUE)** – The purchase price of the security as recorded on the City's books.

**COUPON** – a) The annual rate of interest that a bond's issuer promises to pay the bondholder on the bond's face value; b) a certificate attached to a bond evidencing interest due on a payment date.

**DEBENTURE** - A bond secured only by the general credit of the issuer.

**DELIVERY VS PAYMENT** - Delivery of securities with a simultaneous exchange of money.

**DEMAND ACCOUNT** – An account with a commercial bank from which check withdrawals may be made at any time.

**DERIVATIVES** – Financial products that are dependent for their value on (or derived from) an underlying financial instrument, a commodity, or an index representing values of groups of such instruments or assets.

**DISCOUNT** – The difference between the cost price of a security and its maturity when quoted at lower than face value. A security selling below original offering price shortly after sale also is considered to be at a discount.

**DIVERSIFICATION** – Dividing investment funds among a variety of securities offering independent returns.

**FEDERAL FUNDS RATE** – Interest rate charged by one institution lending federal funds to another.

**FEDERAL OPEN MARKET COMMITTEE (FOMC)** – Consists of seven members of the Federal Reserve Board and five of the twelve Federal Reserve Bank Presidents. The President of the New York Federal Reserve Bank is a permanent member, while the other presidents serve on a rotating basis. The Committee periodically meets to set Federal Reserve guidelines regarding purchases and sales of Government Securities in the open market as a means of influencing the volume of bank credit and money.

**FINANCIAL ADVISOR** – A firm or bank that acts in a financial advisory capacity with respect to a new issue of municipal securities pursuant to a written contract.

**FISCAL AGENT** – A financial institution with trust powers which acts in a fiduciary capacity for the benefit of the bondholders in enforcing the terms of the bond contract.

**GOVERNMENTAL ACCOUNTING STANDARDS BOARD** – The independent organization that establishes and improves standards of accounting and financial reporting for U.S. state and local governments.

**INTERNAL RATE OF RETURN** – Rate of return over the life of a security on variables.

**LOCAL AGENCY INVESTMENT FUND (LAIF)** – The aggregate of all funds from political subdivisions that are placed in the custody of the State Treasurer for investment and reinvestment.

**MARKET VALUE** – The price at which a security is trading, usually the liquidation value.

**MASTER REPURCHASE AGREEEMENT** – A written contract covering all future transactions between the parties to repurchase-reverse repurchase agreements that establishes each party's rights in the transactions. A master agreement will often specify, among other things, the right of the buyer-lender to liquidate the underlying securities in the event of default by the seller borrower.

**MONEY MARKET MUTUAL FUNDS** – Open-ended mutual fund that invests in commercial paper, banker's acceptances, repurchase agreements, government securities, certificates of deposit and other highly liquid and safe securities, and pays money market rates of interest. The fund's net

asset value remains a constant $1 a share, with the interest rate increasing or decreasing.

**NATIONALLY RECOGNIZED STATISTICAL RATING ORGANIZATION (NRSRO)** – A rating organization designated by the SEC as being nationally recognized.

**OFFER PRICE** – The price at which a broker/dealer will offer securities to an investor.

**OPEN MARKET OPERATIONS** – Federal Reserve activity. Under the Federal Reserve Act, the Fed uses purchases and sales of Government and Federal Agency securities to add to or subtract from commercial bank reserves. Goals are to sustain economic growth, high employment and reasonable price stability.

**PAPER GAIN OR LOSS** – Term used for unrealized gain or loss on securities being held in a portfolio based on comparison of current market quotes and their original cost. This situation exists as long as the security is held while there is a difference between cost value (book value) and the market value.

**PORTFOLIO** – Collection of securities held by an investor.

**PRIMARY DEALER** – A group of government securities dealers that serve as trading counterparties of the New York Fed in its implementation of monetary policy. This role includes the obligations to: (i) participate consistently in open market operations to carry out U.S. monetary policy pursuant to the direction of the Federal Open Market Committee (FOMC); and (ii) provide the New York Fed's trading desk with market information and analysis helpful in the formulation and implementation of monetary policy. Primary dealers are also required to participate in all auctions of U.S. government debt and to make reasonable markets for the New York Fed when it transacts on behalf of its foreign official account-holders.

**RATE OF RETURN** – The yield obtainable on a security based on its purchase price or its current market price. This may be the amortized yield to maturity; on a bond, the current income return.

**REPURCHASE AGREEMENT (REPO)** – A holder of securities sells these securities to an investor with an agreement to repurchase them at a fixed price on a fixed date. The security "buyer" in effect lends the "seller" money for the period of the agreement, and the terms of the agreement are structured to compensate them for this.

**REVERSE REPURCHASE AGREEMENT (REVERSE REPO)** – A reverse-repurchase agreement (reverse repo) involves an investor borrowing cash from a financial institution in exchange for securities. The investor agrees to repurchase the securities at a specific date for the same cash value plus an agreed upon interest rate. Although the transaction is similar to repo, the purpose of entering into a reverse repo is quite different. While a repo is a straightforward investment of public funds, the reverse repo is a borrowing.

**SAFEKEEPING** – The service provided by banks and trust companies for clients when the bank or trust company stores the securities, takes in coupon payments, and redeems issues at maturity.

**SECURITIES & EXCHANGE COMMISSION (SEC)** – Agency created by Congress to protect investors in securities transactions by administering securities legislation.

**SEC RULE 15(C) 3-1** – See Uniform Net Capital Rule.

**SPREAD** – a) The yield or price difference between the bid and offer on an issue; b) the yield or price difference between different issues.

**SUPRANATIONALS** – International institutions formed by two or more governments that transcend boundaries to pursue mutually beneficial economic or social goals. There are three supranational institutions that issue obligations that are eligible investments for California local agencies: the International Bank for Reconstruction and Development (IBRD), International Finance Corporation (IFC), and Inter-American Development Bank (IADB).

**SWAP** – The sale of one issue and the simultaneous purchase of another for some perceived advantage.

**TREASURY BILLS** – A non-interest bearing discount security issued by the U.S. Treasury to finance the national debt. Most bills are issued to mature in three months, six months or one year.

**TREASURY BONDS** – U.S. Treasury securities that have initial maturities of more than 10 years.

**TREASURY NOTES** – Intermediate-term coupon bearing U.S. Treasury securities having initial maturities of from one year to ten years.

**TRUSTEE** – A financial institution with trust powers that acts in a fiduciary capacity for the benefit of the bondholders in enforcing the terms of the bond contract.

**UNIFORM NET CAPITAL RULE** – Securities and Exchange Commission requirement that member firms as well as nonmember broker-dealers in securities maintain a maximum ratio of indebtedness to liquid capital of 15 to 1; also called net capital rule and net capital ratio. Indebtedness covers all money owed to a firm, including margin loans and commitments to purchase securities, one reason new public issues are spread among members of underwriting syndicates. Liquid capital includes cash and assets easily converted into cash.

**WHEN ISSUED BASIS (WI)** – A term applied to securities that are traded before they are actually issued with the stipulation that transactions are null and void if securities are not issued.

**YIELD CURVE** – Yield calculations of various maturities at a given time to observe spread difference.

**YIELD TO MATURITY** – The current coupon yield minus any premium above par, or plus any discount from par in the purchase price with the adjustment spread over the period from date of purchase to maturity.

**Exhibit**

# BYLAWS OF THE INVESTMENT ADVISORY COMMITTEE OF THE CITY OF IRVINE

## ARTICLE I - PURPOSE

The purpose of the Investment Advisory Committee is to oversee the management of the investment portfolio through regular quarterly meetings. The Committee will review investment transactions, discuss economic conditions and strategies regarding the management of the portfolio, and report to individual Councilmembers on the meetings.

## ARTICLE II - STRUCTURE

The Committee shall be comprised of five members. Each Councilmember shall be responsible for appointing one member to the Committee with the term of the member running concurrent with the term of the Councilmember making the appointment.

The Chairperson and Vice Chairperson of the Committee shall be elected by a majority vote of the members and shall hold the seat for a one-year term. These positions may be elected for two consecutive terms. At the end of the second consecutive term, the members shall elect a new Chairperson and Vice Chairperson.

## ARTICLE III - MEETINGS

The meetings shall be held at least quarterly at Irvine City Hall. Each meeting shall be held prior to the presentation of the quarterly report to Council on the status of the portfolio. Three members of the Committee must be present to constitute a quorum.

## ARTICLE IV - PARLIAMENTARY PROCEDURE

The rules contained in the current edition of Robert's Rules of Order, newly revised, shall govern the Committee in all cases to which they are applicable and where they are not inconsistent with these Bylaws.

## ARTICLE V - AMENDMENT OF BYLAWS

These Bylaws may be amended by a majority vote of the Committee.

# 2.6

# REQUEST FOR CITY COUNCIL ACTION

**MEETING DATE:** DECEMBER 13, 2016

**TITLE:** RESOLUTION CONTINUING SUPPLEMENTAL MILITARY LEAVE BENEFITS FOR CITY EMPLOYEES CALLED INTO ACTIVE MILITARY DUTY

Assistant City Manager

City Manager

## RECOMMENDED ACTION

Adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, CONTINUING TEMPORARY SUPPLEMENTAL MILITARY BENEFITS, EFFECTIVE JANUARY 1, 2017, FOR FULL-TIME CITY EMPLOYEES CALLED INTO ACTIVE MILITARY DUTY

## EXECUTIVE SUMMARY

When an eligible employee is called to active military duty, federal and state laws require the City to fully pay for military leave and continue health benefits for a maximum of thirty calendar days per fiscal year. Since 2001, the Irvine City Council has adopted and maintained a resolution to provide supplemental benefits beyond the required 30 days.

This action seeks approval to continue Supplemental Military Leave benefits for employees called into active military duty through December 31, 2017.

## COMMISSION/BOARD/COMMITTEE RECOMMENDATION

Not applicable.

## ANALYSIS

The Uniformed Services Employment and Reemployment Rights Act and the California Military and Veteran's Code require employers to provide 30 days of paid leave, health and pension benefits to eligible employees called to active duty. The recommended action extends the aforementioned benefits beyond what is required by law through Supplemental Military Leave.

The pay each eligible employee receives under the Supplemental Military Leave benefits is the difference between the base salary they would have earned had they not been called to active military service and the gross pay received from the United States Government, exclusive of any housing allowance. The City also provides health insurance

benefits to the employee and the employee's dependents at the same level of contribution that the employee would have received from the City if he or she had not been called to active military service, provided the dependents were covered for those benefits prior to the employee being called into active military service.

## ALTERNATIVES CONSIDERED

The City Council could reject the recommended action, discontinue Supplemental Military Leave benefits, and provide only those benefits required by law (30 calendar days per fiscal year).

## FINANCIAL IMPACT

The cost of the Supplemental Military Leave benefits is dependent on the salary and benefits received by employees called to active duty. For the last three fiscal years, two employees utilized the benefit at a cost of $459 in FY 2015-16, $32,000 in FY 2014-15, and $19,000 in FY 2013-14. There is no year-to-date cost in FY 2016-17, as no employees have been called to active duty in a manner which resulted in the utilization of the Supplemental Military Leave benefit.

**REPORT PREPARED BY** Brian King, Human Resources Administrator

**ATTACHMENT** Supplemental Military Leave Benefits Resolution

CITY COUNCIL RESOLUTION NO. 16-XX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, CONTINUING TEMPORARY SUPPLEMENTAL MILITARY BENEFITS, EFFECTIVE JANUARY 1, 2017, FOR FULL-TIME CITY EMPLOYEES CALLED INTO ACTIVE MILITARY DUTY

WHEREAS, federal and state laws provide for fully paid military leave and continuation of benefits for eligible employees who are ordered to report to active military duty for a maximum of thirty (30) calendar days per fiscal year; and

WHEREAS, City employees may be called into active military service; and

WHEREAS, the City Council of the City of Irvine wishes to alleviate financial hardships, which employees and their families may experience as a result of being called into active duty.

NOW, THEREFORE, the City Council of the City of Irvine DOES HEREBY RESOLVE as follows:

SECTION 1. In addition to the military leave benefits provided by federal and state laws, each full-time employee of the City who has been or is called to active military duty with the Armed Forces of the United States, shall be entitled to temporary partial pay for military leave for the duration of this resolution.

SECTION 2. The amount of pay each such employee shall be entitled to receive from the City for said military leave shall be the difference between the gross pay and all allowances, exclusive of housing allowance, actually received by the employee from the United States for such services and the base salary that said employee would have received from the City if he or she had not been called to active military service, subject to all necessary and appropriate deductions and withholdings. If said employee works for the City during his or her military leave, payment for such services shall be deducted from any supplemental military pay to which the employee is entitled under these provisions.

SECTION 3. The City shall also provide continued health insurance benefits to the employee and the employee's dependents at the same level of contribution that the employee would have received from the City if he or she had not been called to active military service, provided that the dependents were covered for those benefits prior to the employee being called into active military duty. Life insurance, disability benefits and accrued leaves are not included in this provision.

SECTION 4. The City shall not pay any wage or benefit provided for in this resolution until and unless the employee who requests such payment provides

satisfactory proof and documentation of the call to service and eligibility for the payment in accordance with procedures established by the Personnel Officer.

SECTION 5. The pay and benefits authorized by this resolution shall be effective with the first full pay period that includes January 1, 2017, and shall terminate on the first full pay period following December 31, 2017, or otherwise required by law.

SECTION 6. That 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 13th day of December 2016.

_____
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 13th day of December 2016.

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

ABSTAIN: COUNCILMEMBERS:

_____
CITY CLERK OF THE CITY OF IRVINE

# 2.7

# REQUEST FOR CITY COUNCIL ACTION

**MEETING DATE:** DECEMBER 13, 2016

**TITLE:** ADOPTION OF AMENDMENTS TO CITY OF IRVINE CONFLICT OF INTEREST CODE AND ADOPT THE SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY'S 2016 BIENNIAL NOTICE

City Clerk

City Manager

**RECOMMENDED ACTION**

1) Adopt – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, AMENDING THE CITY'S CONFLICT OF INTEREST CODE AND LIST OF DESIGNATED EMPLOYEES

2) Adopt the City of Irvine as Successor Agency to the Dissolved Irvine Redevelopment Agency's 2016 Biennial Notice.

**EXECUTIVE SUMMARY**

The Political Reform Act (PRA) requires every local government agency to adopt and promulgate a conflict of interest code to provide for the filing of Statement of Economic Interests Form 700 by "designated employees" of the agency upon their appointment and annually thereafter. City Council Resolution No. 84-131 adopted the Fair Political Practices Commission's (FPPC) model conflict of interest code by reference and any future amendments duly adopted by the FPPC as the City's conflict of interest code. City Council Resolution No. 14-152 (Attachment 1) represents the City's current list of "designated employees" required to file Statement of Economic Interests Form 700.

Under FPPC regulations, the City Council serves as the code reviewing body for the City's conflict of interest code. The code reviewing body is required to review its conflict of interest code and list of "designated employees" biennially to determine if amendments are necessary. On September 27, 2016, the City Council received and filed the 2016 Local Agency Biennial Notice and directed staff to return with proposed amendments within 90 days. Staff is recommending adoption of the attached resolution to implement necessary amendments to update the City's list of "designated employees."

As noted in the Successor Agency's Resolution No. 12-05 (Attachment 2), the reviewing body for the Successor Agency's conflict of interest code shall be the City Council of the

City of Irvine. On September 27, 2016, the Successor Agency to the Dissolved Irvine Redevelopment Agency received and filed its 2016 Biennial Notice, citing no amendments required (Attachment 3). Staff is requesting that the City Council approve, as reviewing body, the Successor Agency to the Dissolved Irvine Redevelopment Agency's 2016 Biennial Notice.

## COMMISSION/BOARD/COMMITTEE RECOMMENDATION

The Successor Agency to the Dissolved Irvine Redevelopment Agency received and filed it 2016 Biennial Notice, citing no amendments required.

## ANALYSIS

City Council Resolution No. 84-131 adopted the FPPC's model conflict of interest code and any future amendments promulgated by the California Code of Regulations, Title 2, Section 18730 (Attachment 4). Appendix A of Resolution No. 14-152, represents the current list of "designated employees" that are required to file Statement of Economic Interests Form 700 under the City's conflict of interest code. The Political Reform Act defines a "designated employee" as an officer, employee or consultant whose position entails the making or participation in the making of governmental decisions that may foreseeably have a material effect on any financial interest. Appendix B defines the various categories of financial interests that must be disclosed and are assigned to a particular "designated employee" based upon job duties.

A thorough analysis of job duties has determined that the City's current list of designated filers requires amendments due to changes in position titles, the deletion of positions that do not meet the filing criteria or no longer exist, and the addition of positions deemed required to file by their respective Department Directors. The proposed resolution, with requested amendments to the list of designated filers and disclosure categories, are presented in Attachment 5 (bold print represents changes in position titles, added positions and assigned disclosure categories. Strikeouts represent positions that have been deleted or retitled since last review). The City Attorney, Department Directors and Human Resources Manager have reviewed all of the proposed revisions.

Positions listed in Government Code Section 87200 (i.e., City Councilmembers, Planning Commissioners, City Attorney, City Manager, and City Treasurer) are not considered "designated employees" and therefore, are not included in Appendix A. These positions are already identified and required to file Form 700 under Government Code Sections 87200-87210.

## ALTERNATIVES CONSIDERED

No other alternatives were considered. The biennial review of the City's conflict of interest code and list of designated employees is required by state law.

## FINANCIAL IMPACT

There is no financial impact related to the management of the City's conflict of interest code.

**REPORT PREPARED BY** Molly McLaughlin, City Clerk

## ATTACHMENTS

1. City Council Resolution No. 14-152
2. Successor Agency to the Dissolved Irvine Redevelopment Agency's Resolution 12-05
3. September 27, 2016 Staff Report and 2016 Local Agency Biennial Notice for the Successor Agency to the Dissolved Irvine Redevelopment Agency w/attachments
4. California Code of Regulations – Title 2, Section 18730
5. Proposed Resolution including Appendices A and B with redlined proposed amendments

CITY COUNCIL RESOLUTION NO. 14-152

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, AMENDING THE CITY'S CONFLICT OF INTEREST CODE AND LIST OF DESIGNATED EMPLOYEES

WHEREAS, the Political Reform Act of 1974, Government Code Section 81000 et seq., requires every state or local government agency to adopt a Conflict of Interest Code, and to conduct an biennial review of the code and list of designated positions; and

WHEREAS, the City Council has previously adopted the model Conflict of Interest Code promulgated by the Fair Political Practices Commission (FPPC) under California Code of Regulations, Title 2, Section 18730 and all future amendments duly adopted by the FPPC with approval of City Council Resolution 84-131 adopted on November 13, 1984; and

WHEREAS, Appendix A of Resolution 84-131 representing the list of designated positions required to file statements of economic interests has been revised as a result of subsequent biennial reviews; and

WHEREAS, Resolution No. 12-140, Appendix A represents the City's current list of designated positions that are required to file statements of economic interests, and Appendix B represents the descriptions of disclosure categories; and

WHEREAS, after conducting a biennial review of the list of designated positions and due to changes in the City's organizational structure, it has been determined that Appendix A of Resolution No. 12-140 require amendments.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF IRVINE DOES HEREBY RESOLVE AS FOLLOWS:

Section 1. Pursuant to the Political Reform Act of 1974, Government Code Section 87300 et seq., and Section 18730 of Title 2 of the California Code of Regulations, the City Council adopts the model conflict of interest code promulgated by the Fair Political Practices Commission of the State of California as set forth in Section 18730 of Title 2 of the California Code of Regulations, which model conflict of interest code is incorporated herein by reference, and which, together with the list of designated positions and the disclosure categories applicable to each designated position as set forth in Appendix A and B of this Resolution, collectively constitutes the City of Irvine's conflict of interest code. As the model conflict of interest code set forth in Section 18730 of Title 2 of the California Code of Regulations is amended from time to time by State law, regulatory action of the Fair Political Practices Commission, or judicial determination, the portion of the Board's conflict of interest code comprising the model conflict of interest code shall be deemed automatically amended without further action to incorporate by reference all such amendments to the model conflict of interest code so as to remain in compliance therewith. Nothing in this Resolution shall supersede the independent applicability of Government Code Section 87200.

Section 2. The definitions contained in the Political Reform Act of 1974 and in the regulations of the Fair Political Practices Commission, and any amendments to either of the foregoing, are incorporated by reference into this conflict of interest code.

Section 3. The City Council finds and determines that the persons who hold the designated positions set forth in Appendix A, attached to and made part of this resolution, make or participate in the making of decisions which may foreseeably have a material effect on their financial interests, and shall file statements of economic interests pursuant to the requirements of the City of Irvine conflict of interest code.

Section 4. That persons holding designated positions shall disclose their economic interests according to the assigned disclosure categories set forth in Appendix B, attached to and made part of this resolution.

Section 5. Resolution No. 84-131 and prior City Council Resolutions designating the positions of persons required to file Statements of Economic Interests and their assigned disclosure categories are hereby repealed.

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 9th day of December, 2014.

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 9th day of December, 2014.

| | | | |
|---|---|---|---|
| AYES: | 4 | COUNCILMEMBERS: | Krom, Lalloway, Shea and Choi |
| NOES: | 0 | COUNCILMEMBERS: | None |
| ABSENT: | 1 | COUNCILMEMBERS: | Agran |

CITY CLERK OF THE CITY OF IRVINE

## APPENDIX A

| POSITION/TITLE | DISCLOSURE CATEGORY |
|---|---|
| Animal Care Center Supervisor | 3,4,5,6,7 |
| Animal Care Center Veterinarian | 3,4,5,6,7 |
| Aquatics Supervisor | 3,4,5,6,7 |
| Armorer | 6,7 |
| Assistant City Attorney | 1,2 |
| Assistant City Clerk | 3,4,5,6,7 |
| Assistant City Manager | 1,2 |
| Assistant City Manager, Great Park | 1,2 |
| Assistant Planner | 3,4,5,6,7 |
| Assistant to the City Manager | 1,2 |
| Assistant Transportation Analyst | 3,4,5,6,7 |
| Associate Engineer | 3,4,5,6,7 |
| Associate Plan Check Engineer | 3,4,5,6,7 |
| Associate Planner | 3,4,5,6,7 |
| Associate Transportation Analyst | 3,4,5,6,7 |
| Budget Officer | 1,2 |
| Building Inspector | 3,4,5,6,7 |
| Building Inspection Supervisor | 3,4,5,6,7 |
| Business Services Administrator | 3,4,5,6,7 |
| Buyer | 4,6,7 |
| City Clerk | 1,2 |
| City Engineer | 1,2 |
| Clerk of the Board | 1,2 |
| Code Enforcement Supervisor | 3,4,5,6,7 |
| Communications Bureau Supervisor | 1,2 |
| Community Development Project Administrator | 1,2 |
| Community Services Superintendent | 3,4,5,6,7 |
| Community Services Supervisor | 3,4,5,6,7 |
| Construction Inspector | 3,4,5,6,7 |
| Construction Inspection Supervisor | 3,4,5,6,7 |
| Council Executive Assistant I, II, III, IV (excluding interns) | 1,2 |
| Council Services Manager | 1,2 |
| Deputy Building Official | 1,2 |
| Deputy City Attomey | 1,2 |
| Deputy Director, Community Development | 1,2 |
| Deputy Director of Community Services | 1,2 |
| Deputy Director Public Safety/Police Chief | 1,2 |
| Deputy Director of Public Works | 1,2 |

| POSITION/TITLE | DISCLOSURE CATEGORY |
|---|---|
| Director of Administrative Services | 1,2 |
| Director of Community Development | 1,2 |
| Director of Community Services | 1,2 |
| Director of Public Affairs and Communications | 1,2 |
| Director of Public Safety/Chief of Police | 1,2 |
| Director of Public Works | 1,2 |
| Emergency Management Coordinator | 6,7 |
| Engineering Geologist | 3,4,5,6,7 |
| Environmental Program Administrator | 1,2 |
| Facilities Construction Administrator | 1,2 |
| Facilities Maintenance Specialist | 3,4,5,6,7 |
| Facilities Maintenance Superintendent | 3,4,5,6,7 |
| Facilities Maintenance Supervisor | 3,4,5,6,7 |
| Finance Administrator | 1,2 |
| Fleet Services Superintendent | 3,4,5,6,7 |
| Fleet Services Supervisor | 3,4,5,6,7 |
| General Counsel – Irvine Community Land Trust | 1,2 |
| Human Resources Administrator | 1,2 |
| Human Resources Analyst I | 4,5,6,7 |
| Human Resources Analyst II | 4,5,6,7 |
| Information Technology Administrator | 1,2 |
| Landscape Contract Specialist | 3,4,5,6,7 |
| Landscape Maintenance Specialist | 3,4,5,6,7 |
| Landscape Maintenance Superintendent | 3,4,5,6,7 |
| Landscape Maintenance Supervisor | 3,4,5,6,7 |
| Lead Equipment Mechanic | 3,4,5,6,7 |
| Lead Facilities Maintenance Technician | 3,4,5,6,7 |
| Lead Landscape Maintenance Technician | 3,4,5,6,7 |
| Lead Permit Specialist | 3,4,5,6,7 |
| Lead Street Maintenance Technician | 3,4,5,6,7 |
| Management Analyst I | 4,5,6,7 |
| Management Analyst II | 4,5,6,7 |
| Manager, Advance Planning | 1,2 |
| Manager, Building & Safety/Chief Building Official | 1,2 |
| Manager, Budget and Business Planning | 1,2 |
| Manager, Business Services | 1,2 |
| Manager, Community Services | 1,2 |
| Manager, Engineering | 1,2 |
| Manager, Facilities Maintenance & Rehabilitation | 1,2 |
| Manager, Fiscal Services | 1,2 |
| Manager, Housing | 1,2 |
| Manager, Human Resources | 1,2 |
| Manager, Land and Assets | 1,2 |

| POSITION/TITLE | DISCLOSURE CATEGORY |
|---|---|
| Manager, Public Communications | 1,2 |
| Manager, Public Services | 1,2 |
| Manager, Transit and Transportation | 1,2 |
| Master Facilities Maintenance Specialist | 3,4,5,6,7 |
| Municipal Records Administrator | 1,2 |
| Payroll Process Analyst | 3,4,5,6,7 |
| Permit Services Supervisor | 3,4,5,6,7 |
| Plans Examiner | 3,4,5,6,7 |
| Police Commander | 1,2 |
| Police Lieutenant | 1,2 |
| Press Information Officer, IPD | 1,2 |
| Principal Plan Check Engineer | 3,4,5,6,7 |
| Principal Planner | 1,2 |
| Program Specialist | 6,7 |
| Project Development Administrator | 1,2 |
| Public Information Officer | 1,2 |
| Public Safety Records Supervisor | 6,7 |
| Public Safety Technology Analyst | 6,7 |
| Purchasing/Contracts Administrator | 1,2 |
| Registered Veterinarian Technician | 3,4,5,6,7 |
| Regulatory Affairs Supervisor | 6,7 |
| Right-of-Way Administrator | 3,4,5,6,7 |
| Risk Management Administrator | 1,2 |
| Senior Building Inspector | 3,4,5,6,7 |
| Senior Buyer/Contracts Coordinator | 4,6,7 |
| Senior Civil Engineer | 3,4,5,6,7 |
| Senior Code Enforcement Inspector | 3,4,5,6,7 |
| Senior Construction Inspector | 3,4,5,6,7 |
| Senior Council Executive Assistant | 1,2 |
| Senior Crime Analyst | 4,5,6,7 |
| Senior Human Resources Analyst | 4,5,6,7 |
| Senior Management Analyst | 4,5,6,7 |
| Senior Permit Specialist | 3,4,5,6,7 |
| Senior Plan Check Engineer | 3,4,5,6,7 |
| Senior Planner | 3,4,5,6,7 |
| Senior Project Manager | 3,4,5,6,7 |
| Senior Transportation Analyst | 3,4,5,6,7 |
| Senior Transportation Engineer | 3,4,5,6,7 |
| Social Services Supervisor/Counselor | 3,4,5,6,7 |
| Special Assistant to the Chief of Police | 1,2 |
| Street Maintenance Specialist | 3,4,5,6,7 |
| Street Maintenance Superintendent | 3,4,5,6,7 |
| Street Maintenance Supervisor | 3,4,5,6,7 |
| Supervising Transportation Analyst | 3,4,5,6,7 |

| POSITION/TITLE | DISCLOSURE CATEGORY |
|---|---|
| Supervisor of Accounting Services | 1,2 |
| Transit Programs Administrator | 1,2 |
| Water Quality Administrator | 3,4,5,6,7 |
| Zoning Administrator | 1,2 |

| BOARDS, COMMISSIONS & COMMITTEES | DISCLOSURE CATEGORY |
|---|---|
| Appeals Board Member | 1,2 |
| Community Services Commissioner | 1,2 |
| Finance Commissioner | 1,2 |
| Industrial Development Authority Board Member | 1,2 |
| Irvine Community Land Trust Board Member | 1,2 |
| Irvine Public Facilities and Infrastructure Authority Board Member | 1,2 |
| Irvine Public Facilities Corporation Member | 1,2 |
| Investment Advisory Committee Member | 1,2 |
| Orange County Great Park Corporation Board Member | 1,2 |

**CONTRACT EMPLOYEES**: If a designated position is filled by a contract employee (full or part-time) the contract employee has a filing obligation.

**CONSULTANTS**: Consultants shall be included in the list of designated employees and shall disclose pursuant to the broadest disclosure category in the code subject to the following limitation:

The Department Director, with concurrence by the City Manager, may determine in writing that a particular consultant, although a "designated position," is hired to perform a range of duties that is limited in scope and thus is not required to fully comply with the disclosure requirements in this section. Such written determination shall include description of the consultant's duties and, based upon that description, a statement of the extent of disclosure requirements. The Department Director's determination, with concurrence of the City Manager, is public record and shall be retained for public inspection in the same manner and location as this Conflict of Interest Code.

**Note:** The Mayor, City Council Members, City Manager, City Attorney, City Treasurer and Planning Commissioners are not included as designated positions because those officials are required by the Political Reform Act to file broad statements of economic interest with the Fair Political Practices Commission and in conformance with Government Code Section 87200.

## APPENDIX B

Category 1: All investments, business positions and sources of income, including gifts, loans and travel payments.

Category 2: All interests in real property.

Category 3: All investments, business positions, interests in real property and sources of income, including gifts, loans and travel payments subject to the regulatory, permit or licensing authority of the department.

Category 4: Investments in business entities, business positions and sources of income, including gifts, loans and travel payments which engage in land development, construction or the acquisition or sale of real property.

Category 5: Interests in real property located within two miles of any land owned or used by the City of Irvine.

Category 6: Investments in business entities, business positions and sources of income, including gifts, loans and travel payments of the type which, within the past two years, have contracted with the City of Irvine to provide services, supplies, materials, machinery or equipment.

Category 7: Investments in business entities, business positions and sources of income, including gifts, loans and travel payments of the type which, within the past two years, have contracted with the designated employee's department to provide services, supplies, materials, machinery or equipment.

SUCCESSOR AGENCY RESOLUTION NO. 12-05

A RESOLUTION OF THE SUCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY ADOPTING A CONFLICT OF INTEREST CODE

WHEREAS, the Successor Agency to the dissolved Irvine Redevelopment Agency (Successor Agency) is deemed a separate public entity apart from the City of Irvine which provides its governance; and

WHEREAS, pursuant to the Political Reform Act and regulations promulgated thereunder by the Fair Political Practices Commission ("FPPC"), a newly established local entity is required to adopt a conflict of interest code; and

WHEREAS, the Successor Agency finds and determines that it is appropriate to adopt as its conflict of interest code the model conflict of interest code promulgated by the FPPC as set forth in this Resolution.

NOW, THEREFORE, BE IT RESOLVED by the Successor Agency as follows:

SECTION 1. Pursuant to the Political Reform Act of 1974, Government Code Section 87300 et seq., and Section 18730 of Title 2 of the California Code of Regulations, the Board adopts the model conflict of interest code promulgated by the Fair Political Practices Commission of the State of California as set forth in Section 18730 of Title 2 of the California Code of Regulations, which model conflict of interest code is incorporated herein by reference, and which, together with the list of designated positions and the disclosure categories applicable to each designated position as set forth in Sections 3 and 6 of this Resolution, collectively constitutes the Board's conflict of interest code. As the model conflict of interest code set forth in Section 18730 of Title 2 of the California Code of Regulations is amended from time to time by State law, regulatory action of the Fair Political Practices Commission, or judicial determination, the portion of the Board's conflict of interest code comprising the model conflict of interest code shall be deemed automatically amended without further action to incorporate by reference all such amendments to the model conflict of interest code so as to remain in compliance therewith. Nothing in this Resolution shall supersede the independent applicability of Government Code Section 87200.

SECTION 2. The definitions contained in the Political Reform Act of 1974 and in the regulations of the Fair Political Practices Commission, and any amendments to either of the foregoing, are incorporated by reference into this conflict of interest code.

SECTION 3. The following are the designated positions, the holders of which shall be required to file statements of economic interests: Successor Agency Boardmembers, the Executive Director of the Successor Agency, the Assistance Executive Director, General Counsel to the Successor Agency, Manager of Fiscal Services and the Board Secretary.

SECTION 4. The code reviewing body for this conflict of interest code shall be the City Council of the City of Irvine. This conflict of interest code shall be promptly submitted after its adoption by the Secretary to the City Clerk for City Council approval. Statements of economic interests shall be filed by the holders of designated positions with the City Clerk of the City of Irvine.

SECTION 5. The Board finds and determines that the persons holding the positions set forth in Section 3 make or participate in the making of decisions which may foreseeably have a material effect on financial interests.

SECTION 6. Each person holding a designated position set forth in Section 3 shall report in every disclosure category set forth in the statement of economic interests promulgated by the FPPC to the extent such category is applicable to such person pursuant to the rules and regulations of the FPPC. The disclosure categories as promulgated by the FPPC may be amended from time to time and such amendments shall not require an amendment to this code or Resolution.

SECTION 7. Sections 3 and 6 of this Resolution constitute the Appendix referred to in subdivision (b)(2) of Section 18730 of Title 2 of the California Code of Regulations.

SECTION 8. Nothing contained in this Resolution is intended to modify or abridge the provisions of the Political Reform Act of 1974, Government Code Section 87000 et seq., or FPPC the regulations, Title 2 California Code of Regulations including Sections 18700 et seq. The provisions of this Resolution are additional to the Political Reform Act and FPPC Regulations. This Resolution shall be interpreted in a manner consistent with the Political Reform Act and FPPC regulations. In the event of any inconsistency between the provisions of this Resolution, on the one hand, and the Political Reform Act and/or the FPPC regulations, on the other hand, the provisions of the Political Reform Act and FPPC regulations shall govern.

SECTION 9. If any section, subsection, sentence, clause, or phrase of this Resolution is for any reason held by a court of competent jurisdiction to be invalid, such decision shall not affect the validity of the remaining portions of this Resolution. The Board hereby declares that it would have adopted this Resolution and each section, subsection, sentence, clause, or phrase thereof irrespective of the fact that any one or more section, subsection, sentence, clause, or phrase be declared invalid.

PASSED AND ADOPTED by the Successor Agency at an adjourned regular meeting held on the 27th day of November, 2012.

CHAIR, SUCCESSOR AGENCY

ATTEST:

SECRETARY

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

I, SHARIE APODACA, Secretary to the Successor Agency, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at an adjourned regular meeting of the Successor Agency held on the 27th day of November, 2012.

| | | | |
|---|---|---|---|
| AYES: | 5 | BOARD MEMBERS: | Agran, Choi, Krom, Lalloway and Kang |
| NOES: | 0 | BOARD MEMBERS: | None |
| ABSENT: | 0 | BOARD MEMBERS: | None |

SECRETARY, SUCCESSOR AGENCY

# REQUEST FOR ACTION BY SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOMENT AGENCY

**MEETING DATE:** September 27, 2016

**TITLE:** 2016 LOCAL AGENCY BIENNIAL NOTICE FOR THE SUCCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY

City Clerk

City Manager

## RECOMMENDED ACTION

Receive and file the Fair Political Practices Commission 2016 Local Agency Biennial Notice for the conflict of interest code for Successor Agency to the Dissolved Irvine Redevelopment Agency.

## EXECUTIVE SUMMARY

The Political Reform Act requires every local government agency to adopt and promulgate a conflict of interest code to provide for the filing of Statement of Economic Interests by "designated employees" of the agency upon their appointment and annually thereafter. The Successor Agency to the Dissolved Irvine Redevelopment Agency (Successor Agency) Resolution No. 12-05 represents the Successor Agency's current conflict of interest code.

Every local government agency is required to review its conflict of interest code and list of "designated employees" biennially to determine if amendments are necessary. Any proposed amendments to the conflict of interest code must be approved by the Successor Agency.

## COMMISSION/BOARD/COMMITTEE RECOMMENDATION

Not applicable.

## ANALYSIS

Biennial Notice and Review

Fair Political Practices Commission (FPPC) regulations require a biennial review of an agency's conflict of interest code and list of "designated employees" to determine if the current list of designated filers requires amendments due to changes in position titles, positions that may no longer exist and the creation of new positions that meet the

definition of a "designated employee." The 2016 Local Agency Biennial Notice must be received and filed by the City Council no later than October 1, 2016. Any proposed amendments to the code must be forwarded to the City Council for approval within 90 days thereafter.

Staff recommends that the Successor Agency receive and file the FPPC 2016 Local Agency Biennial Notice that reflects no proposed amendments. As noted in Resolution No. 12-05 (Attachment 1), the code reviewing body for the Successor Agency's conflict of interest code shall be the City Council of the City of Irvine. Following the receipt and filing of the proposed 2016 Biennial Notice (Attachment 2), the Successor Agency's conflict of interest code will be submitted to the City Council for approval at the December 13, 2016, City Council meeting.

Statements of economic interests shall be filed by the holders of the designated positions with the City Clerk. These positions include Successor Agency Boardmembers, the Executive Director of the Successor Agency, the Assistant Executive Director, General Counsel to the Successor Agency, Manager of Fiscal Services and Board Secretary. No positions have been added or removed, therefore staff recommends the filing of the 2016 Biennial Notice with no amendments required.

**ALTERNATIVES CONSIDERED**

No alternatives were considered as the biennial review of the conflict of interest codes are required by state law.

**FINANCIAL IMPACT**

There is no fiscal impact. The Board Members of the Successor Agency shall serve without compensation unless otherwise authorized by law.

**REPORT PREPARED BY** Molly McLaughlin, City Clerk

**ATTACHMENTS**

1. Resolution No. 12-05, Successor Agency Conflict of Interest Code
2. 2016 Local Agency Biennial Notice

SUCCESSOR AGENCY RESOLUTION NO. 12-05

A RESOLUTION OF THE SUCESSOR AGENCY TO THE DISSOLVED IRVINE REDEVELOPMENT AGENCY ADOPTING A CONFLICT OF INTEREST CODE

WHEREAS, the Successor Agency to the dissolved Irvine Redevelopment Agency (Successor Agency) is deemed a separate public entity apart from the City of Irvine which provides its governance; and

WHEREAS, pursuant to the Political Reform Act and regulations promulgated thereunder by the Fair Political Practices Commission ("FPPC"), a newly established local entity is required to adopt a conflict of interest code; and

WHEREAS, the Successor Agency finds and determines that it is appropriate to adopt as its conflict of interest code the model conflict of interest code promulgated by the FPPC as set forth in this Resolution.

NOW, THEREFORE, BE IT RESOLVED by the Successor Agency as follows:

SECTION 1. Pursuant to the Political Reform Act of 1974, Government Code Section 87300 et seq., and Section 18730 of Title 2 of the California Code of Regulations, the Board adopts the model conflict of interest code promulgated by the Fair Political Practices Commission of the State of California as set forth in Section 18730 of Title 2 of the California Code of Regulations, which model conflict of interest code is incorporated herein by reference, and which, together with the list of designated positions and the disclosure categories applicable to each designated position as set forth in Sections 3 and 6 of this Resolution, collectively constitutes the Board's conflict of interest code. As the model conflict of interest code set forth in Section 18730 of Title 2 of the California Code of Regulations is amended from time to time by State law, regulatory action of the Fair Political Practices Commission, or judicial determination, the portion of the Board's conflict of interest code comprising the model conflict of interest code shall be deemed automatically amended without further action to incorporate by reference all such amendments to the model conflict of interest code so as to remain in compliance therewith. Nothing in this Resolution shall supersede the independent applicability of Government Code Section 87200.

SECTION 2. The definitions contained in the Political Reform Act of 1974 and in the regulations of the Fair Political Practices Commission, and any amendments to either of the foregoing, are incorporated by reference into this conflict of interest code.

SECTION 3. The following are the designated positions, the holders of which shall be required to file statements of economic interests: Successor Agency Boardmembers, the Executive Director of the Successor Agency, the Assistance Executive Director, General Counsel to the Successor Agency, Manager of Fiscal Services and the Board Secretary.

SECTION 4. The code reviewing body for this conflict of interest code shall be the City Council of the City of Irvine. This conflict of interest code shall be promptly submitted after its adoption by the Secretary to the City Clerk for City Council approval. Statements of economic interests shall be filed by the holders of designated positions with the City Clerk of the City of Irvine.

SECTION 5. The Board finds and determines that the persons holding the positions set forth in Section 3 make or participate in the making of decisions which may foreseeably have a material effect on financial interests.

SECTION 6. Each person holding a designated position set forth in Section 3 shall report in every disclosure category set forth in the statement of economic interests promulgated by the FPPC to the extent such category is applicable to such person pursuant to the rules and regulations of the FPPC. The disclosure categories as promulgated by the FPPC may be amended from time to time and such amendments shall not require an amendment to this code or Resolution.

SECTION 7. Sections 3 and 6 of this Resolution constitute the Appendix referred to in subdivision (b)(2) of Section 18730 of Title 2 of the California Code of Regulations.

SECTION 8. Nothing contained in this Resolution is intended to modify or abridge the provisions of the Political Reform Act of 1974, Government Code Section 87000 et seq., or FPPC the regulations, Title 2 California Code of Regulations including Sections 18700 et seq. The provisions of this Resolution are additional to the Political Reform Act and FPPC Regulations. This Resolution shall be interpreted in a manner consistent with the Political Reform Act and FPPC regulations. In the event of any inconsistency between the provisions of this Resolution, on the one hand, and the Political Reform Act and/or the FPPC regulations, on the other hand, the provisions of the Political Reform Act and FPPC regulations shall govern.

SECTION 9. If any section, subsection, sentence, clause, or phrase of this Resolution is for any reason held by a court of competent jurisdiction to be invalid, such decision shall not affect the validity of the remaining portions of this Resolution. The Board hereby declares that it would have adopted this Resolution and each section, subsection, sentence, clause, or phrase thereof irrespective of the fact that any one or more section, subsection, sentence, clause, or phrase be declared invalid.

PASSED AND ADOPTED by the Successor Agency at an adjourned regular meeting held on the 27th day of November, 2012.

CHAIR, SUCCESSOR AGENCY

ATTEST:

SECRETARY

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

I, SHARIE APODACA, Secretary to the Successor Agency, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at an adjourned regular meeting of the Successor Agency held on the 27th day of November, 2012.

| | | | |
|---|---|---|---|
| AYES: | 5 | BOARD MEMBERS: | Agran, Choi, Krom, Lalloway and Kang |
| NOES: | 0 | BOARD MEMBERS: | None |
| ABSENT: | 0 | BOARD MEMBERS: | None |

SECRETARY, SUCCESSOR AGENCY

# 2016 Local Agency Biennial Notice

Name of Agency: Successor Agency to the Dissolved Irvine Redevelopment Agency

Mailing Address: 1 Civic Center Plaza, Irvine, CA 92606-5207

Contact Person: Molly McLaughlin, Board Secretary Phone No. (949) 724-6205

Email: mollymclaughlin@cityofirvine.org Alternate Email: N/A

**Accurate disclosure is essential to monitor whether officials have conflicts of interest and to help ensure public trust in government. The biennial review examines current programs to ensure that the agency's code includes disclosure by those agency officials who make or participate in making governmental decisions.**

This agency has reviewed its conflict of interest code and has determined that *(check one BOX):*

☐ **An amendment is required. The following amendments are necessary:**

*(Check all that apply.)*

- ○ Include new positions
- ○ Revise disclosure categories
- ○ Revise the titles of existing positions
- ○ Delete titles of positions that have been abolished and/or positions that no longer make or participate in making governmental decisions
- ○ Other *(describe)* _____

☐ **The code is currently under review by the code reviewing body.**

☑ **No amendment is required.** (If your code is over five years old, amendments may be necessary.)

---

**Verification (to be completed if no amendment is required)**

*This agency's code accurately designates all positions that make or participate in the making of governmental decisions. The disclosure assigned to those positions accurately requires that all investments, business positions, interests in real property, and sources of income that may foreseeably be affected materially by the decisions made by those holding designated positions are reported. The code includes all other provisions required by Government Code Section 87302.*

Steve Joyce 10-3-16

*Signature of Chief Executive Officer* *Date*

All agencies must complete and return this notice regardless of how recently your code was approved or amended. Please return this notice no later than **October 3, 2016**, or by the date specified by your agency, if earlier, to:

City of Irvine
Attn: City Clerk
1 Civic Center Plaza
Irvine, CA 92606

**PLEASE DO NOT RETURN THIS FORM TO THE FPPC.**



Attachment 2 to Staff Report Dated 09/27/16

(Regulations of the Fair Political Practices Commission, Title 2, Division 6, California Code of **Regulations.)**

**§ 18730. Provisions of Conflict of Interest Codes.**

(a) Incorporation by reference of the terms of this regulation along with the designation of employees and the formulation of disclosure categories in the Appendix referred to below constitute the adoption and promulgation of a conflict of interest code within the meaning of Section 87300 or the amendment of a conflict of interest code within the meaning of Section 87306 if the terms of this regulation are substituted for terms of a conflict of interest code already in effect. A code so amended or adopted and promulgated requires the reporting of reportable items in a manner substantially equivalent to the requirements of article 2 of chapter 7 of the Political Reform Act, Sections 81000, et seq . The requirements of a conflict of interest code are in addition to other requirements of the Political Reform Act, such as the general prohibition against conflicts of interest contained in Section 87100, and to other state or local laws pertaining to conflicts of interest.

(b) The terms of a conflict of interest code amended or adopted and promulgated pursuant to this regulation are as follows:

(1) Section 1. Definitions.

The definitions contained in the Political Reform Act of 1974, regulations of the Fair Political Practices Commission (Regulations 18110, et seq.), and any amendments to the Act or regulations, are incorporated by reference into this conflict of interest code.

(2) Section 2. Designated Employees.

The persons holding positions listed in the Appendix are designated employees. It has been determined that these persons make or participate in the making of decisions which may foreseeably have a material effect on economic interests.

(3) Section 3. Disclosure Categories.

This code does not establish any disclosure obligation for those designated employees who are also specified in Section 87200 if they are designated in this code in that same capacity or if the geographical jurisdiction of this agency is the same as or is wholly included within the jurisdiction in which those persons must report their economic interests pursuant to article 2 of chapter 7 of the Political Reform Act, Sections 87200, et seq .

In addition, this code does not establish any disclosure obligation for any designated employees who are designated in a conflict of interest code for another agency, if all of the following apply:

(A) The geographical jurisdiction of this agency is the same as or is wholly included within the jurisdiction of the other agency;

(B) The disclosure assigned in the code of the other agency is the same as that required under article 2 of chapter 7 of the Political Reform Act, Section 87200; and

(C) The filing officer is the same for both agencies. [1]

Such persons are covered by this code for disqualification purposes only. With respect to all other designated employees, the disclosure categories set forth in the Appendix specify which kinds of economic interests are reportable. Such a designated employee shall disclose in his or her statement of economic interests those economic interests he or she has which are of the kind described in the disclosure categories to which he or she is assigned in the Appendix. It has been determined that the economic interests set forth in a designated employee's disclosure categories

are the kinds of economic interests which he or she foreseeably can affect materially through the conduct of his or her office.

(4) Section 4. Statements of Economic Interests: Place of Filing.

The code reviewing body shall instruct all designated employees within its code to file statements of economic interests with the agency or with the code reviewing body, as provided by the code reviewing body in the agency's conflict of interest code. [2]

(5) Section 5. Statements of Economic Interests: Time of Filing.

(A) Initial Statements. All designated employees employed by the agency on the effective date of this code, as originally adopted, promulgated and approved by the code reviewing body, shall file statements within 30 days after the effective date of this code. Thereafter, each person already in a position when it is designated by an amendment to this code shall file an initial statement within 30 days after the effective date of the amendment.

(B) Assuming Office Statements. All persons assuming designated positions after the effective date of this code shall file statements within 30 days after assuming the designated positions, or if subject to State Senate confirmation, 30 days after being nominated or appointed.

(C) Annual Statements. All designated employees shall file statements no later than April 1. If a person reports for military service as defined in the Servicemember's Civil Relief Act, the deadline for the annual statement of economic interests is 30 days following his or her return to office, provided the person, or someone authorized to represent the person's interests, notifies the filing officer in writing prior to the applicable filing deadline that he or she is subject to that federal statute and is unable to meet the applicable deadline, and provides the filing officer verification of his or her military status.

(D) Leaving Office Statements. All persons who leave designated positions shall file statements within 30 days after leaving office.

(5.5) Section 5.5. Statements for Persons Who Resign Prior to Assuming Office.

Any person who resigns within 12 months of initial appointment, or within 30 days of the date of notice provided by the filing officer to file an assuming office statement, is not deemed to have assumed office or left office, provided he or she did not make or participate in the making of, or use his or her position to influence any decision and did not receive or become entitled to receive any form of payment as a result of his or her appointment. Such persons shall not file either an assuming or leaving office statement.

(A) Any person who resigns a position within 30 days of the date of a notice from the filing officer shall do both of the following:

(1) File a written resignation with the appointing power; and

(2) File a written statement with the filing officer declaring under penalty of perjury that during the period between appointment and resignation he or she did not make, participate in the making, or use the position to influence any decision of the agency or receive, or become entitled to receive, any form of payment by virtue of being appointed to the position.

(6) Section 6. Contents of and Period Covered by Statements of Economic Interests.

(A) Contents of Initial Statements.

Initial statements shall disclose any reportable investments, interests in real property and business positions held on the effective date of the code and income received during the 12 months prior to the effective date of the code.

(B) Contents of Assuming Office Statements.

Assuming office statements shall disclose any reportable investments, interests in real property and business positions held on the date of assuming office or, if subject to State Senate confirmation or appointment, on the date of nomination, and income received during the 12 months prior to the date of assuming office or the date of being appointed or nominated, respectively.

(C) Contents of Annual Statements. Annual statements shall disclose any reportable investments, interests in real property, income and business positions held or received during the previous calendar year provided, however, that the period covered by an employee's first annual statement shall begin on the effective date of the code or the date of assuming office whichever is later, or for a board or commission member subject to Section 87302.6, the day after the closing date of the most recent statement filed by the member pursuant to Regulation 18754.

(D) Contents of Leaving Office Statements.

Leaving office statements shall disclose reportable investments, interests in real property, income and business positions held or received during the period between the closing date of the last statement filed and the date of leaving office.

(7) Section 7. Manner of Reporting.

Statements of economic interests shall be made on forms prescribed by the Fair Political Practices Commission and supplied by the agency, and shall contain the following information:

(A) Investment and Real Property Disclosure.

When an investment or an interest in real property [3] is required to be reported, [4] the statement shall contain the following:

1. A statement of the nature of the investment or interest;

2. The name of the business entity in which each investment is held, and a general description of the business activity in which the business entity is engaged;

3. The address or other precise location of the real property;

4. A statement whether the fair market value of the investment or interest in real property equals or exceeds $2,000, exceeds $10,000, exceeds $100,000, or exceeds $1,000,000.

(B) Personal Income Disclosure. When personal income is required to be reported, [5] the statement shall contain:

1. The name and address of each source of income aggregating $500 or more in value, or $50 or more in value if the income was a gift, and a general description of the business activity, if any, of each source;

2. A statement whether the aggregate value of income from each source, or in the case of a loan, the highest amount owed to each source, was $1,000 or less, greater than $1,000, greater than $10,000, or greater than $100,000;

3. A description of the consideration, if any, for which the income was received;

4. In the case of a gift, the name, address and business activity of the donor and any intermediary through which the gift was made; a description of the gift; the amount or value of the gift; and the date on which the gift was received;

5. In the case of a loan, the annual interest rate and the security, if any, given for the loan and the term of the loan.

(C) Business Entity Income Disclosure. When income of a business entity, including income of a sole proprietorship, is required to be reported, [6] the statement shall contain:

1. The name, address, and a general description of the business activity of the business entity;

2. The name of every person from whom the business entity received payments if the filer's pro rata share of gross receipts from such person was equal to or greater than $10,000.

(D) Business Position Disclosure. When business positions are required to be reported, a designated employee shall list the name and address of each business entity in which he or she is a director, officer, partner, trustee, employee, or in which he or she holds any position of management, a description of the business activity in which the business entity is engaged, and the designated employee's position with the business entity.

(E) Acquisition or Disposal During Reporting Period. In the case of an annual or leaving office statement, if an investment or an interest in real property was partially or wholly acquired or disposed of during the period covered by the statement, the statement shall contain the date of acquisition or disposal.

(8) Section 8. Prohibition on Receipt of Honoraria.

(A) No member of a state board or commission, and no designated employee of a state or local government agency, shall accept any honorarium from any source, if the member or employee would be required to report the receipt of income or gifts from that source on his or her statement of economic interests. This section shall not apply to any part-time member of the governing board of any public institution of higher education, unless the member is also an elected official.

Subdivisions (a), (b), and (c) of Section 89501 shall apply to the prohibitions in this section.

This section shall not limit or prohibit payments, advances, or reimbursements for travel and related lodging and subsistence authorized by Section 89506.

(8.1) Section 8.1. Prohibition on Receipt of Gifts in Excess of $460.

(A) No member of a state board or commission, and no designated employee of a state or local government agency, shall accept gifts with a total value of more than $460 in a calendar year from any single source, if the member or employee would be required to report the receipt of income or gifts from that source on his or her statement of economic interests. This section shall not apply to any part-time member of the governing board of any public institution of higher education, unless the member is also an elected official.

Subdivisions (e), (f), and (g) of Section 89503 shall apply to the prohibitions in this section.

(8.2) Section 8.2. Loans to Public Officials.

(A) No elected officer of a state or local government agency shall, from the date of his or her election to office through the date that he or she vacates office, receive a personal loan from any officer, employee, member, or consultant of the state or local government agency in which the elected officer holds office or over which the elected officer's agency has direction and control.

(B) No public official who is exempt from the state civil service system pursuant to subdivisions (c), (d), (e), (f), and (g) of Section 4 of Article VII of the Constitution shall, while he or she holds office, receive a personal loan from any officer, employee, member, or consultant of the state or local government agency in which the public official holds office or over which the public official's agency has direction and control. This subdivision shall not apply to loans made to a public official whose duties are solely secretarial, clerical, or manual.

(C) No elected officer of a state or local government agency shall, from the date of his or her election to office through the date that he or she vacates office, receive a personal loan from any person who has a contract with the state or local government agency to which that elected

officer has been elected or over which that elected officer's agency has direction and control. This subdivision shall not apply to loans made by banks or other financial institutions or to any indebtedness created as part of a retail installment or credit card transaction, if the loan is made or the indebtedness created in the lender's regular course of business on terms available to members of the public without regard to the elected officer's official status.

(D) No public official who is exempt from the state civil service system pursuant to subdivisions (c), (d), (e), (f), and (g) of Section 4 of Article VII of the Constitution shall, while he or she holds office, receive a personal loan from any person who has a contract with the state or local government agency to which that elected officer has been elected or over which that elected officer's agency has direction and control. This subdivision shall not apply to loans made by banks or other financial institutions or to any indebtedness created as part of a retail installment or credit card transaction, if the loan is made or the indebtedness created in the lender's regular course of business on terms available to members of the public without regard to the elected officer's official status. This subdivision shall not apply to loans made to a public official whose duties are solely secretarial, clerical, or manual.

(E) This section shall not apply to the following:

1. Loans made to the campaign committee of an elected officer or candidate for elective office.

2. Loans made by a public official's spouse, child, parent, grandparent, grandchild, brother, sister, parent-in-law, brother-in-law, sister-in-law, nephew, niece, aunt, uncle, or first cousin, or the spouse of any such persons, provided that the person making the loan is not acting as an agent or intermediary for any person not otherwise exempted under this section.

3. Loans from a person which, in the aggregate, do not exceed $500 at any given time.

4. Loans made, or offered in writing, before January 1, 1998.

(8.3) Section 8.3. Loan Terms.

(A) Except as set forth in subdivision (B), no elected officer of a state or local government agency shall, from the date of his or her election to office through the date he or she vacates office, receive a personal loan of $500 or more, except when the loan is in writing and clearly states the terms of the loan, including the parties to the loan agreement, date of the loan, amount of the loan, term of the loan, date or dates when payments shall be due on the loan and the amount of the payments, and the rate of interest paid on the loan.

(B) This section shall not apply to the following types of loans:

1. Loans made to the campaign committee of the elected officer.

2. Loans made to the elected officer by his or her spouse, child, parent, grandparent, grandchild, brother, sister, parent-in-law, brother-in-law, sister-in-law, nephew, niece, aunt, uncle, or first cousin, or the spouse of any such person, provided that the person making the loan is not acting as an agent or intermediary for any person not otherwise exempted under this section.

3. Loans made, or offered in writing, before January 1, 1998.

(C) Nothing in this section shall exempt any person from any other provision of Title 9 of the Government Code.

(8.4) Section 8.4. Personal Loans.

(A) Except as set forth in subdivision (B), a personal loan received by any designated employee shall become a gift to the designated employee for the purposes of this section in the following circumstances:

1. If the loan has a defined date or dates for repayment, when the statute of limitations for filing an action for default has expired.

2. If the loan has no defined date or dates for repayment, when one year has elapsed from the later of the following:

a. The date the loan was made.

b. The date the last payment of $100 or more was made on the loan.

c. The date upon which the debtor has made payments on the loan aggregating to less than $250 during the previous 12 months.

(B) This section shall not apply to the following types of loans:

1. A loan made to the campaign committee of an elected officer or a candidate for elective office.

2. A loan that would otherwise not be a gift as defined in this title.

3. A loan that would otherwise be a gift as set forth under subdivision (A), but on which the creditor has taken reasonable action to collect the balance due.

4. A loan that would otherwise be a gift as set forth under subdivision (A), but on which the creditor, based on reasonable business considerations, has not undertaken collection action. Except in a criminal action, a creditor who claims that a loan is not a gift on the basis of this paragraph has the burden of proving that the decision for not taking collection action was based on reasonable business considerations.

5. A loan made to a debtor who has filed for bankruptcy and the loan is ultimately discharged in bankruptcy.

(C) Nothing in this section shall exempt any person from any other provisions of Title 9 of the Government Code.

(9) Section 9. Disqualification.

No designated employee shall make, participate in making, or in any way attempt to use his or her official position to influence the making of any governmental decision which he or she knows or has reason to know will have a reasonably foreseeable material financial effect, distinguishable from its effect on the public generally, on the official or a member of his or her immediate family or on:

(A) Any business entity in which the designated employee has a direct or indirect investment worth $2,000 or more;

(B) Any real property in which the designated employee has a direct or indirect interest worth $2,000 or more;

(C) Any source of income, other than gifts and other than loans by a commercial lending institution in the regular course of business on terms available to the public without regard to official status, aggregating $500 or more in value provided to, received by or promised to the designated employee within 12 months prior to the time when the decision is made;

(D) Any business entity in which the designated employee is a director, officer, partner, trustee, employee, or holds any position of management; or

(E) Any donor of, or any intermediary or agent for a donor of, a gift or gifts aggregating $460 or more provided to, received by, or promised to the designated employee within 12 months prior to the time when the decision is made.

(9.3) Section 9.3. Legally Required Participation.

No designated employee shall be prevented from making or participating in the making of any decision to the extent his or her participation is legally required for the decision to be

made. The fact that the vote of a designated employee who is on a voting body is needed to break a tie does not make his or her participation legally required for purposes of this section.

(9.5) Section 9.5. Disqualification of State Officers and Employees.

In addition to the general disqualification provisions of section 9, no state administrative official shall make, participate in making, or use his or her official position to influence any governmental decision directly relating to any contract where the state administrative official knows or has reason to know that any party to the contract is a person with whom the state administrative official, or any member of his or her immediate family has, within 12 months prior to the time when the official action is to be taken:

(A) Engaged in a business transaction or transactions on terms not available to members of the public, regarding any investment or interest in real property; or

(B) Engaged in a business transaction or transactions on terms not available to members of the public regarding the rendering of goods or services totaling in value $1,000 or more.

(10) Section 10. Disclosure of Disqualifying Interest.

When a designated employee determines that he or she should not make a governmental decision because he or she has a disqualifying interest in it, the determination not to act may be accompanied by disclosure of the disqualifying interest.

(11) Section 11. Assistance of the Commission and Counsel.

Any designated employee who is unsure of his or her duties under this code may request assistance from the Fair Political Practices Commission pursuant to Section 83114 and Regulations 18329 and 18329.5 or from the attorney for his or her agency, provided that nothing in this section requires the attorney for the agency to issue any formal or informal opinion.

(12) Section 12. Violations.

This code has the force and effect of law. Designated employees violating any provision of this code are subject to the administrative, criminal and civil sanctions provided in the Political Reform Act, Sections 81000-91014. In addition, a decision in relation to which a violation of the disqualification provisions of this code or of Section 87100 or 87450 has occurred may be set aside as void pursuant to Section 91003.

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[1] Designated employees who are required to file statements of economic interests under any other agency's conflict of interest code, or under article 2 for a different jurisdiction, may expand their statement of economic interests to cover reportable interests in both jurisdictions, and file copies of this expanded statement with both entities in lieu of filing separate and distinct statements, provided that each copy of such expanded statement filed in place of an original is signed and verified by the designated employee as if it were an original. See Section 81004.

[2] See Section 81010 and Regulation 18115 for the duties of filing officers and persons in agencies who make and retain copies of statements and forward the originals to the filing officer.

[3] For the purpose of disclosure only (not disqualification), an interest in real property does not include the principal residence of the filer.

[4] Investments and interests in real property which have a fair market value of less than $2,000 are not investments and interests in real property within the meaning of the Political Reform Act. However, investments or interests in real property of an individual include those held by the individual's spouse and dependent children as well as a pro rata share of any investment or interest in real property of any business entity or trust in which the individual, spouse and

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dependent children own, in the aggregate, a direct, indirect or beneficial interest of 10 percent or greater.

[5] A designated employee's income includes his or her community property interest in the income of his or her spouse but does not include salary or reimbursement for expenses received from a state, local or federal government agency.

[6] Income of a business entity is reportable if the direct, indirect or beneficial interest of the filer and the filer's spouse in the business entity aggregates a 10 percent or greater interest. In addition, the disclosure of persons who are clients or customers of a business entity is required only if the clients or customers are within one of the disclosure categories of the filer.

Note: Authority cited: Section 83112, Government Code. Reference: Sections 87103(e), 87300-87302, 89501, 89502 and 89503, Government Code.

HISTORY

1. New section filed 4-2-80 as an emergency; effective upon filing (Register 80, No. 14). Certificate of Compliance included.

2. Editorial correction (Register 80, No. 29).

3. Amendment of subsection (b) filed 1-9-81; effective thirtieth day thereafter (Register 81, No. 2).

4. Amendment of subsection (b)(7)(B)1. filed 1-26-83; effective thirtieth day thereafter (Register 83, No. 5).

5. Amendment of subsection (b)(7)(A) filed 11-10-83; effective thirtieth day thereafter (Register 83, No. 46).

6. Amendment filed 4-13-87; operative 5-13-87 (Register 87, No. 16).

7. Amendment of subsection (b) filed 10-21-88; operative 11-20-88 (Register 88, No. 46).

8. Amendment of subsections (b)(8)(A) and (b)(8)(B) and numerous editorial changes filed 8-28-90; operative 9-27-90 (Reg. 90, No. 42).

9. Amendment of subsections (b)(3), (b)(8) and renumbering of following subsections and amendment of Note filed 8-7-92; operative 9-7-92 (Register 92, No. 32).

10. Amendment of subsection (b)(5.5) and new subsections (b)(5.5)(A)-(A)(2) filed 2-4-93; operative 2-4-93 (Register 93, No. 6).

11. Change without regulatory effect adopting Conflict of Interest Code for California Mental Health Planning Council filed 11-22-93 pursuant to title 1, section 100, California Code of Regulations (Register 93, No. 48). Approved by Fair Political Practices Commission 9-21-93.

12. Change without regulatory effect redesignating Conflict of Interest Code for California Mental Health Planning Council as chapter 62, section 55100 filed 1-4-94 pursuant to title 1, section 100, California Code of Regulations (Register 94, No. 1).

13. Editorial correction adding History 11 and 12 and deleting duplicate section number (Register 94, No. 17).

14. Amendment of subsection (b)(8), designation of subsection (b)(8)(A), new subsection (b)(8)(B), and amendment of subsections (b)(8.1)-(b)(8.1)(B), (b)(9)(E) and Note filed 3-14-95; operative 3-14-95 pursuant to Government Code section 11343.4(d) (Register 95, No. 11).

15. Editorial correction inserting inadvertently omitted language in footnote 4 (Register 96, No. 13).

16. Amendment of subsections (b)(8)(A)-(B) and (b)(8.1)(A), repealer of subsection (b)(8.1)(B), and amendment of subsection (b)(12) filed 10-23-96; operative 10-23-96 pursuant to Government Code section 11343.4(d) (Register 96, No. 43).

17. Amendment of subsections (b)(8.1) and (9)(E) filed 4-9-97; operative 4-9-97 pursuant to Government Code section 11343.4(d) (Register 97, No. 15).

18. Amendment of subsections (b)(7)(B)5., new subsections (b)(8.2)-(b)(8.4)(C) and amendment of Note filed 8-24-98; operative 8-24-98 pursuant to Government Code section 11343.4(d) (Register 98, No. 35).

19. Editorial correction of subsection (a) (Register 98, No. 47).

20. Amendment of subsections (b)(8.1), (b)(8.1)(A) and (b)(9)(E) filed 5-11-99; operative 5-11-99 pursuant to Government Code section 11343.4(d) (Register 99, No. 20).

21. Amendment of subsections (b)(8.1)-(b)(8.1)(A) and (b)(9)(E) filed 12-6-2000; operative 1-1-2001 pursuant to the 1974 version of Government Code section 11380.2 and Title 2, California Code of Regulations, section 18312(d) and (e) (Register 2000, No. 49).

22. Amendment of subsections (b)(3) and (b)(10) filed 1-10-2001; operative 2-1-2001. Submitted to OAL for filing pursuant to *Fair Political Practices Commission v. Office of Administrative Law*, 3 Civil C010924, California Court of Appeal, Third Appellate District, nonpublished decision, April 27, 1992 (FPPC regulations only subject to 1974 Administrative Procedure Act rulemaking requirements) (Register 2001, No. 2).

23. Amendment of subsections (b)(7)(A)4., (b)(7)(B)1.-2., (b)(8.2)(E)3., (b)(9)(A)-(C) and footnote 4. filed 2-13-2001. Submitted to OAL for filing pursuant to *Fair Political Practices Commission v. Office of Administrative Law*, 3 Civil C010924, California Court of Appeal, Third

Appellate District, nonpublished decision, April 27, 1992 (FPPC regulations only subject to 1974 Administrative Procedure Act rulemaking requirements) (Register 2001, No. 7).

24. Amendment of subsections (b)(8.1)-(b)(8.1)(A) filed 1-16-2003; operative 1-1-2003. Submitted to OAL for filing pursuant to *Fair Political Practices Commission v. Office of Administrative Law*, 3 Civil C010924, California Court of Appeal, Third Appellate District, nonpublished decision, April 27, 1992 (FPPC regulations only subject to 1974 Administrative Procedure Act rulemaking requirements) (Register 2003, No. 3).

25. Editorial correction of History 24 (Register 2003, No. 12).

26. Editorial correction removing extraneous phrase in subsection (b)(9.5)(B) (Register 2004, No. 33).

27. Amendment of subsections (b)(2)-(3), (b)(3)(C), (b)(6)(C), (b)(8.1)-(b)(8.1)(A), (b)(9)(E) and (b)(11)-(12) filed 1-4-2005; operative 1-1-2005 pursuant to Government Code section 11343.4 (Register 2005, No. 1).

28. Amendment of subsection (b)(7)(A)4. filed 10-11-2005; operative 11-10-2005 (Register 2005, No. 41).

29. Amendment of subsections (a), (b)(1), (b)(3), (b)(8.1), (b)(8.1)(A) and (b)(9)(E) filed 12-18-2006; operative 1-1-2007. Submitted to OAL pursuant to *Fair Political Practices Commission v. Office of Administrative Law*, 3 Civil C010924, California Court of Appeal, Third Appellate District, nonpublished decision, April 27, 1992 (FPPC regulations only subject to 1974 Administrative Procedure Act rulemaking requirements) (Register 2006, No. 51).

30. Amendment of subsections (b)(8.1)-(b)(8.1)(A) and (b)(9)(E) filed 10-31-2008; operative 11-30-2008. Submitted to OAL for filing pursuant to *Fair Political Practices Commission v. Office of Administrative Law*, 3 Civil C010924, California Court of Appeal, Third Appellate

District, nonpublished decision, April 27, 1992 (FPPC regulations only subject to 1974 Administrative Procedure Act rulemaking requirements and not subject to procedural or substantive review by OAL) (Register 2008, No. 44).

31. Amendment of section heading and section filed 11-15-2010; operative 12-15-2010. Submitted to OAL for filing pursuant to *Fair Political Practices Commission v. Office of Administrative Law*, 3 Civil C010924, California Court of Appeal, Third Appellate District, nonpublished decision, April 27, 1992 (FPPC regulations only subject to 1974 Administrative Procedure Act rulemaking requirements and not subject to procedural or substantive review by OAL) (Register 2010, No. 47).

32. Amendment of section heading and subsections (a)-(b)(1), (b)(3)-(4), (b)(5)(C), (b)(8.1)-(b)(8.1)(A) and (b)(9)(E) and amendment of footnote 1 filed 1-8-2013; operative 2-7-2013. Submitted to OAL for filing pursuant to *Fair Political Practices Commission v. Office of Administrative Law*, 3 Civil C010924, California Court of Appeal, Third Appellate District, nonpublished decision, April 27, 1992 (FPPC regulations only subject to 1974 Administrative Procedure Act rulemaking requirements and not subject to procedural or substantive review by OAL) (Register 2013, No. 2).

33. Amendment of subsections (b)(8.1)-(b)(8.1)(A), (b)(8.2)(E)3. and (b)(9)(E) filed 12-15-2014; operative 1-1-2015 pursuant to section 18312(e)(1)(A), title 2, California Code of Regulations. Submitted to OAL for filing and printing pursuant to *Fair Political Practices Commission v. Office of Administrative Law*, 3 Civil C010924, California Court of Appeal, Third Appellate District, nonpublished decision, April 27, 1992 (FPPC regulations only subject to 1974 Administrative Procedure Act rulemaking requirements) (Register 2014, No. 51).

CITY COUNCIL RESOLUTION NO. 16-XX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, AMENDING THE CITY'S CONFLICT OF INTEREST CODE AND LIST OF DESIGNATED EMPLOYEES

WHEREAS, the Political Reform Act of 1974, Government Code Section 81000 et seq., requires every state or local government agency to adopt a Conflict of Interest Code, and to conduct an biennial review of the code and list of designated positions; and

WHEREAS, the City Council has previously adopted the model Conflict of Interest Code promulgated by the Fair Political Practices Commission (FPPC) under California Code of Regulations, Title 2, Section 18730 and all future amendments duly adopted by the FPPC with approval of City Council Resolution 84-131 adopted on November 13, 1984; and

WHEREAS, Appendix A of Resolution 84-131 representing the list of designated positions required to file statements of economic interests has been revised as a result of subsequent biennial reviews; and

WHEREAS, Resolution No. 14-152, Appendix A represents the City's current list of designated positions that are required to file statements of economic interests, and Appendix B represents the descriptions of disclosure categories; and

WHEREAS, after conducting a biennial review of the list of designated positions and due to changes in the City's organizational structure, it has been determined that Appendix A of Resolution No. 14-152 require amendments.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF IRVINE DOES HEREBY RESOLVE AS FOLLOWS:

SECTION 1. Pursuant to the Political Reform Act of 1974, Government Code Section 87300 et seq., and Section 18730 of Title 2 of the California Code of Regulations, the City Council adopts the model conflict of interest code promulgated by the Fair Political Practices Commission of the State of California as set forth in Section 18730 of Title 2 of the California Code of Regulations, which model conflict of interest code is incorporated herein by reference, and which, together with the list of designated positions and the disclosure categories applicable to each designated position as set forth in Appendix A and B of this Resolution, collectively constitutes the City of Irvine's conflict of interest code. As the model conflict of interest code set forth in Section 18730 of Title 2 of the California Code of Regulations is amended from time to time by State law, regulatory action of the Fair Political Practices Commission, or judicial determination, the portion of the Board's conflict of interest code comprising the model conflict of interest code shall be deemed automatically amended without further action to incorporate by reference all such amendments to the model conflict of interest code

so as to remain in compliance therewith. Nothing in this Resolution shall supersede the independent applicability of Government Code Section 87200.

SECTION 2. The definitions contained in the Political Reform Act of 1974 and in the regulations of the Fair Political Practices Commission, and any amendments to either of the foregoing, are incorporated by reference into this conflict of interest code.

SECTION 3. The City Council finds and determines that the persons who hold the designated positions set forth in Appendix A, attached to and made part of this resolution, make or participate in the making of decisions which may foreseeably have a material effect on their financial interests, and shall file statements of economic interests pursuant to the requirements of the City of Irvine conflict of interest code.

SECTION 4. That persons holding designated positions shall disclose their economic interests according to the assigned disclosure categories set forth in Appendix B, attached to and made part of this resolution.

SECTION 5. Resolution No. 14-152 and prior City Council Resolutions designating the positions of persons required to file Statements of Economic Interests and their assigned disclosure categories are hereby repealed.

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 13th day of December, 2016.

_____
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 13th day of December, 2016.

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

ABSTAIN: COUNCILMEMBERS:

_____
CITY CLERK OF THE CITY OF IRVINE

# APPENDIX A

| POSITION/TITLE | DISCLOSURE CATEGORY |
|---|---|
| Animal Care Center Supervisor | 3,4,5,6,7 |
| Animal Care Center Veterinarian | 3,4,5,6,7 |
| **Animal Care Volunteer Program Supervisor** | **3,4,5,6,7** |
| **Animal Services Supervisor** | **3,4,5,6,7** |
| **Applications Programmer/Analyst** | **6,7** |
| Aquatics Supervisor | 3,4,5,6,7 |
| Armorer | 6,7 |
| Assistant City Attorney | 1,2 |
| Assistant City Clerk | 3,4,5,6,7 |
| **Assistant City Engineer** | **1,2** |
| Assistant City Manager | 1,2 |
| ~~**Assistant City Manager, Great Park**~~ | ~~**1,2**~~ |
| **Assistant City Manager, Special Projects** | **1,2** |
| **Assistant Executive Director, Successor Agency** | **1,2** |
| Assistant Planner | 3,4,5,6,7 |
| Assistant to the City Manager | 1,2 |
| Assistant Transportation Analyst | 3,4,5,6,7 |
| Associate Engineer | 3,4,5,6,7 |
| Associate Plan Check Engineer | 3,4,5,6,7 |
| Associate Planner | 3,4,5,6,7 |
| Associate Transportation Analyst | 3,4,5,6,7 |
| Budget Officer | 1,2 |
| Building Inspector | 3,4,5,6,7 |
| Building Inspection Supervisor | 3,4,5,6,7 |
| Business Services Administrator | 3,4,5,6,7 |
| Buyer | 4,6,7 |
| **Capital Improvement Program Administrator** | **1,2** |
| **Chief Veterinarian** | **1,2** |
| City Clerk | 1,2 |
| City Engineer | 1,2 |
| Code Enforcement Supervisor | 3,4,5,6,7 |
| Communications Bureau Supervisor | 1,2 |
| Community Development Project Administrator | 1,2 |
| **Community Services Administrator** | **1,2** |
| Community Services Superintendent | 3,4,5,6,7 |
| Community Services Supervisor | 3,4,5,6,7 |
| Construction Inspector | 3,4,5,6,7 |
| Construction Inspection Supervisor | 3,4,5,6,7 |
| Council Executive Assistant I, II, III, IV (excluding interns) | 1,2 |
| Council Services Manager | 1,2 |
| Deputy Building Official | 1,2 |
| Deputy City Attorney | 1,2 |
| **Deputy Director, Administrative Services** | **1,2** |
| Deputy Director, Community Development | 1,2 |
| Deputy Director, ~~**of**~~ Community Services | 1,2 |

| POSITION/TITLE | DISCLOSURE CATEGORY |
|---|---|
| Deputy Director, Public Safety/Police Chief | 1,2 |
| Deputy Director, ~~of~~ Public Works | 1,2 |
| Director of Administrative Services | 1,2 |
| Director of Community Development | 1,2 |
| Director of Community Services | 1,2 |
| **Director of Financial Services** | **1,2** |
| Director of Public Affairs and Communications | 1,2 |
| Director of Public Safety/Chief of Police | 1,2 |
| Director of Public Works | 1,2 |
| **Director of the Great Park** | **1,2** |
| Emergency Management Coordinator | 6,7 |
| Engineering Geologist | 3,4,5,6,7 |
| Environmental Program(s) Administrator | 1,2 |
| **Executive Director, Successor Agency** | **1,2** |
| Facilities Construction Administrator | 1,2 |
| Facilities Maintenance Specialist | 3,4,5,6,7 |
| Facilities Maintenance Superintendent | 3,4,5,6,7 |
| Facilities Maintenance Supervisor | 3,4,5,6,7 |
| Finance Administrator | 1,2 |
| Fleet Services Superintendent | 3,4,5,6,7 |
| Fleet Services Supervisor | 3,4,5,6,7 |
| General Counsel - Irvine Community Land Trust | 1,2 |
| **Great Park Property Administrator** | **1,2** |
| Human Resources Administrator | 1,2 |
| Human Resources Analyst I | 4,5,6,7 |
| Human Resources Analyst II | 4,5,6,7 |
| Information Technology Administrator | 1,2 |
| Landscape Contract Specialist | 3,4,5,6,7 |
| Landscape Maintenance Specialist | 3,4,5,6,7 |
| Landscape Maintenance Superintendent | 3,4,5,6,7 |
| Landscape Maintenance Supervisor | 3,4,5,6,7 |
| Lead Equipment Mechanic | 3,4,5,6,7 |
| Lead Facilities Maintenance Technician | 3,4,5,6,7 |
| Lead Landscape Maintenance Technician | 3,4,5,6,7 |
| Lead Permit Specialist | 3,4,5,6,7 |
| Lead Street Maintenance Technician | 3,4,5,6,7 |
| Management Analyst I | 4,5,6,7 |
| Management Analyst II | 4,5,6,7 |
| Manager, Advance Planning | 1,2 |
| **Manager, Animal Care** | **1,2** |
| Manager, Budget and Business Planning | 1,2 |
| Manager, Building & Safety/Chief Building Official | 1,2 |
| Manager, Business Services | 1,2 |
| Manager, Community Services | 1,2 |
| Manager, Engineering/**City Engineer** | 1,2 |
| Manager, Facilities Maintenance and Rehabilitation | 1,2 |
| Manager, Fiscal Services | 1,2 |

| POSITION/TITLE | DISCLOSURE CATEGORY |
|---|---|
| **Manager, Great Park Planning & Development** | **1,2** |
| Manager, Housing | 1,2 |
| Manager, Human Resources | 1,2 |
| ~~Manager, Land and Assets~~ | ~~1,2~~ |
| Manager, Public Communications | 1,2 |
| Manager, Public Services | 1,2 |
| **Manager, Technology and Innovation** | **1,2** |
| Manager, Transit and Transportation | 1,2 |
| Master Facilities Maintenance Specialist | 3,4,5,6,7 |
| Municipal Records Administrator | 1,2 |
| Payroll Process Analyst | 3,4,5,6,7 |
| **Payroll Supervisor** | **1,2** |
| Permit Services Supervisor | 3,4,5,6,7 |
| Plans Examiner | 3,4,5,6,7 |
| Police Commander | 1,2 |
| Police Lieutenant | 1,2 |
| Press Information Officer, IPD | 1,2 |
| **Principal Code Enforcement Inspector** | **3,4,5,6,7** |
| Principal Plan Check Engineer | 3,4,5,6,7 |
| Principal Planner | 1,2 |
| Program Specialist | 6,7 |
| Project Development Administrator | 1,2 |
| Public Information Officer | 1,2 |
| Public Safety Records Supervisor | 6,7 |
| Public Safety Technology Analyst | 6,7 |
| **Public Works Administrator** | 1,2 |
| Purchasing/Contract**s** Administrator | 1,2 |
| **Real Property Administrator** | **1,2** |
| Regulatory Affairs Supervisor | 6,7 |
| Right-of-Way Administrator | 3,4,5,6,7 |
| Risk Management Administrator | 1,2 |
| **Secretary,** | |
| **Industrial Development Authority** | **1,2** |
| **Irvine Public Facilities and Infrastructure** | **1,2** |
| **Successor Agency to the dissolved Irvine Redevelopment Agency** | **1,2** |
| **Secretary**/Clerk of the Board | 1,2 |
| Senior Building Inspector | 3,4,5,6,7 |
| Senior Buyer/Contract Coordinator | 4,6,7 |
| Senior Civil Engineer | 3,4,5,6,7 |
| Senior Code Enforcement Inspector | 3,4,5,6,7 |
| Senior Construction Inspector | 3,4,5,6,7 |
| Senior Council Executive Assistant | 1,2 |
| Senior Crime Analyst | 4,5,6,7 |
| Senior Human Resources Analyst | 4,5,6,7 |
| Senior Management Analyst | 4,5,6,7 |
| Senior Permit Specialist | 3,4,5,6,7 |
| Senior Plan Check Engineer | 3,4,5,6,7 |

| POSITION/TITLE | DISCLOSURE CATEGORY |
|---|---|
| Senior Planner | 3,4,5,6,7 |
| Senior Project Manager | 3,4,5,6,7 |
| **Senior** Registered Veterinarian Technician | 3,4,5,6,7 |
| Senior Transportation Analyst | 3,4,5,6,7 |
| Senior Transportation Engineer | 3,4,5,6,7 |
| Social Services Supervisor/Counselor | 3,4,5,6,7 |
| Special Assistant to the Chief of Police | 1,2 |
| Street Maintenance Specialist | 3,4,5,6,7 |
| Street Maintenance Superintendent | 3,4,5,6,7 |
| Street Maintenance Supervisor | 3,4,5,6,7 |
| Supervising Transportation Analyst | 3,4,5,6,7 |
| Supervisor of Accounting Services | 1,2 |
| Transit Programs Administrator | 1,2 |
| **Treasurer/Chief Financial Officer, OC Great Park** | **1,2** |
| **Veterinary Practice Manager** | **1,2** |
| Water Quality Administrator | 3,4,5,6,7 |
| Zoning Administrator | 1,2 |

| BOARDS, COMMISSIONS & COMMITTEES | DISCLOSURE CATEGORY |
|---|---|
| Appeals Boardmember | 1,2 |
| Community Services Commissioner | 1,2 |
| Finance Commissioner | 1,2 |
| Industrial Development Authority Boardmember | 1,2 |
| Investment Advisory Committee Member | 1,2 |
| Irvine Community Land Trust **Boardmember** | 1,2 |
| Irvine Public Facilities and Infrastructure Authority Boardmember | 1,2 |
| Irvine Public Facilities Corporation **Board**member | 1,2 |
| Orange County Great Park Corporation Director | 1,2 |
| **Oversight Board to the Successor Agency Boardmember** | **1,2** |
| **Successor Agency to the dissolved Irvine Redevelopment Agency Boardmember** | **1,2** |

**CONTRACT EMPLOYEES:** If a designated position is filled by a contract employee (full or part-time) the contract employee has a filing obligation.

**CONSULTANTS:** Consultants shall be included in the list of designated employees and shall disclose pursuant to the broadest disclosure category in the code subject to the following limitation:

The Department Director, with concurrence by the City Manager, may determine in writing that a particular consultant, although a "designated position," is hired to perform a range of duties that is limited in scope and thus is not required to fully comply with the disclosure requirements in this section. Such written determination shall include description of the consultant's duties and, based upon that description, a statement of the extent of disclosure requirements. The Department Director's determination, with concurrence of the City Manager, is public record and shall be retained for public inspection in the same manner and location as this Conflict of Interest Code.

**Note:** The Mayor, City Council Members, City Manager, City Attorney, City Treasurer and Planning Commissioners are not included as designated positions because those officials are required by the Political Reform Act to file broad statements of economic interest with the Fair Political Practices Commission and in conformance with Government Code Section 87200.

# APPENDIX B

Category 1: All investments, business positions and sources of income, including gifts, loans and travel payments.

Category 2: All interests in real property.

Category 3: All investments, business positions, interests in real property and sources of income, including gifts, loans and travel payments subject to the regulatory, permit or licensing authority of the department.

Category 4: Investments in business entities, business positions and sources of income, including gifts, loans and travel payments which engage in land development, construction or the acquisition or sale of real property.

Category 5: Interests in real property located within two miles of any land owned or used by the City of Irvine.

Category 6: Investments in business entities, business positions and sources of income, including gifts, loans and travel payments of the type which, within the past two years, have contracted with the City of Irvine to provide services, supplies, materials, machinery or equipment.

Category 7: Investments in business entities, business positions and sources of income, including gifts, loans and travel payments of the type which, within the past two years, have contracted with the designated employee's department to provide services, supplies, materials, machinery or equipment.

# 2.8

# REQUEST FOR CITY COUNCIL ACTION

**MEETING DATE:** DECEMBER 13, 2016

**TITLE:** QUITCLAIM OF ACCESS AND UTILITY EASEMENTS IN GREAT PARK NEIGHBORHOODS (PLANNING AREA 51)

Director of Public Works

City Manager

**RECOMMENDED ACTION**

Authorize the Mayor to execute nine quitclaim deeds relinquishing easements on private property no longer needed for public access and utility purposes.

**EXECUTIVE SUMMARY**

Public service easements previously dedicated by Heritage Fields El Toro, LLC, to the City for residential developments in Great Park Neighborhoods District 1 and 4 of Planning Area 51 are no longer needed and are recommended to be relinquished to the corresponding property owners. Easement Quitclaim Deeds have been prepared in consultation with the City Attorney's office for this purpose and are presented for City Council consideration. The location of the proposed easement relinquishments are depicted in Attachments 2 and 3.

**COMMISSION/BOARD/COMMITTEE RECOMMENDATION**

Not applicable.

**ANALYSIS**

As part of its residential development plans for Great Park Neighborhoods Districts 1 and 4, Heritage Fields El Toro, LLC was required to dedicate public easements to the City for underground utilities and emergency vehicle access in accordance with City Standards, Uniform Security Code and Orange County Fire Authority (OCFA) requirements. Subsequent to the dedication of these easements, the developer revised the on-site circulation to accommodate changes to its development plans resulting in modifications to the original easement areas. New easements, corresponding with the revised on-site circulation, have been dedicated to the City and the previous easements are no longer needed. Staff has confirmed that the new easements provide for the necessary public utility services and satisfy OCFA requirements for emergency access purposes.

Relinquishment of public property rights and public easements require City Council approval in accordance with the City's Subdivision Ordinance. The proposed nine Quitclaim Deeds (Attachment 4) have been prepared and submitted by the developer to relinquish the City's interest in the previously dedicated easements. The quitclaim deeds have been reviewed by staff in consultation with the City Attorney's office and are recommended for approval by the City Council.

## ALTERNATIVES CONSIDERED

The City Council can elect not to quitclaim the utility and access easements. This alternative is not recommended because the existing easements are no longer needed for the intended public purposes.

## FINANCIAL IMPACT

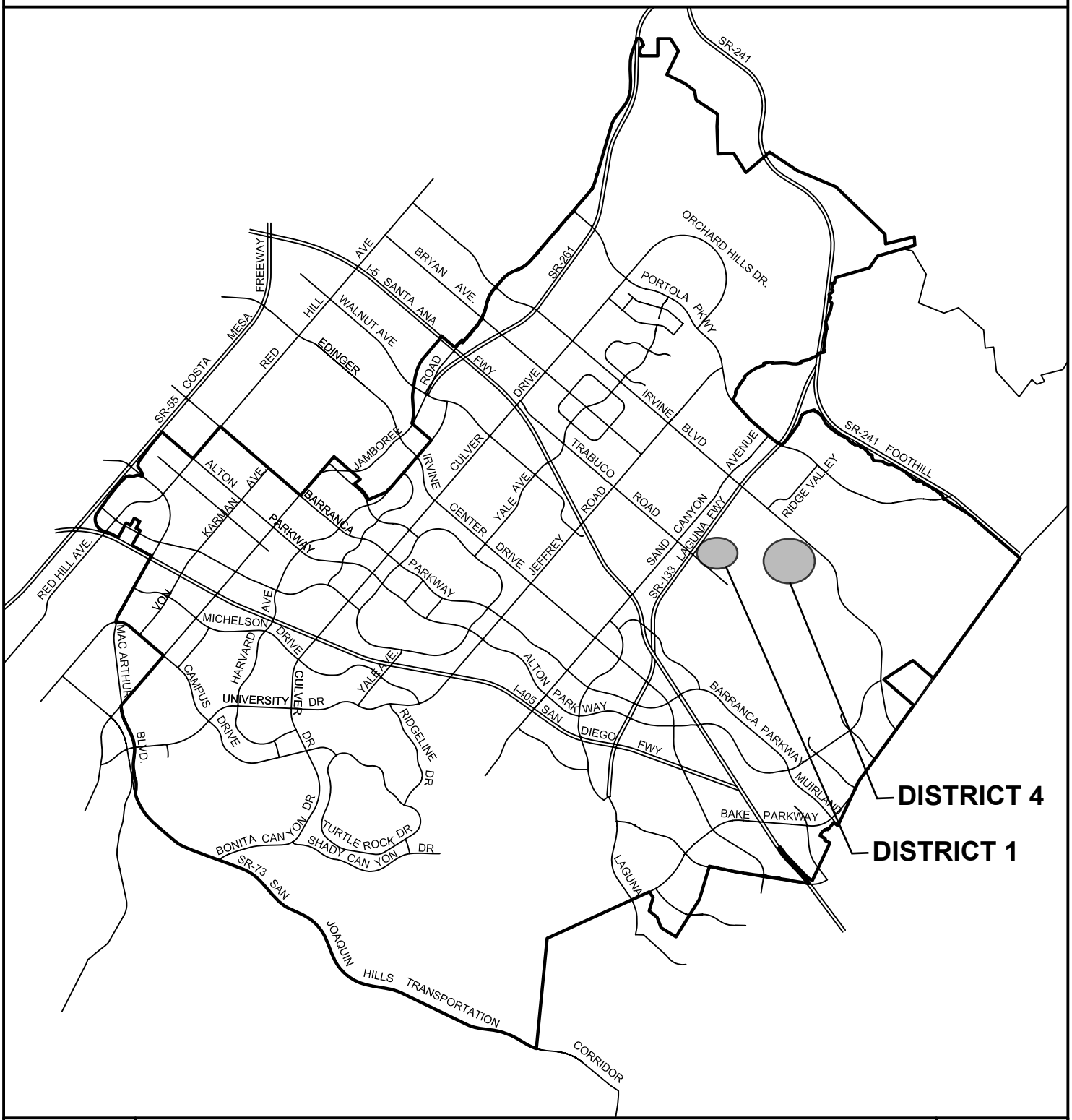
The administrative cost to the City for processing these quitclaim deeds is offset by developer fees paid by the corresponding property owners requesting the quitclaims in accordance with the City approved Development Fee Schedule.

**REPORT PREPARED BY** Andrew Pham, Senior Civil Engineer

## ATTACHMENTS

1. Vicinity Map
2. Site Map (District 1)
3. Site Map (District 4)
4. Quitclaim Deeds

# QUITCLAIM LOCATIONS



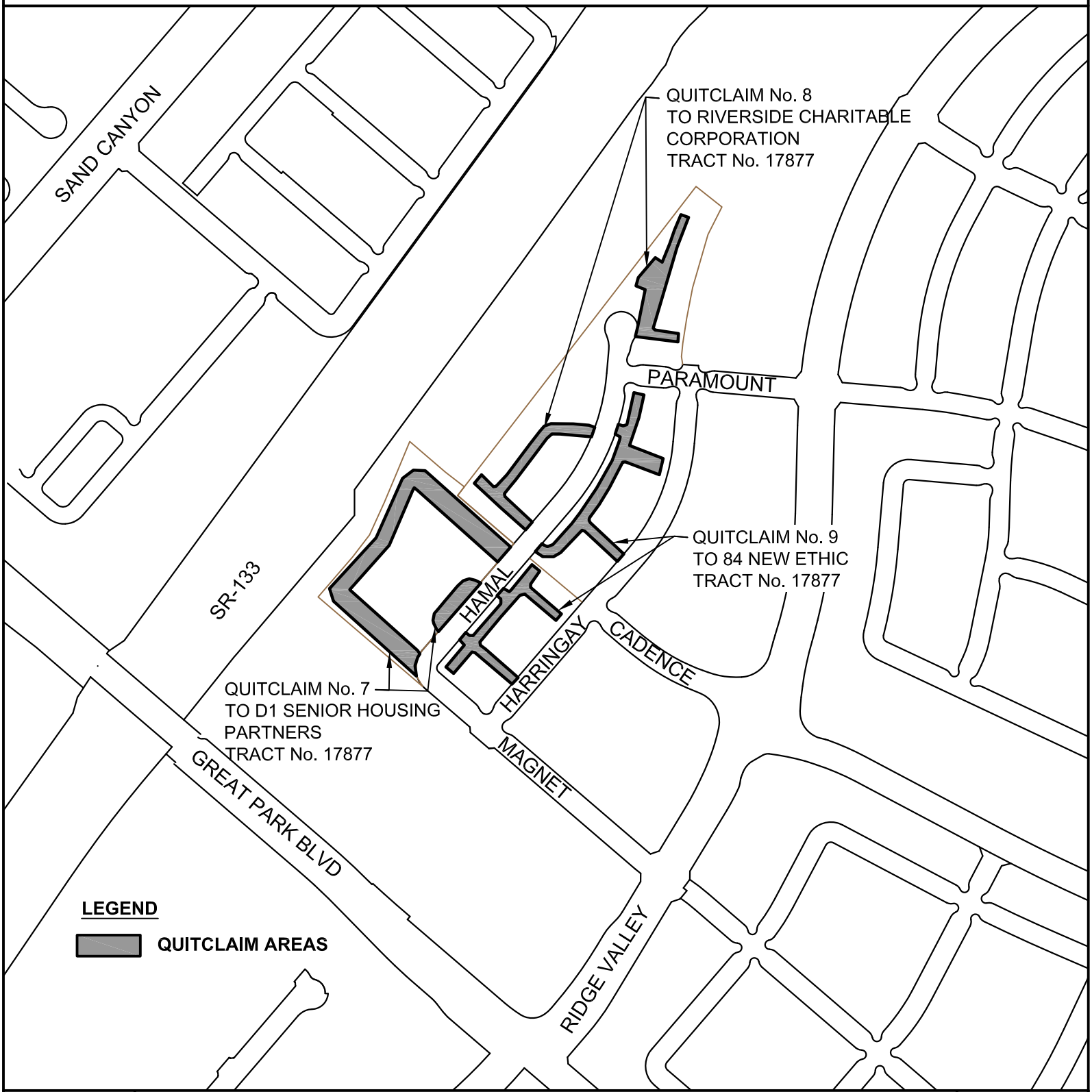

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# VICINITY MAP

CITY OF IRVINE 1971

ATTACHMENT 1

# QUITCLAIM LOCATIONS (DISTRICT 1)
## TRACT No. 17877



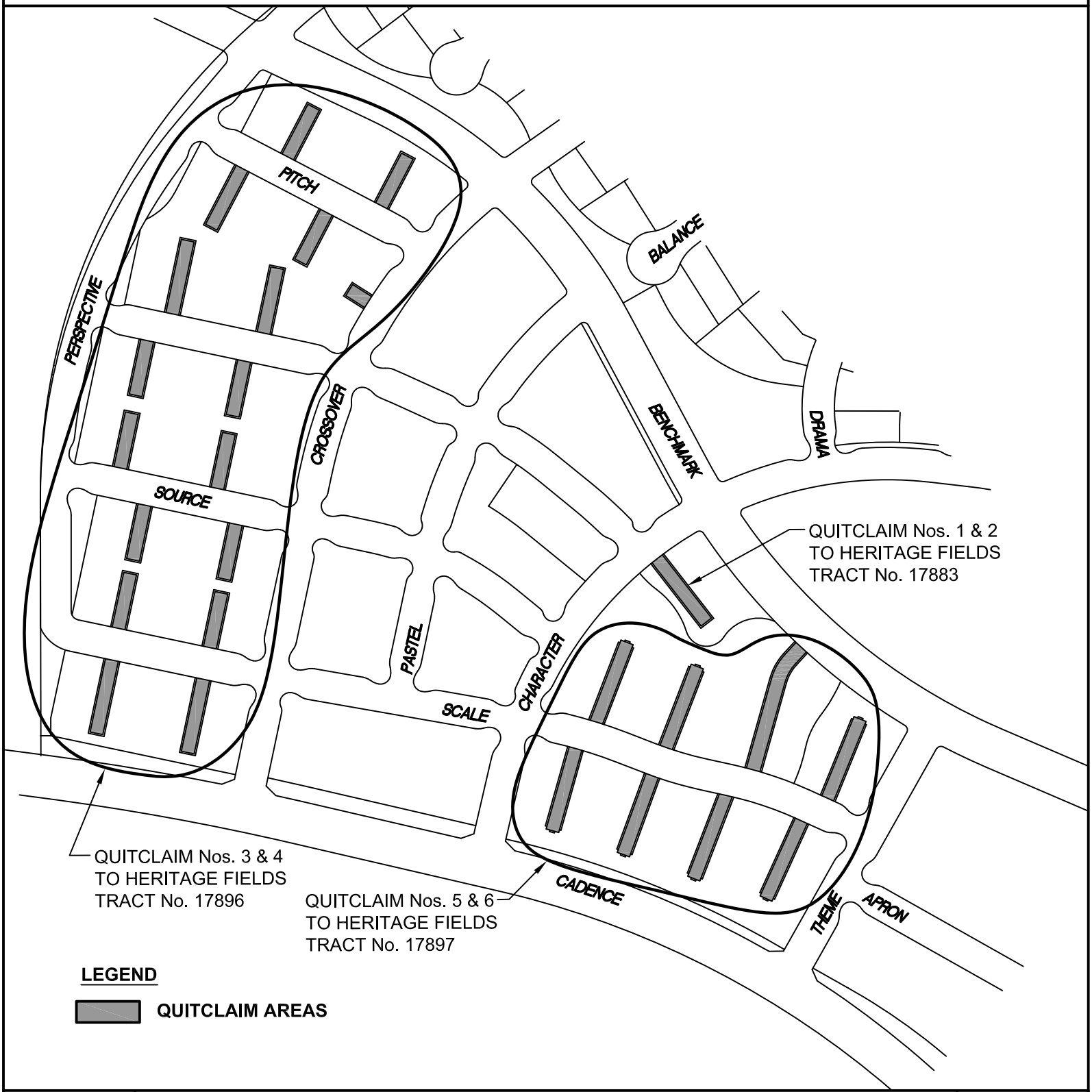

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# SITE MAP

CITY OF IRVINE 1971

ATTACHMENT 2

# QUITCLAIM LOCATIONS (DISTRICT 4)
## TRACT Nos. 17883, 17896, AND 17897




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# SITE MAP

CITY OF IRVINE 1971

ATTACHMENT 3

# QUITCLAIM DEED No. 1
# LOT 8 OF TRACT No. 17883
# TO HERITAGE FIELDS EL TORO, LLC
## (PUBLIC UTILITY EASEMENT)

ATTACHMENT 4

**RECORDING REQUESTED BY, AND**
**WHEN RECORDED, MAIL TO:**

FIVE POINT COMMUNITIES MANAGEMENT, Inc.
25 Enterprise, Suite 300
Aliso Viejo, CA 92656
Attn: Jennifer Bohen

**WITH A CONFORMED COPY TO:**

CITY OF IRVINE
P.O. Box 19595
Irvine, CA 92623-9575
Attn: City Clerk

---

*(Space Above for Recorder's Use)*

# QUITCLAIM DEED

(Public Utility Easement, Lot 8 of Tract No. 17883)

FOR VALUABLE CONSIDERATION, the receipt and sufficiency of which is hereby acknowledged, the CITY OF IRVINE, a California Charter City ("**City**"), hereby remises, releases and quitclaims to HERITAGE FIELDS EL TORO, LLC, a Delaware Limited Liability Company, all right, title and interest of City in and to the real property described on **Exhibit A** attached hereto and incorporated in this Quitclaim Deed.

IN WITNESS WHEREOF, City has executed this Quitclaim Deed as of the date set forth below.

CITY OF IRVINE,
a California municipal corporation

Date: _____, 2016

By: _____

Mayor

APPROVED AS TO FORM:
Rutan & Tucker

By: _____ for
Jeffrey T. Melching
City Attorney

ATTEST:

_____
Molly McLaughlin
City Clerk

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 ORANGE )

On _____, 20___, before me, _____, a Notary Public, 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.

_____
Notary Public

(SEAL)

**EXHIBIT "A"**
**LEGAL DESCRIPTION FOR QUITCLAIM**

In the City of Irvine, County of Orange, State of California, being that certain easement shown as "INDICATES AN EASEMENT FOR PUBLIC UTILITY PURPOSES DEDICATED HEREON TO THE CITY OF IRVINE" lying within Lot 8 of Tract No. 17883, as shown on a map filed in Book 946, Pages 1 through 14, inclusive, of Miscellaneous Maps, in the office of the County Recorder of said county.




Robert L. Wheeler, IV, PLS 8639
Date: 10/17/16

*Revised: October 17, 2016*
August 29, 2016
WO No. 1855-17896X
Page 1 of 1
H&A Legal No. 8884 QC PUE
By: K. Vo
Checked By: R. Wheeler

# QUITCLAIM DEED No. 2
# LOT 8 OF TRACT No. 17883
# TO HERITAGE FIELDS EL TORO, LLC
## (ACCESS EASEMENT)

**RECORDING REQUESTED BY, AND**
**WHEN RECORDED, MAIL TO:**

FIVE POINT COMMUNITIES MANAGEMENT, Inc.
25 Enterprise, Suite 300
Aliso Viejo, CA 92656
Attn: Jennifer Bohen

**WITH A CONFORMED COPY TO:**

CITY OF IRVINE
P.O. Box 19595
Irvine, CA 92623-9575
Attn: City Clerk

---

*(Space Above for Recorder's Use)*

# QUITCLAIM DEED

(Emergency Access Easement, Lot 8 of Tract No. 17883)

FOR VALUABLE CONSIDERATION, the receipt and sufficiency of which is hereby acknowledged, the CITY OF IRVINE, a California Charter City ("City"), hereby remises, releases and quitclaims to HERITAGE FIELDS EL TORO, LLC, a Delaware Limited Liability Company, all right, title and interest of City in and to the real property described on **Exhibit A** attached hereto and incorporated in this Quitclaim Deed.

IN WITNESS WHEREOF, City has executed this Quitclaim Deed as of the date set forth below.

CITY OF IRVINE,
a California municipal corporation

Date: _____, 2016

By: _____

Mayor

APPROVED AS TO FORM:
Rutan & Tucker

By: _____
Jeffrey T. Melching
City Attorney

ATTEST:

_____
Molly McLaughlin
City Clerk

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 ORANGE )

On _____, 20___, before me, _____, a Notary Public, 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.

_____
Notary Public

(SEAL)

**EXHIBIT "A"**
**LEGAL DESCRIPTION FOR QUITCLAIM**

In the City of Irvine, County of Orange, State of California, being that certain easement shown as "INDICATES AN EASEMENT FOR EMERGENCY ACCESS AND PUBLIC SERVICE VEHICLE INGRESS AND EGRESS PURPOSES DEDICATED HEREON TO THE CITY OF IRVINE" lying within Lot 8 of Tract No. 17883, as shown on a map filed in Book 946, Pages 1 through 14, inclusive, of Miscellaneous Maps, in the office of the County Recorder of said county.




Robert L. Wheeler, IV, PLS 8639
Date: 10/17/16

*Revised: October 17, 2016*
August 29, 2016
WO No. 1855-17896X
Page 1 of 1
H&A Legal No. 8883 QC Access
By: K. Vo
Checked By: R. Wheeler

# QUITCLAIM DEED No. 3
# LOTS 1-5 OF TRACT No. 17896
# TO HERITAGE FIELDS EL TORO, LLC
## (PUBLIC UTILITY EASEMENT)

**RECORDING REQUESTED BY, AND**
**WHEN RECORDED, MAIL TO:**

FIVE POINT COMMUNITIES MANAGEMENT, Inc.
25 Enterprise, Suite 300
Aliso Viejo, CA 92656
Attn: Jennifer Bohen

**WITH A CONFORMED COPY TO:**

CITY OF IRVINE
P.O. Box 19595
Irvine, CA 92623-9575
Attn: City Clerk

---

*(Space Above for Recorder's Use)*

# QUITCLAIM DEED

(Public Utility Easement, Lots 1-5 of Tract No. 17896)

FOR VALUABLE CONSIDERATION, the receipt and sufficiency of which is hereby acknowledged, the CITY OF IRVINE, a California Charter City ("**City**"), hereby remises, releases and quitclaims to HERITAGE FIELDS EL TORO, LLC, a Delaware Limited Liability Company, all right, title and interest of City in and to the real property described on **Exhibit A** attached hereto and incorporated in this Quitclaim Deed.

IN WITNESS WHEREOF, City has executed this Quitclaim Deed as of the date set forth below.

CITY OF IRVINE,
a California municipal corporation

Date: _____, 2016

By: _____

Mayor

APPROVED AS TO FORM:
Rutan & Tucker

By: _____ for
Jeffrey T. Melching
City Attorney

ATTEST:

_____
Molly McLaughlin
City Clerk

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 ORANGE )

On _____, 20___, before me, _____, a Notary Public, 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.

_____
Notary Public

(SEAL)

**EXHIBIT "A"**
**LEGAL DESCRIPTION FOR QUITCLAIM**

In the City of Irvine, County of Orange, State of California, being those certain easements shown as "INDICATES AN EASEMENT FOR PUBLIC UTILITY PURPOSES DEDICATED HEREON TO THE CITY OF IRVINE" on Tract No. 17896, as shown on a map filed in Book 949, Pages 12 through 18, inclusive, of Miscellaneous Maps, in the office of the County Recorder of said county.




Robert L. Wheeler, IV, PLS 8639
Date: 10/17/16

*Revised: October 17, 2016*
August 23, 2016
WO No. 1855-17896X
Page 1 of 1
H&A Legal No. 8866 QC PUE
By: K. Vo
Checked By: R. Wheeler

# QUITCLAIM DEED No. 4
# LOTS 1-5 OF TRACT No. 17896
# TO HERITAGE FIELDS EL TORO, LLC
## (ACCESS EASEMENT)

**RECORDING REQUESTED BY, AND**
**WHEN RECORDED, MAIL TO:**

FIVE POINT COMMUNITIES MANAGEMENT, Inc.
25 Enterprise, Suite 300
Aliso Viejo, CA 92656
Attn: Jennifer Bohen

**WITH A CONFORMED COPY TO:**

CITY OF IRVINE
P.O. Box 19595
Irvine, CA 92623-9575
Attn: City Clerk

---

*(Space Above for Recorder's Use)*

## QUITCLAIM DEED

(Emergency Access Easement, Lots 1-5 of Tract No. 17896)

FOR VALUABLE CONSIDERATION, the receipt and sufficiency of which is hereby acknowledged, the CITY OF IRVINE, a California Charter City ("City"), hereby remises, releases and quitclaims to HERITAGE FIELDS EL TORO, LLC, a Delaware Limited Liability Company, all right, title and interest of City in and to the real property described on **Exhibit A** attached hereto and incorporated in this Quitclaim Deed.

IN WITNESS WHEREOF, City has executed this Quitclaim Deed as of the date set forth below.

CITY OF IRVINE,
a California municipal corporation

Date: _____, 2016

By: _____

Mayor

APPROVED AS TO FORM:
Rutan & Tucker

By: _____ for
Jeffrey T. Melching
City Attorney

ATTEST:

_____
Molly McLaughlin
City Clerk

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 ORANGE )

On _____, 20___, before me, _____, a Notary Public, 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.

_____
Notary Public

(SEAL)

**EXHIBIT "A"**
**LEGAL DESCRIPTION FOR QUITCLAIM**

In the City of Irvine, County of Orange, State of California, being those certain easements shown as "INDICATES AN EASEMENT FOR EMERGENCY ACCESS AND PUBLIC SERVICE VEHICLE INGRESS AND EGRESS PURPOSES DEDICATED HEREON TO THE CITY OF IRVINE" on Tract No. 17896, as shown on a map filed in Book 949, Pages 12 through 18, inclusive, of Miscellaneous Maps, in the office of the County Recorder of said county.




Robert L. Wheeler, IV, PLS 8639
Date: 10/24/16

*Revised: October 17, 2016*
August 23, 2016
WO No. 1855-17896X
Page 1 of 1
H&A Legal No. 8867 QC Access
By: K. Vo
Checked By: R. Wheeler

# QUITCLAIM DEED No. 5
# LOTS 1 & 2 OF TRACT No. 17897
# TO HERITAGE FIELDS EL TORO, LLC
## (PUBLIC UTILITY EASEMENT)

**RECORDING REQUESTED BY, AND**
**WHEN RECORDED, MAIL TO:**

FIVE POINT COMMUNITIES MANAGEMENT, Inc.
25 Enterprise, Suite 300
Aliso Viejo, CA 92656
Attn: Jennifer Bohen

**WITH A CONFORMED COPY TO:**

CITY OF IRVINE
P.O. Box 19595
Irvine, CA 92623-9575
Attn: City Clerk

---

*(Space Above for Recorder's Use)*

# QUITCLAIM DEED

(Public Utility Easement, Lots 1 & 2 of Tract No. 17897)

FOR VALUABLE CONSIDERATION, the receipt and sufficiency of which is hereby acknowledged, the CITY OF IRVINE, a California Charter City ("**City**"), hereby remises, releases and quitclaims to HERITAGE FIELDS EL TORO, LLC, a Delaware Limited Liability Company, all right, title and interest of City in and to the real property described on **Exhibit A** attached hereto and incorporated in this Quitclaim Deed.

IN WITNESS WHEREOF, City has executed this Quitclaim Deed as of the date set forth below.

CITY OF IRVINE,
a California municipal corporation

Date: _____, 2016

By: _____
Mayor

APPROVED AS TO FORM:
Rutan & Tucker

By: _____ for
Jeffrey T. Melching
City Attorney

ATTEST:

_____
Molly McLaughlin
City Clerk

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 ORANGE )

On _____, 20___, before me, _____, a Notary Public, 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.

_____
Notary Public

(SEAL)

**EXHIBIT "A"**
**LEGAL DESCRIPTION FOR QUITCLAIM**

In the City of Irvine, County of Orange, State of California, being those certain easements shown as "INDICATES AN EASEMENT FOR PUBLIC UTILITY PURPOSES DEDICATED HEREON TO THE CITY OF IRVINE" on Tract No. 17897, as shown on a map filed in Book 948, Pages 21 through 26, inclusive, of Miscellaneous Maps, in the office of the County Recorder of said county.




Robert L. Wheeler, IV, PLS 8639
Date: 10/17/16

*Revised: October 17, 2016*
August 23, 2016
WO No. 1855-17897X
Page 1 of 1
H&A Legal No. 8869 QC PUE
By: K. Vo
Checked By: R. Wheeler

# QUITCLAIM DEED No. 6
# LOTS 1 & 2 TRACT No. 17897
# TO HERITAGE FIELDS EL TORO, LLC
## (ACCESS EASEMENT)

**RECORDING REQUESTED BY, AND**
**WHEN RECORDED, MAIL TO:**

FIVE POINT COMMUNITIES MANAGEMENT, Inc.
25 Enterprise, Suite 300
Aliso Viejo, CA 92656
Attn: Jennifer Bohen

**WITH A CONFORMED COPY TO:**

CITY OF IRVINE
P.O. Box 19595
Irvine, CA 92623-9575
Attn: City Clerk

---

*(Space Above for Recorder's Use)*

## QUITCLAIM DEED

(Emergency Access Easement, Lots 1 & 2 of Tract No. 17897)

FOR VALUABLE CONSIDERATION, the receipt and sufficiency of which is hereby acknowledged, the CITY OF IRVINE, a California Charter City ("**City**"), hereby remises, releases and quitclaims to HERITAGE FIELDS EL TORO, LLC, a Delaware Limited Liability Company, all right, title and interest of City in and to the real property described on **Exhibit A** attached hereto and incorporated in this Quitclaim Deed.

IN WITNESS WHEREOF, City has executed this Quitclaim Deed as of the date set forth below.

CITY OF IRVINE,
a California municipal corporation

Date: _____, 2016

By: _____

Mayor

APPROVED AS TO FORM:
Rutan & Tucker

By: _____ for
Jeffrey T. Melching
City Attorney

ATTEST:

_____
Molly McLaughlin
City Clerk

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 ORANGE )

On _____, 20___, before me, _____, a Notary Public, 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.

_____
Notary Public

(SEAL)

**EXHIBIT "A"**
**LEGAL DESCRIPTION FOR QUITCLAIM**

In the City of Irvine, County of Orange, State of California, being those certain easements shown as "INDICATES AN EASEMENT FOR EMERGENCY ACCESS AND PUBLIC SERVICE VEHICLE INGRESS AND EGRESS PURPOSES DEDICATED HEREON TO THE CITY OF IRVINE" on Tract No. 17897, as shown on a map filed in Book 948, Pages 21 through 26, inclusive, of Miscellaneous Maps, in the office of the County Recorder of said county.




Robert L. Wheeler, IV, PLS 8639
Date: 10/17/16

*Revised: October 17, 2016*
August 23, 2016
WO No. 1855-17897X
Page 1 of 1
H&A Legal No. 8868 QC Access
By: K. Vo
Checked By: R. Wheeler

# QUITCLAIM DEED No. 7

# LOT 3 OF TRACT No. 17877

# TO D1 SENIOR HOUSING PARTNERS, LP

## (ACCESS EASEMENT)

**RECORDING REQUESTED BY, AND**
**WHEN RECORDED, MAIL TO:**

FIVE POINT COMMUNITIES MANAGEMENT, Inc.
25 Enterprise, Suite 300
Aliso Viejo, CA 92656
Attn: Jennifer Bohen

**WITH A CONFORMED COPY TO:**

CITY OF IRVINE
P.O. Box 19595
Irvine, CA 92623-9575
Attn: City Clerk

---

*(Space Above for Recorder's Use)*

# QUITCLAIM DEED

(Emergency Access Easement, Lot 3 of Tract No. 17877)

FOR VALUABLE CONSIDERATION, the receipt and sufficiency of which is hereby acknowledged, the CITY OF IRVINE, a California Charter City ("**City**"), hereby remises, releases and quitclaims to D1 SENIOR IRVINE HOUSING PARTNERS, L.P., a California limited partnership, all right, title and interest of City in and to the real property described on **Exhibit A** attached hereto and incorporated in this Quitclaim Deed.

IN WITNESS WHEREOF, City has executed this Quitclaim Deed as of the date set forth below.

CITY OF IRVINE,
a California municipal corporation

Date: _____, 2016

By: _____
Mayor

APPROVED AS TO FORM:
Rutan & Tucker

By: _____ for
Jeffrey T. Melching
City Attorney

ATTEST:

_____
Molly McLaughlin
City Clerk

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 ORANGE )

On _____, 20___, before me, _____, a Notary Public, 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.

_____
Notary Public

(SEAL)

**EXHIBIT "A"**
**LEGAL DESCRIPTION FOR QUITCLAIM**

In the City of Irvine, County of Orange, State of California, being those certain easements shown as "INDICATES AN EASEMENT FOR EMERGENCY ACCESS AND PUBLIC SERVICE VEHICLE INGRESS AND EGRESS PURPOSES DEDICATED HEREON TO THE CITY OF IRVINE" lying within Lot 3 of Tract No. 17877, as shown on a map filed in Book 950, Pages 1 through 12, inclusive, of Miscellaneous Maps, in the office of the County Recorder of said county.




Robert L. Wheeler, IV, PLS 8639
Date: 10/24/16

August 22, 2016
WO No. 3964-13
Page 1 of 1
H&A Legal No. 8871 QC Access
By: K. Vo
Checked By: R. Wheeler

# QUITCLAIM DEED No. 8

# LOTS 2 & 5 OF TRACT No. 17877

# TO RIVERSIDE CHARITABLE CORPORATION

## (ACCESS EASEMENT)

**RECORDING REQUESTED BY, AND WHEN RECORDED, MAIL TO:**

RELATED CALIFORNIA
18201 Von Karman Avenue Suite 900
Irvine, California 92612
Attn: Reid Bradshaw

**WITH A CONFORMED COPY TO:**

CITY OF IRVINE
P.O. Box 19595
Irvine, CA 92623-9575
Attn: City Clerk

---

*(Space Above for Recorder's Use)*

# QUITCLAIM DEED

(Emergency Access Easement, Lots 2 & 5 of Tract No. 17877)

FOR VALUABLE CONSIDERATION, the receipt and sufficiency of which is hereby acknowledged, the CITY OF IRVINE, a California Charter City ("**City**"), hereby remises, releases and quitclaims to RIVERSIDE CHARITABLE CORPORATION, a California non-profit public benefit corporation, all right, title and interest of City in and to the real property described on **Exhibit A** attached hereto and incorporated in this Quitclaim Deed.

IN WITNESS WHEREOF, City has executed this Quitclaim Deed as of the date set forth below.

CITY OF IRVINE,
a California municipal corporation

Date: _____, 2016

By: _____
Mayor

APPROVED AS TO FORM:
Rutan & Tucker

By: _____ for
Jeffrey T. Melching
City Attorney

ATTEST:

_____
Molly McLaughlin
City Clerk

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 ORANGE )

On _____, 20___, before me, _____, a Notary Public, 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.

_____
Notary Public

(SEAL)

**EXHIBIT "A"**
**LEGAL DESCRIPTION FOR QUITCLAIM**

In the City of Irvine, County of Orange, State of California, being those certain easements shown as "INDICATES AN EASEMENT FOR EMERGENCY ACCESS AND PUBLIC SERVICE VEHICLE INGRESS AND EGRESS PURPOSES DEDICATED HEREON TO THE CITY OF IRVINE" on Lots 2 and 5 of Tract No. 17877, as shown on a map filed in Book 950, Pages 1 through 12, inclusive, of Miscellaneous Maps, in the office of the County Recorder of said county.




Robert L. Wheeler, IV, PLS 8639
Date: 10/17/16

*Revised: October 17, 2016*
September 13, 2016
WO No. 1855-446
Page 1 of 1
H&A Legal No. 8880 QC Access
By: J. Chau
Checked By: K. Vo

# QUITCLAIM DEED No. 9
# LOT 4 OF TRACT No. 17877
# TO 84 NEW ETHIC, LLC
## (ACCESS EASEMENT)

**RECORDING REQUESTED BY, AND WHEN RECORDED, MAIL TO:**

RELATED CALIFORNIA
18201 Von Karman Avenue Suite 900
Irvine, California 92612
Attn: Christopher Johnson

**WITH A CONFORMED COPY TO:**

CITY OF IRVINE
P.O. Box 19595
Irvine, CA 92623-9575
Attn: City Clerk

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*(Space Above for Recorder's Use)*

# QUITCLAIM DEED

(Emergency Access Easement, Lot 4 of Tract No. 17877)

FOR VALUABLE CONSIDERATION, the receipt and sufficiency of which is hereby acknowledged, the CITY OF IRVINE, a California Charter City ("**City**"), hereby remises, releases and quitclaims to 84 NEW ETHIC LLC, a California limited liability company, all right, title and interest of City in and to the real property described on **Exhibit A** attached hereto and incorporated in this Quitclaim Deed.

IN WITNESS WHEREOF, City has executed this Quitclaim Deed as of the date set forth below.

CITY OF IRVINE,
a California municipal corporation

Date: _____, 2016

By: _____

Mayor

APPROVED AS TO FORM:
Rutan & Tucker

By: _____ /for
Jeffrey T. Melching
City Attorney

ATTEST:

_____
Molly McLaughlin
City Clerk

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 ORANGE )

On _____, 20___, before me, _____, a Notary Public, 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.

_____
Notary Public

(SEAL)

**EXHIBIT "A"**
**LEGAL DESCRIPTION FOR QUITCLAIM**

In the City of Irvine, County of Orange, State of California, being those certain easements shown as "INDICATES AN EASEMENT FOR EMERGENCY ACCESS AND PUBLIC SERVICE VEHICLE INGRESS AND EGRESS PURPOSES DEDICATED HEREON TO THE CITY OF IRVINE" on Lot 4 of Tract No. 17877, as shown on a map filed in Book 950, Pages 1 through 12, inclusive, of Miscellaneous Maps, in the office of the County Recorder of said county.




Robert L. Wheeler, IV, PLS 8639
Date: 10/17/16

*Revised: October 17, 2016*
September 13, 2016
WO No. 1855-446
Page 1 of 1
H&A Legal No. 8878 QC Access
By: J. Chau
Checked By: K. Vo

# 2.9

# REQUEST FOR COUNCIL ACTION

**MEETING DATE:** DECEMBER 13, 2016

**TITLE:** APPROVAL OF PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS FOR FREEWAY TRAIL LIGHTING IMPROVEMENTS FROM SAN DIEGO CREEK TO CULVER DRIVE

Director of Public Works

City Manager

## RECOMMENDED ACTION

1. Approve the plans, specifications and contract documents for Freeway Trail Lighting Improvements, Capital Improvement Project 341302.

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.

## EXECUTIVE SUMMARY

Plans, specifications and contract documents for the Freeway Trail Lighting Improvements from San Diego Creek to Culver Drive are complete and ready for City Council approval. If approved by the City Council, this project will install new trail lights along the existing bicycle freeway trail from San Diego Creek to Culver Drive to increase visibility, enhance safety and enhance the potential for commuter and recreational use for this portion of the trail. The contract documents are available for public review in the Public Works Department. Approval of the recommended actions will allow staff to proceed with solicitation of competitive bids for construction and award of contract to the lowest responsive and responsible bidder in accordance with the City's purchasing policies and procedures.

## COMMISSION/BOARD/COMMITTEE RECOMMENDATION

Not applicable.

## ANALYSIS

The annual Capital Improvement Program budget includes funding for the Freeway Trail Lighting Improvements project. The project scope includes installation of 42 new light-

emitting diode (LED) lights along the existing bicycle Freeway Trail from San Diego Creek to Culver Drive. The improvements will increase visibility, enhance safety and increase the potential for commuter and recreational use along this portion of off-street trail that connects to the San Diego Creek Trail.

The design and preparation of construction documents for the proposed improvements are complete and staff is seeking City Council approval to proceed with soliciting competitive bids for construction. A copy of the Construction Contract, Specifications and the proposed Schedule of Work listing the individual bid items for this project is included as Attachment 2.

The construction contract cost estimate prepared by the consultant design engineer for the project is $600,000. A budget allowance of $80,000 for construction engineering (material and equipment testing and inspection services) and $90,000 for construction contingency is recommended as shown in the Project Funding Summary (Attachment 3).

Construction is anticipated to begin in May 2017 with completion in August 2017. Work activity will take place primarily Monday through Friday between the hours of 7 a.m. and 4 p.m., with temporary closures of the bike trail to facilitate the work.

**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 has been found to be categorically exempt from the requirements of CEQA, under State Guideline Section 15301, Class 1(c), Existing Facilities.

In accordance with Title 24 Code of Federal Regulations (CFR) 58.35, the project does not have a significant impact on the environment as defined by the National Environmental Policy Act (NEPA); therefore, this project is a Categorical Exclusion under Title 24 CFR 58.35(a).

**ALTERNATIVES CONSIDERED**

The City Council could elect not to approve the plans, specifications and contract documents and defer this lighting project to a future date. Staff does not recommend this alternative because the lighting will enhance bicycle safety along this portion of the bike trail and the scope of the project as proposed is consistent with the City's goals promoting the use of the City's public trail system for commuting and recreational enjoyment by the public.

**FINANCIAL IMPACT**

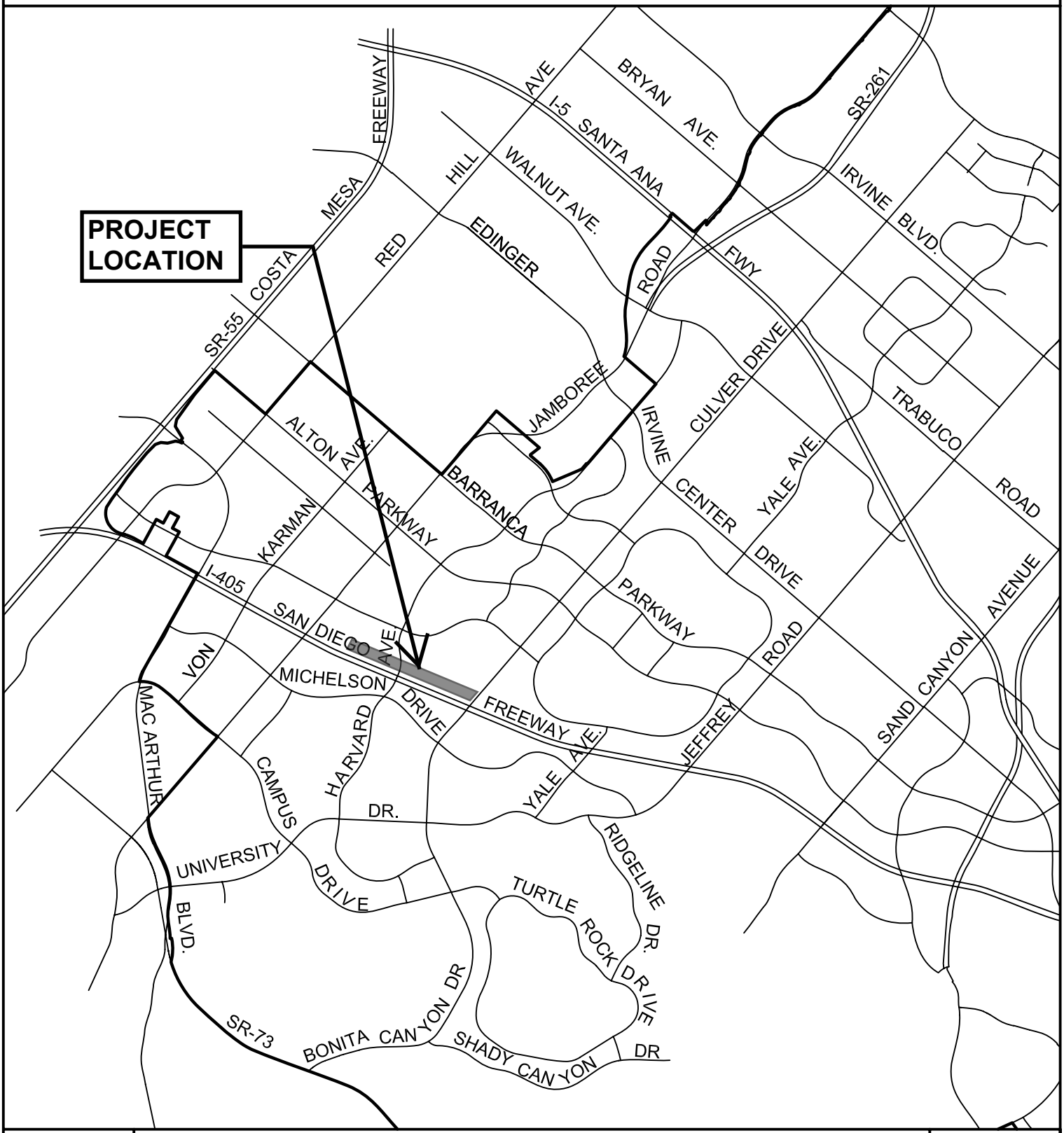
The City Council approved funding for this project with the annual Capital Improvement Program budget and funds are available in CIP project number 341302 from a combination of grant funds including the State Bicycle Corridor Improvement Program, Federal Mobile Source Air Pollution Reduction Program and System Development Charge funding sources. The construction contract estimate prepared by the design engineer is $600,000. A complete funding summary for this project is provided in Attachment 3.

**REPORT PREPARED BY** Reza Jafari, Senior Project Manager

**ATTACHMENTS**

1. Vicinity Map
2. Construction Contract, Specifications, and Schedule of Work (Construction Plans on file in the Public Works Department)
3. Project Funding Summary

# FREEWAY TRAIL LIGHTING IMPROVEMENTS FROM SAN DIEGO CREEK TO CULVER DRIVE, CIP 341302




# VICINITY MAP

ATTACHMENT 1

# CONSTRUCTION CONTRACT
# FOR CAPITAL IMPROVEMENTS

CITY OF IRVINE

FREEWAY TRAIL LIGHTING IMPROVEMENTS
FROM THE SAN DIEGO CREEK TO CULVER
CIP 341302

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:

    Furnishing and installing trail lighting, including foundations, pull boxes, conduit, conductors, trenching, boring, backfilling, compaction, coordination with Southern California Edison for service, 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 IDS Group, Inc.

4. 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.

5. 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.

6. 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: **One Thousand Five Hundred Dollars ($1,500)** 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.

7. 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.

8. 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.

   If there is a difference between the minimum wage rates predetermined by the Secretary of Labor and the general prevailing wage rates determined by the Director of the California Department of Industrial Relations for similar classifications of labor, the CONTRACTOR and subcontractors shall pay not less than the higher wage rate. The CITY will not accept lower State wage rates not

specifically included in the Federal minimum wage determinations. This includes "helper" (or other classifications based on hours of experience) or any other classification not appearing in the Federal wage determinations. Where Federal wage determinations do not contain the State wage rate determination otherwise available for use by the CONTRACTOR and subcontractors, the CONTRACTOR and subcontractors shall pay not less than the Federal minimum wage rate which most closely approximates the duties of the employees in question.

9. 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

# 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.

Each subcontract and any lower tier subcontract that may in turn be made shall physically include the “Required Contract Provisions Federal-Aid Construction Contracts” of these Special Provisions.

**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 a new 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.** *DELETE in its entirety and SUBSTITUTE with the following:*
The Contractor shall engage a licensed land surveyor registered in the State of California to perform any surveying and/or calculations required by the Work of this Contract.

Construction stakes shall not be provided for any part of the work and contractor is responsible for constructing all portions of the project and providing any construction surveying made necessary by this contract.

Full Compensation for **CONSTRUCTION SURVEYING** and for conforming to all of the requirements of Section 2-9 shall be considered as included in other items of work no separate compensation shall be allowed therefore. Full Compensation shall include, but not be limited to furnishing all labor, materials, tools, equipment, incidentals, filing fees, and for doing all the work as specified in the Standard Specifications and these Special Provisions, and as directed by the City Representative.

**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 exceeds125 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 therefor.

**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 3rd 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 therefor.

**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 therefor.

## 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.

**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 reminder 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 4$^{th}$ 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 Five Million Dollars ($5,000,000) each loss and Ten Million Dollars ($10,000,000) 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 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 coverages 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 should be 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.

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 therefor.

**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 require 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/) 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 noncommercially 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 noncommercially 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 identify 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 per the Lump Sum (LS) price bid 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 therefor.

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 WPCP.

**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 therefor.

**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 therefor.

**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 therefor.

**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 therefor, 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.

The Contractor shall comply with all applicable Federal laws, including those set forth in “Federal Requirements” of these Special Provisions.

**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.

CITY OF IRVINE
FREEWAY TRAIL LIGHTING IMPROVEMENTS
FROM SAN DIEGO CREEK TO CULVER DRIVE
CIP 341302

# SCHEDULE OF WORK AND BID PRICES

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 | UNIT PRICE | BID ITEM TOTAL |
|---|---|---|---|---|---|
| 1 | Mobilization | LS | 1 | $ | $ |
| 2 | Water Pollution Control Plan (WPCP) | LS | 1 | $ | $ |
| 3 | Trail Lights including Foundation, Pole, Fixture, Conductors and Conduit | EA | 42 | $ | $ |
| 4 | Philips Citytouch Plug-N-Play Cellular Connector Node | EA | 42 | $ | $ |
| 5 | Trenching, Conduit and Conductors | LF | 4,500 | $ | $ |
| 6 | Two (2) spare 2” Conduits within New Trench | LF | 4,500 | $ | $ |
| 7 | Trail Lighting Pull Box | EA | 53 | $ | $ |
| 8 | SCE Intercept Pull Box | EA | 2 | $ | $ |
| 9 | 3” Service Conduit, Including Pull Rope | LF | 30 | $ | $ |
| 10 | Remove Existing Single Meter Service Pedestal at Harvard Avenue | EA | 2 | $ | $ |
| 11 | Single Meter Service Pedestal at Harvard including Foundation | EA | 1 | $ | $ |
| 12 | Remove Existing Single Meter Service Pedestal at Claremont Street, including Chain Link Fence Removal | EA | 1 | $ | $ |
| 13 | Single Meter Service Pedestal at Claremont Street, including Foundation and Existing Branch Feeders | EA | 1 | $ | $ |
| 14 | Coordination with SCE for Service | EA | 2 | $ | $ |

TOTAL BID PRICE - BASE BID _____

_____

_____

(Amount written in words)

Total Bid Price - Base Bid (in figures) $_____

# 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 therefor.

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 1$^{st}$ and 2$^{nd}$ 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 therefor 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.** Mobilization is eligible for partial payment if the Contract includes a bid item for mobilization. Payment for **Mobilization** shall be per the **Lump-Sum (LS)** price bid and 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.

**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 in 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:*

**201-1.1.3 Concrete Specified by Special Exposure** *ADD the following*

Light and pedestal foundations shall be 658-CME-4500, Type V, Moderate Exposure, Maximum Water-Cement Ratio 0.45.

# PART 3 - CONSTRUCTION METHODS

*REVISE as follows:*

**Section 304-3.4 Measurement and Payment (Chain Link Fence)** *ADD the following to the section*

Payment for chain link fence removal around existing meter pedestal near Claremont Street shall be considered as included the Lump Sum price bid for **Remove Existing Single Meter Service Pedestal at Claremont Street, including Chain Link Fence Removal** and no additional compensation shall be allowed therefore.

# 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 therefor.

**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**

| | Name of Street | Portion Designated |
|---|---|---|
| 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**

| | Name of Street | Portion Designated |
|---|---|---|
| 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**

| | Name of Street | Portion Designated |
|---|---|---|
| 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.

**601-3 PAYMENT.** *MODIFY to ADD the following:*
Full compensation for **Traffic Control** shall be considered as included in the price of other bid items and no additional compensation shall be allowed therefore. Full compensation includes furnishing all labor, materials, tools, equipment and incidentals and doing all the work involved in all temporary traffic control related work involving placing, removing, storing, maintaining, moving to new locations, replacing and disposing of the components of traffic control system, complete in place, temporary Asphalt Concrete including installation and removal; all associated temporary signing and striping; flashing arrow signs; flagging and/or flagger costs; and project notifications, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer.

**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 therefor.

**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.

The WORK shall be performed during the following hours when traffic control is required:

**a) Local Streets, Parking Lots and Off-Street Bike Trails.**

Work on local streets, parking lots and off-street bike trails shall be permitted Monday through Friday between the hours of 8:00 a.m. and 4:00 p.m. Installation of traffic control shall start no sooner than 8:00 a.m. Completion of work and the removal of all traffic control shall be completed by 4:00 p.m.

**b) Arterial and Collector Streets.**

Work on arterial and collector streets shall be permitted Monday through Friday between the hours of 9:00 a.m. and 3:00 p.m. Installation of traffic control shall start no sooner than 9:00 a.m. Completion of work and the removal of all traffic control shall be completed by 3:00 p.m.

**c) Request for Night Work – Requires Separate City Approval.**

Contractor requests for nighttime work shall be submitted to the Engineer for review and approval. All requests for nighttime work shall cite the reason for the request and shall detail the reason why the work cannot be performed during regular weekday work hours.

For rejected requests, the Contractor shall promptly schedule the work to occur within regular Weekday Hours. The City shall have sole discretion in approving Weekend Work Requests and rejection of such requests shall not be cause for any claim for additional compensation.

**d) Request for Weekend Work – Requires Separate City Approval.**

Contractor requests for weekend work shall be submitted to the Engineer for review and approval. All requests for weekend work shall cite the reason for the request and shall detail the reason why the work cannot be performed during regular weekday hours.

The Contractor shall be responsible for all overtime inspection charges as a result of approved weekend work. The cost for overtime shall be deducted from monies due to the Contractor for work performed.

For rejected requests, the Contractor shall promptly schedule the work to occur within regular Weekday Hours. The City shall have sole discretion in approving Weekend Work Requests and rejection of such requests shall not be cause for any claim for additional compensation.

The Contractor shall notify and coordinate traffic control removal with City Representative.

The Contractor shall be responsible for allowing sufficient time during contract period to complete inspections and any corrections. Each day beyond the time prescribed to complete the contract will be subject to assessment of liquidated damages. The City Representative shall determine if the repairs and/or corrections are in substantial compliance with the Contract documents.

**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, Orange County Transportation Authority (OCTA) bus service, 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, Orange County Transportation Authority (OCTA) bus service, 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.

**601-6.8 Late Reopening of Closures and Required Contingency Plan.** If a closure is not reopened to public traffic by the specified time, work shall be suspended in conformance with the provisions in 6-3 of the Special Provisions. No further closures shall to be made until the Engineer has accepted a contingency plan, submitted by the Contractor that will ensure future closures will be reopened to public traffic at the specified time. A detailed contingency plan shall be prepared and submitted to the Engineer within one business day of the Engineer's request. The Engineer will have two (2) Working Days to accept or reject the Contractor's proposed contingency plan. The Contractor will not be entitled to compensation for the suspension of work resulting from the late reopening of closures.

**601-6.9 Compensation.** The Engineer shall be notified of delays in the Contractor's operations due to the following conditions:

a) The Contractor's proposed closure schedule is denied and his planned closures are within the time frame allowed for closures in the Special Provisions, except

that the Contractor will not be entitled to compensation for amendments requested by the Contractor to the closure schedule that are not approved.

b) The Contractor is denied a confirmed closure.

If, in the opinion of the Engineer, the Contractor's controlling operation is delayed or interfered with by reason of these conditions, and the Contractor's loss due to that delay could not have been avoided by rescheduling the affected closure or by judicious handling of forces, equipment and plant, the delay will be considered a right of way delay and will be compensated in conformance with the provisions in 2-8 of the Standard Specifications and the Special Provisions.

Should the Engineer direct the Contractor to remove a closure before the time designated in the approved closure schedule, delay to the Contractor's schedule due to removal of the closure will be considered a right of way delay and compensation for the delay will be determined in conformance with the provisions in 2-8 of the Standard Specifications and these Provisions.

**601-10 AUTHORITY OF AGENCY REPRESENTATIVE.** Provisions of this section may be modified or altered if, in the opinion of the Agency Representative, public traffic will be better served and work expedited.

**601-10.1 Execution.** The Contractor shall field check all temporary traffic control signs, barricades, and other devices at least three (3) times every day, including Saturdays, Sundays and holidays to insure their proper maintenance and conformance to the Contract Documents and detailed instructions by the Agency Representative.

Should Contractor fail to properly place and/or maintain delineated lane closures or work areas, the Agency, at its option and at Contractor’s sole cost and expense, may place delineation, barricades, or other devices, as may be necessary, to protect the public. Agency may in its discretion withhold the cost of such work from any monies due the Contractor at an amount equal to the rates shown below:

| Delineation | |
|---|---|
| Delineator | $2.00/day plus-labor & equipment |
| Lighted Barricade | $5.00/day plus-labor & equipment |
| 8 Foot Wood Barricade | $7.50/day plus-labor & equipment |
| Temporary Signs | $25.00/day plus-labor & equipment |
| Type III Barricade | $10.00/day plus-labor & equipment |

| Labor (2 Hour Minimum) - Regular Time | |
|---|---|
| Lead Street Maintenance Technician | $52.88 |
| Street Maintenance Technician | $40.82 |
| Equipment Operator I | $46.14 |
| Equipment Operator II | $49.74 |
| Street Maintenance Supervisor | $62.99 |
| Street Superintendent | $79.80 |

| Equipment | |
|---|---|
| Arrow Board | $15.00/hour |
| Pickup | $10.00/hour |
| Sweeper | $45.00/hour |
| 5-Yard Dump | $25.00/hour |
| Loader | $25.00/hour |
| Water Truck | $25.00/hour |
| 1-Ton Truck | $10.00/hour |

Agency shall have no obligation to Contractor with respect to Agency's decision whether or not to exercise Agency's options pursuant to this subsection.

**ADD:**

**601-11 PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS).** Portable changeable message signs shall be furnished, placed, operated, and maintained as designated by the Engineer in conformance with the provisions in Section 12, "Construction Area Traffic Control Devices," of the State Standard Specifications and these Provisions. The Contractor shall furnish **Four (4)** PCMS. PCMS shall be in place a minimum of one (1) week prior to start of construction.

The Engineer will determine the exact message wording and location. The Contractor may be required to update the changeable message daily, depending on the type of work performed. The Contractor shall be responsible for maintaining, relocating, programming, and re-programming Changeable Message Signs as specified and as directed by the Owner's Representative.

The changeable message letters shall have sufficient brightness so as to be fully visible both at night and in bright daylight. The City shall have sole discretion to determine acceptable models from submittals provided by the Contractor.

**601-11.1 Payment.** Full compensation for conforming to the requirements for PCMS, including furnishing all labor, tools, equipment, materials and incidentals required for doing all the work involved in furnishing, installing, maintaining, relocating, changing sign message (regardless of the number of times directed by the Engineer), replacing, repairing, and when no longer required, removing of all PCMS as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, shall be considered as included in the price paid for other bid items and no separate compensation will be allowed therefor.

**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.

Full compensation for conforming to the requirements of this section shall be considered as part of Bid Item **Traffic Control** and no additional compensation will be allowed therefor.

# PART 7 – STREET LIGHTING AND TRAFFIC SIGNAL SYSTEMS

*REVISE as follows:*

**Section 700-3.7 Pull Boxes** *ADD the following*

Pull boxes for Bike Trail Lighting shall be Brooks Products, Jenson Precast or approved equal. Pull boxes shall be concrete cast with bolt down concrete covers with legend "Trail Lighting" ½" (min.) block recessed letters cast into cover. Boxes called out on plan are to be 10-1/2” x 17-1/4”, 17” x 30” and 24” x 36” Brooks Products or approved equal and have been and sized according to the 2013 C.E.C. art. 214.28.

Southern California Edison pull boxes (Hand Holes) shall be 17" x 30" x 24" and 13" x 24" x 18" Brooks Products, Jenson Precast or approved equal. Pull boxes shall be concrete cast with bolt down concrete covers with legend "Edison" ½" (min.) block recessed letters cast into cover.

The grade of the top of the pull box shall be set flush in paved and lawn areas and 1 inch above natural grade in planter and natural grade areas.

**Section 700-3.10 Services** *ADD the following*

Service Equipment Enclosures shall be as follows:

Pedestals MPA and MPB, Single Meter Electrical Pedestal: Electrical Meter Panel: Myers Power Products, Inc. MEUG -24X-100-120/240-1Ph/3W (rated for 42KAIC) including mounting base for concrete MEUG24-Base and anchor bolts.

Stainless Steel Cabinet
Recessed T-handle latch assembly which folds down in pocket that is protected by pad lockable cover
Locking devices require approval from City of Irvine.
Meter socket, test blocks integral pull section with lugs per SCE requirements
Min AIC Rating 10K AIC including all components
Photocell – Precision ST-15 or Intermatic K4021c with maintenance by-pass switch
Lighting contactors 120V Coil – 4 pole (enclosed) Manufacturers GE Allen Bradley, Cutler Hammer or Square D Electrical held contactors
Listed by Underwriters Laboratories, Inc.
SCE work space clearance 3' back and sides, 6' front

**Section 700-4.1 Reinforced Concrete Standards** *ADD the following*

Concrete light pole shall be Ameron 1C614 with black and white marble aggregate and anchor base type.

**Section 700-4.4 High Pressure Sodium Luminaires** *DELETE in its entirety and SUBSTITUTE with the following:*

**700-4.4 LED Luminaires**
Pole mounted luminaire shall be Echo Lighting Inc. EPF Series EPF/TS-BS-126WATT LED4K-120V-277V-SF3OD-DBZ, fixture includes LED lamp components.

**Section 701-1 General** *ADD the following to the section.*

Upon receiving the Notice to Proceed, because of the length of time required for delivery of poles and lighting fixtures, the Contractor shall immediately place an order

for the poles and light fixtures and provide the City with documentation confirming the placement of the order and the expected dates of delivery.

The term "Street Lighting Standard" shall mean "Bike Trail Light(s)" or "Light(s)".

Should there be an underground utility or other conflict with the 2-foot diameter by 4'-6" deep light pole foundation the contractor shall use the alternate shallow footing foundation.

Payment for contract Bid Items will be considered full compensation for furnishing all labor, materials, tools, equipment and incidentals necessary to accomplish the work complete in place, conforming to the requirements herein, as shown on the plans, as specified in the Standard Specifications and these Special Provisions, as approve by the Engineer and no additional compensation will be allowed therefore.

**Section 701-8.2** *ADD the following to the end of the paragraph*

The portion of the foundation above ground shall be formed by using a sonotube

**Section 701-8.6 Payment – Foundations** *DELETE* and *SUBSTITUTE with the following:*

The type of footing to be used will be at the City's discretion and not decided by the contractor. The contractor shall verify the footing type to be used for each new light pole location with the City.

Payment for bike trail light foundations or alternate shallow footing foundation including saw cutting, removing and replacing concrete, asphalt pavement, rip-rap and rip-rap with shotcrete, excavation, form work, concrete, 3" PVC drain, conduit, anchor bolts and reinforcement shall be included in the unit price per each light in the Bid.

**Section 701-10.4 Payment** (Street Light Standards and Meter Pedestals) *DELETE* and *SUBSTITUTE with the following:*

Payment for installed Bike Trail Light shall be made at the contract unit price per Each (EA) light in the Bid, including but not limited to saw cutting; removing and replacing: concrete, asphalt pavement, rip-rap and shotcrete and rip-rap; excavation and backfill; trenching; directional boring; form work; concrete foundation; reinforcement; anchor bolts; light pole; fixture; conduit; conductors; disconnect fuses; splices; temporary removing and reinstalling existing cable barrier fencing and chain link fencing.

Payment for installed Meter Pedestal shall be made at the contract unit price per Each (EA) meter pedesal in the Bid, including but not limited to saw cutting; removing and replacing: concrete, asphalt pavement, rip-rap and shotcrete and rip-rap; excavation and backfill; trenching; directional boring; form work; concrete foundation; reinforcement; anchor bolts; conduit; conductors; disconnect fuses; splices; panel assembly; circuit breakers; contactors; interception and connection of all existing branch feeders fed from removed meter pedestals and all connections of new branch feeders.

Payment for Removed Meter Pedestal shall be made at the contract unit price per Each (EA) meter pedesal in the Bid, including but not limited to removing: chain link cage,

concrete, rip-rap and shotcrete and rip-rap; excavation and backfill; identification of existing branch feeders including conduit sizes, circuit breakers sizes and type; protection of existing branch feeders and utility secondary feeders.

**Section 701-11.3 Payment – Pull Boxes** *DELETE* and *SUBSTITUTE with the following:*

Payment for "Bike Trail Lighting" pull boxes shall be included in the unit price per each pull box in the Bid.

Payment for SCE intercept pull boxes shall be included in the unit price per each SCE intercept pull box in the Bid.

**Section 701-12.1 General** *DELETE the 2nd and 3rd sentence and SUBSTITUTE with the following:*

Conduit shall be installed by directional boring method when under concrete sidewalk and driveways, asphalt pavement or artificial turf and by trenching and/or directional boring method when in dirt.

**Section 701-12.7 Payment – Conduit** *DELETE* and *SUBSTITUTE with the following:*

Payment for 1-1/2" conduit including trenching and/or directional boring method; removing and replacing: concrete, asphalt, landscaping, irrigation and artificial turf shall be at the unit price per linear foot of 1-1/2" Conduit and Conductors for Bike Trail Lighting in the Bid.

Payment for the two (2) spare 2" conduit shall be included in the unit price per 2" Spare Conduit linear footage in the Bid.

Payment for the 3" SCE Service conduit including trenching and/or directional boring method; pull rope; saw cutting; and removing and replacing: concrete, asphalt, landscaping, irrigation and artificial turf shall be at the unit price per linear foot of 3" Service conduit in the Bid.

**Section 701-13.4 Payment – Conductors** *DELETE* and *SUBSTITUTE with the following:*

Payment for conductors for the bike trail lights shall be included in the unit price per conduit and conductor linear footage in the Bid.

**701-14 SERVICES** *ADD the following to the section*

Harvard Avenue Service

There are two existing single meter service pedestals for the existing irrigation system. The two existing single meter service pedestal are to be removed and replaced with a single meter service pedestal to serve the Bike Trail Lights and irrigation system. The plans call for the installation of a single meter service pedestal including the foundation and the interception with utility intercept pull box and extension of the existing 3" service conduit and pull rope to the new meter pedestal.

Claremont Street trail entry Service

There is an existing single meter service pedestal for the existing irrigation system. The existing single meter service pedestal is to be removed and replaced with a new single meter service pedestal to serve the Bike Trail Lights and irrigation system. The plans call for the installation of a single meter service pedestal including the foundation and the interception with utility intercept pull box and splice of the existing direct burial service conduit with new 3” service conduit and pull rope extension to the new meter pedestal.

The contractor shall submit to the Engineer for approval, the method and coordination with SCE of changing over the existing irrigation single meter services to the new single meter service pedestals. Upon completion of the irrigation meter service change over, the contractor shall remove the single meter service pedestals and deliver them to the City Yard; remove the foundation; cap the 3" conduit at the pedestal where applicable; and remove a section of the conduit adjacent to the point of service location and cap each end.

See Section 701-10.4 for Payment

# PART 8 – LANDSCAPING AND IRRIGATION

*REVISE as follows:*

**Section 801-8 Payment** *ADD the following to the section*

Contractor shall be responsible for determining the locations of existing irrigation mains, laterals and sprinkler heads that will conflict the proposed improvements. Contractor shall repair any/all damage to the irrigation system and shall be required to relocate or reroute any portion of the existing irrigation system to facilitate construction of the proposed improvements.

Payment for irrigation line relocation around bike trail light foundation and/or repair shall be considered as included in the unit price bid for each **Trail Light including Foundation, Pole, Fixture, Conductors and Conduit** and no additional compensation shall be allowed therefore.

# FEDERAL REQUIREMENTS

# FEDERAL REQUIREMENTS FOR FEDERAL-AID CONSTRUCTION PROJECTS

**GENERAL**.— The work herein proposed will be financed in whole or in part with Federal funds, and therefore all of the statutes, rules and regulations promulgated by the Federal Government and applicable to work financed in whole or in part with Federal funds will apply to such work. The "Required Contract Provisions, Federal-Aid Construction Contracts, "Form FHWA 1273, are included in this Section. Whenever in said required contract provisions references are made to "SHA contracting officer," "SHA resident engineer," or "authorized representative of the SHA," such references shall be construed to mean "Engineer" as defined in Section 1-1.18 of the State Standard Specifications

**PERFORMANCE OF PREVIOUS CONTRACT**.—In addition to the provisions in Section II, "Nondiscrimination," and Section VII, "Subletting or Assigning the Contract," of the required contract provisions, the Contractor shall comply with the following:

The bidder shall execute the CERTIFICATION WITH REGARD TO THE PERFORMANCE OF PREVIOUS CONTRACTS OR SUBCONTRACTS SUBJECT TO THE EQUAL OPPORTUNITY CLAUSE AND THE FILING OF REQUIRED REPORTS located in the proposal. No request for subletting or assigning any portion of the contract in excess of $10,000 will be considered under the provisions of Section VII of the required contract provisions unless such request is accompanied by the CERTIFICATION referred to above, executed by the proposed subcontractor.

**NON-COLLUSION PROVISION**.—The provisions in this section are applicable to all contracts except contracts for Federal Aid Secondary projects.

Title 23, United States Code, Section 112, requires as a condition precedent to approval by the Federal Highway Administrator of the contract for this work that each bidder file a sworn statement executed by, or on behalf of, the person, firm, association, or corporation to whom such contract is to be awarded, certifying that such person, firm, association, or corporation has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with the submitted bid. A form to make the non-collusion affidavit statement required by Section 112 as a certification under penalty of perjury rather than as a sworn statement as permitted by 28, USC, Sec. 1746, is included in the proposal.

**PARTICIPATION BY MINORITY BUSINESS ENTERPRISES IN SUBCONTRACTING**.—Part 26, Title 49, Code of Federal Regulations applies to this Federal-aid project. Pertinent sections of said Code are incorporated in part or in its entirety within other sections of these special provisions.

Schedule B—Information for Determining Joint Venture Eligibility

(This form need not be filled in if all joint venture firms are minority owned.)

1. Name of joint venture _____

_____

2. Address of joint venture _____

_____

3. Phone number of joint venture _____

_____

4. Identify the firms which comprise the joint venture. (The MBE partner must complete Schedule A.) _____

_____

a. Describe the role of the MBE firm in the joint venture. _____

_____

b. Describe very briefly the experience and business qualifications of each non-MBE joint venturer: _____

_____

5. Nature of the joint venture's business _____

_____

6. Provide a copy of the joint venture agreement.

7. What is the claimed percentage of MBE ownership? ___

_____

8. Ownership of joint venture: (This need not be filled in if described in the joint venture agreement, provided by question 6.).

a. Profit and loss sharing.
b. Capital contributions, including equipment.
c. Other applicable ownership interests.

9. Control of and participation in this contract. Identify by name, race, sex, and "firm" those individuals (and their titles) who are responsible for day-to-day management and policy decision making, including, but not limited to, those with prime responsibility for:

a. Financial decisions _____

_____

b. Management decisions, such as:

1. Estimating _____

_____

2. Marketing and sales _____

_____

3. Hiring and firing of management personnel ___

_____

4. Purchasing of major items or supplies _____

_____

c. Supervision of field operations _____

_____

Note.—If, after filing this Schedule B and before the completion of the joint venture's work on the contract covered by this regulation, there is any significant change in the information submitted, the joint venture must inform the grantee, either directly or through the prime contractor if the joint venture is a subcontractor.

**Affidavit**

"The undersigned swear that the foregoing statements are correct and include all material information necessary to identify and explain the terms and operation of our joint venture and the intended participation by each joint venturer in the undertaking. Further, the undersigned covenant and agree to provide to grantee current, complete and accurate information regarding actual joint venture work and the payment therefor and any proposed changes in any of the joint venture arrangements and to permit the audit and examination of the books, records and files of the joint venture, or those of each joint venturer relevant to the joint venture, by authorized representatives of the grantee or the Federal funding agency. Any material misrepresentation will be grounds for terminating any contract which may be awarded and for initiating action under Federal or State laws concerning false statements."

| | |
|---|---|
| ..... | ..... |
| Name of Firm | Name of Firm |
| ..... | ..... |
| Signature | Signature |
| ..... | ..... |
| Name | Name |
| ..... | ..... |
| Title | Title |
| ..... | ..... |
| Date | Date |

Date _____

State of _____

County of _____

Subscribed and sworn to (or affirmed) before me on this _____ day of _____, 20_____, by _____, proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me.

Notary Public _____

Commission expires _____

[Seal]

Date _____

State of _____

County of _____

Subscribed and sworn to (or affirmed) before me on this _____ day of _____, 20_____, by _____, proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me.

Notary Public _____

Commission expires _____

[Seal]

# REQUIRED CONTRACT PROVISIONS
# FEDERAL-AID CONSTRUCTION CONTRACTS

## (Exclusive of Appalachian Contracts)


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ATTACHMENTS

A. Employment and materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

## I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

## II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding $10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

**1. Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35,29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the

contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

> *"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the- job training."*

**2. EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

**3. Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering
all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

**4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

**5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

**6. Training and Promotion:**

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

**7. Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

**8. Reasonable Accommodation for Applicants / Employees with Disabilities:** The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an
undue hardship.

**9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:** The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

**10. Assurance Required by 49 CFR 26.13(b):**

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

**11. Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and

non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

## III. NON-SEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

## IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding $2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 “Contract provisions and related matters” with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

### 1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH–1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the

contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

**2. Withholding**

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally- assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

**3. Payrolls and basic records**

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis- Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH–347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency.

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

**1. Apprentices and trainees**

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity.

The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

**5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

**6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

**7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

**8. Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

**9. Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

**10. Certification of eligibility.**

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

## V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of $100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

**1. Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

**2. Violation; liability for unpaid wages; liquidated damages**. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

**3. Withholding for unpaid wages and liquidated damages.** The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

**4. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

## VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term “perform work with its own organization” refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
(2) the prime contractor remains responsible for the quality of the work of the leased employees;
(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

**VII. SAFETY: ACCIDENT PREVENTION**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

**VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

*"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or*

*Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or*

*Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;*

*Shall be fined under this title or imprisoned not more than 5 years or both."*

**IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.

2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

**X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND BOLUNTARY EXCLUSION**

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost $25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1**. Instructions for Certification – First Tier Participants:**

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. “First Tier Covered Transactions” refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant 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 entering into this transaction.

g. The prospective first tier participant 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," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) 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 may terminate this transaction for cause or default.

**2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:**

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal 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;

(3) 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 (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

**2. Instructions for Certification - Lower Tier Participants:**

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost $25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. 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 lower tier participant 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.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant 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.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.

h. 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 participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e 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.

*****

**Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – Lower Tier Participants:**

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such

prospective participant shall attach an explanation to this proposal

*****

**XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING**

This provision is applicable to all Federal aid construction contracts and to all related subcontracts which exceed $100,000 (49 CFR 20).

1. The prospective participant certifies by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, 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 any Federal 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 Federal 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.

2. 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 31 U.S.C. 1352. 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.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed $100,000 and that all such recipients shall certify and disclose accordingly.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notifythe State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

# FEDERAL-AID FEMALE AND MINORITY GOALS

To comply with Section II, "Nondiscrimination," of "Required Contract Provisions Federal-Aid Construction Contracts," the following female and minority utilization goals for Federal-aid construction contracts and subcontracts that exceed $10,000.

The nationwide goal for female utilization is 6.9 percent.

The goals for minority utilization [45 Fed Reg 65984 (10/3/1980)] are as follows:

**Minority Utilization Goals**

| Economic Area | | Goal (Percent) |
|---|---|---|
| 174 | Redding CA:<br>Non-SMSA Counties:<br>CA Lassen; CA Modoc; CA Plumas; CA Shasta; CA Siskiyou; CA Tehema | 6.8 |
| 175 | Eureka, CA<br>Non-SMSA Counties:<br>CA Del Norte; CA Humboldt; CA Trinity | 6.6 |
| 176 | San Francisco-Oakland-San Jose, CA:<br>SMSA Counties:<br>7120 Salinas-Seaside-Monterey, CA<br>CA Monterey<br>7360 San Francisco-Oakland<br>CA Alameda; CA Contra Costa; CA Marin; CA San Francisco; CA San Mateo<br>7400 San Jose, CA<br>CA Santa Clara, CA<br>7485 Santa Cruz, CA<br>CA Santa Cruz<br>7500 Santa Rosa<br>CA Sonoma<br>8720 Vallejo-Fairfield-Napa, CA<br>CA Napa; CA Solano<br>Non-SMSA Counties:<br>CA Lake; CA Mendocino; CA San Benito | <br><br>28.9<br><br>25.6<br><br><br>19.6<br><br>14.9<br><br>9.1<br><br>17.1<br><br>23.2 |
| 177 | Sacramento, CA:<br>SMSA Counties:<br>6920 Sacramento, CA<br>CA Placer; CA Sacramento; CA Yolo<br>Non-SMSA Counties<br>CA Butte; CA Colusa; CA El Dorado; CA Glenn; CA Nevada; CA Sierra; CA Sutter; CA Yuba | <br><br>16.1<br><br>14.3 |
| 178 | Stockton-Modesto, CA:<br>SMSA Counties:<br>5170 Modesto, CA<br>CA Stanislaus<br>8120 Stockton, CA<br>CA San Joaquin<br>Non-SMSA Counties<br>CA Alpine; CA Amador; CA Calaveras; CA Mariposa; CA Merced; CA Toulumne | <br><br>12.3<br><br>24.3<br><br>19.8 |
| 179 | Fresno-Bakersfield, CA<br>SMSA Counties:<br>0680 Bakersfield, CA<br>CA Kern<br>2840 Fresno, CA<br>CA Fresno<br>Non-SMSA Counties:<br>CA Kings; CA Madera; CA Tulare | <br><br>19.1<br><br>26.1<br><br>23.6 |

| | | |
|---|---|---|
| 180 | Los Angeles, CA:<br>SMSA Counties:<br>0360 Anaheim-Santa Ana-Garden Grove, CA<br>CA Orange<br>4480 Los Angeles-Long Beach, CA<br>CA Los Angeles<br>6000 Oxnard-Simi Valley-Ventura, CA<br>CA Ventura<br>6780 Riverside-San Bernardino-Ontario, CA<br>CA Riverside; CA San Bernardino<br>7480 Santa Barbara-Santa Maria-Lompoc, CA<br>CA Santa Barbara<br>Non-SMSA Counties<br>CA Inyo; CA Mono; CA San Luis Obispo | <br><br>11.9<br><br>28.3<br><br>21.5<br><br>19.0<br><br>19.7<br><br>24.6 |
| 181 | San Diego, CA:<br>SMSA Counties<br>7320 San Diego, CA<br>CA San Diego<br>Non-SMSA Counties<br>CA Imperial | <br><br>16.9<br><br>18.2 |

For each July during which work is performed under the contract, you and each non-material-supplier subcontractor with a subcontract of $10,000 or more must complete Form FHWA PR-1391 (Appendix C to 23 CFR 230). Submit the forms by August 15.

**Training**

This section applies if a number of trainees or apprentices is specified in the special provisions.

As part of your equal opportunity affirmative action program, provide on-the-job training to develop full journeymen in the types of trades or job classifications involved.

**The goal for the number of trainees or apprentices to be trained under the requirements of this Special Provision will be None (0).**

You have primary responsibility for meeting this training requirement.

If you subcontract a contract part, determine how many trainees or apprentices are to be trained by the subcontractor.

Include these training requirements in your subcontract.

Where feasible, 25 percent of apprentices or trainees in each occupation must be in their 1st year of apprenticeship or training.

Distribute the number of apprentices or trainees among the work classifications on the basis of your needs and the availability of journeymen in the various classifications within a reasonable recruitment area.

Before starting work, submit to the City/County of _____:

1. Number of apprentices or trainees to be trained for each classification
2. Training program to be used
3. Training starting date for each classification

Obtain the City/County of _____'s approval for this submitted information before you start work. The credits City/County of _____ you for each apprentice or trainee you employ on the work who is currently enrolled or becomes enrolled in an approved program.

The primary objective of this section is to train and upgrade minorities and women toward journeymen status. Make every effort to enroll minority and women apprentices or trainees, such as conducting systematic and direct recruitment through public and private sources likely to yield minority and women apprentices or trainees, to the extent they are available within a reasonable recruitment area. Show that you have made the efforts. In making these efforts, do not discriminate against any applicant for training.

Do not employ as an apprentice or trainee an employee:

1. In any classification in which the employee has successfully completed a training course leading to journeyman status or in which the employee has been employed as a journeyman
2. Who is not registered in a program approved by the US Department of Labor, Bureau of Apprenticeship and Training

Ask the employee if the employee has successfully completed a training course leading to journeyman status or has been employed as a journeyman. Your records must show the employee's answers to the questions.

In your training program, establish the minimum length and training type for each classification. The City/County of Orange and FHWA approves a program if one of the following is met:

1. It is calculated to:

    1.1. Meet the your equal employment opportunity responsibilities
    1.2. Qualify the average apprentice or trainee for journeyman status in the classification involved by the end of the training period

2. It is registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training and it is administered in a way consistent with the equal employment responsibilities of federal-aid highway construction contracts

Obtain the State's approval for your training program before you start work involving the classification covered by the program.

Provide training in the construction crafts, not in clerk-typist or secretarial-type positions. Training is allowed in lower level management positions such as office engineers, estimators, and timekeepers if the training is oriented toward construction applications. Training is allowed in the laborer classification if significant and meaningful training is provided and approved by the division office. Off-site training is allowed if the training is an integral part of an approved training program and does not make up a significant part of the overall training.

The City/County of _____ reimburses you 80 cents per hour of training given an employee on this contract under an approved training program:

1. For on-site training
2. For off-site training if the apprentice or trainee is currently employed on a federal-aid project and you do at least one of the following:

    2.1. Contribute to the cost of the training
    2.2. Provide the instruction to the apprentice or trainee
    2.3. Pay the apprentice's or trainee's wages during the off-site training period

3. If you comply with this section.

Each apprentice or trainee must:

1. Begin training on the project as soon as feasible after the start of work involving the apprentice's or trainee's skill
2. Remain on the project as long as training opportunities exist in the apprentice's or trainee's work classification or until the apprentice or trainee has completed the training program

Furnish the apprentice or trainee:

1. Copy of the program you will comply with in providing the training
2. Certification showing the type and length of training satisfactorily completed

Maintain records and submit reports documenting your performance under this section.

*(THE BIDDER'S EXECUTION ON THE SIGNATURE PORTION OF THIS PROPOSAL SHALL ALSO CONSTITUTE AN ENDORSEMENT AND EXECUTION OF THOSE CERTIFICATIONS WHICH ARE A PART OF THIS PROPOSAL)*

# EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

The bidder _____, proposed subcontractor _____, hereby certifies that he has ___, has not ____, participated in a previous contract or subcontract subject to the equal opportunity clauses, as required by Executive Orders 10925, 11114, or 11246, and that, where required, he has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filling requirements.

**Note:** The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b) (1)), and must be submitted by bidders and proposed subcontractors only in connection with contracts and subcontracts which are subject to the equal opportunity clause. Contracts and subcontracts which are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally only contracts or subcontracts of $10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by the Executive Orders or their implementing regulations.

Proposed prime contractors and subcontractors who have participated in a previous contract or subcontract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b) (1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

# NON-COLLUSION AFFIDAVIT

(Title 23 United States Code Section 112 and
Public Contract Code Section 7106)

## To the CITY of IRVINE, Department of Public Works

In conformance with Title 23 United States Code Section 112 and Public Contract Code 7106 the bidder declares that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that 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, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that 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, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

*Note: The above Noncollusion Affidavit is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Noncollusion Affidavit.*

Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

# DEBARMENT AND SUSPENSION CERTIFICATION

## TITLE 49, CODE OF FEDERAL REGULATIONS, PART 29

The bidder, under penalty of perjury, certifies that, except as noted below, he/she or any other person associated therewith in the capacity of owner, partner, director, officer, manager:

- is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any Federal agency;
- has not been suspended, debarred, voluntarily excluded or determined ineligible by any Federal agency within the past 3 years;
- does not have a proposed debarment pending; and
- has not been indicted, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years.

If there are any exceptions to this certification, insert the exceptions in the following space.

Exceptions will not necessarily result in denial of award, but will be considered in determining bidder responsibility. For any exception noted above, indicate below to whom it applies, initiating agency, and dates of action.

Notes: Providing false information may result in criminal prosecution or administrative sanctions.

The above certification is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Certification.

# NON-LOBBYING CERTIFICATION
# FOR FEDERAL-AID CONTRACTS

The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

(l) 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 any Federal 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 Federal 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 of Lobbying Activities," in conformance with its instructions.

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.

The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed $100,000 and that all such subrecipients shall certify and disclose accordingly.

# DISCLOSURE OF LOBBYING ACTIVITIES

COMPLETE THIS FORM TO DISCLOSE LOBBYING ACTIVITIES PURSUANT TO 31 U.S.C. 1352

**1. Type of Federal Action:**
☐ a. contract
b. grant
c. cooperative agreement
d. loan
e. loan guarantee
f. loan insurance

**2. Status of Federal Action:**
☐ a. bid/offer/application
b. initial award
c. post-award

**3. Report Type:**
☐ a. initial
b. material change

**For Material Change Only:**
year ____ quarter _____
date of last report _____

**4. Name and Address of Reporting Entity**

☐ Prime ☐ Subawardee
Tier _____, if known

**Congressional District,** if known

**5. If Reporting Entity in No. 4 is Subawardee, Enter Name and Address of Prime:**

**Congressional District,** if known

**6. Federal Department/Agency:**

**7. Federal Program Name/Description:**

**CFDA Number,** if applicable _____

**8. Federal Action Number,** if known:

**9. Award Amount,** if known:

**10. a. Name and Address of Lobby Entity**
(If individual, last name, first name, MI)

**b. Individuals Performing Services** (including address if different from No. 10a)
(last name, first name, MI)

(attach Continuation Sheet(s) if necessary)

**11. Amount of Payment (check all that apply)**
$_____ ☐ actual ☐ Planned

**12. Form of Payment (check all that apply):**
☐ a. cash
☐ b. in-kind; specify: nature _____
value _____

**13. Type of Payment (check all that apply)**
☐ a. retainer
☐ b. one-time fee
☐ c. commission
☐ d. contingent fee
☐ e deferred
☐ f. other, specify _____

**14. Brief Description of Services Performed or to be performed and Date(s) of Service, including officer(s), employee(s), or member(s) contacted, for Payment Indicated in Item 11:**

(attach Continuation Sheet(s) if necessary)

**16.** Information requested through this form is authorized by Title 31 U.S.C. Section 1352. This disclosure of lobbying reliance was placed by the tier above when his transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to Congress semiannually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

Signature: _____

Print Name: _____

Title: _____

Telephone No.: _____ Date: _____

**Federal Use Only:**

Authorized for Local Reproduction
Standard Form - LLL

Standard Form LLL Rev. 09-12-97

# INSTRUCTIONS FOR COMPLETION OF SELF DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of covered Federal action or a material change to previous filing pursuant to title 31 U.S.C. section 1352. The filing of a form is required for such payment or agreement to make payment to lobbying entity 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 a covered Federal action. Attach a continuation sheet for additional information if the space on the form is inadequate. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.
2. Identify the status of the covered Federal action.
3. Identify the appropriate classification of this report. If this is a follow-up report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last, previously submitted report by this reporting entity for this covered Federal action.
4. Enter the full name, address, city, state and zip code of the reporting entity. Include Congressional District if known. Check the appropriate classification of the reporting entity that designates if it is or expects to be a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the first tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
5. If the organization filing the report in Item 4 checks "Subawardee" then enter the full name, address, city, state and zip code of the prime Federal recipient. Include Congressional District, if known.
6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organization level below agency name, if known. For example, Department of Transportation, United States Coast Guard.
7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans and loan commitments.
8. Enter the most appropriate Federal identifying number available for the Federal action identification in item 1 (e.g., Request for Proposal (RFP) number, Invitation for Bid (IFB) number, grant announcement number, the contract grant or loan award number, the application/proposal control number assigned by the Federal agency). Include prefixes, e.g., "RFP-DE-90-001."
9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitments for the prime entity identified in item 4 or 5.

10. (a) Enter the full name, address, city, state and zip code of the lobbying entity engaged by the reporting entity identified in item 4 to influence the covered Federal action.

    (b) Enter the full names of the individual(s) performing services and include full address if different from 10 (a). Enter Last Name, First Name and Middle Initial (MI).

11. Enter the amount of compensation paid or reasonably expected to be paid by the reporting entity (item 4) to the lobbying entity (item 10). Indicate whether the payment has been made (actual) or will be made (planned). Check all boxes that apply. If this is a material change report, enter the cumulative amount of payment made or planned to be made.

12. Check the appropriate box(es). Check all boxes that apply. If payment is made through an in-kind contribution, specify the nature and value of the in-kind payment.

13. Check the appropriate box(es). Check all boxes that apply. If other, specify nature.

14. Provide a specific and detailed description of the services that the lobbyist has performed or will be expected to perform and the date(s) of any services rendered. Include all preparatory and related activity not just time spent in actual contact with Federal officials. Identify the Federal officer(s) or employee(s) contacted or the officer(s) employee(s) or Member(s) of Congress that were contacted.

15. Check whether or not a continuation sheet(s) is attached.

16. The certifying official shall sign and date the form, print his/her name title and telephone number.

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, D.C. 20503.

# DISADVANTAGED BUSINESS ENTERPRISE (DBE)

This project is subject to Title 49 CFR 26.13(b):

The contractor, sub recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.

Take necessary and reasonable steps to ensure that DBEs have opportunity to participate in the contract (49 CFR 26).

To ensure equal participation of DBEs provided in 49 CFR 26.5, the Agency shows a goal for DBEs.

Make work available to DBEs and select work parts consistent with available DBE subcontractors and suppliers.

Meet the DBE goal shown elsewhere in these special provisions or demonstrate that you made adequate good faith efforts to meet this goal.

It is your responsibility to verify that the DBE firm is certified as DBE at date of bid opening. For a list of DBEs certified by the California Unified Certification Program, go to:

http://www.dot.ca.gov/hq/bep/find_certified.htm

All DBE participation will count toward the California Department of Transportation’s federally mandated statewide overall DBE goal.

Credit for materials or supplies you purchase from DBEs counts towards the goal in the following manner:

1. 100 percent counts if the materials or supplies are obtained from a DBE manufacturer.
2. 60 percent counts if the materials or supplies are obtained from a DBE regular dealer.
3. Only fees, commissions, and charges for assistance in the procurement and delivery of materials or supplies count if obtained from a DBE that is neither a manufacturer or regular dealer. 49 CFR 26.55 defines "manufacturer" and "regular dealer."

You receive credit towards the goal if you employ a DBE trucking company that performs a commercially useful function as defined in 49 CFR 26.55(d)(1) through (4) and (6).

**DBE Commitment Submittal**

Submit Local Agency Bidder DBE Commitment (Construction Contracts), Exhibit 15-G, form, included in the Bid book. If the form is not submitted with the bid, remove the form from the Bid book before submitting your bid.

If the DBE Commitment form is not submitted with the bid, the apparent low bidder, the 2nd low bidder, and the 3rd low bidder must complete and submit the DBE Commitment form to the Agency. DBE Commitment form must be received by the Agency no later than 4:00 p.m. on the 4th business day after bid opening.

Other bidders do not need to submit the DBE Commitment form unless the Agency requests it. If the Agency requests you to submit a DBE Commitment form, submit the completed form within 4 business days of the request.

Submit written confirmation from each DBE stating that it is participating in the contract. Include confirmation with the DBE Commitment form. A copy of a DBE's quote will serve as written confirmation that the DBE is participating in the contract.

If you do not submit the DBE Commitment form within the specified time, the Agency finds your bid nonresponsive.

**Good Faith Efforts Submittal**

If you have not met the DBE goal, complete and submit the DBE Information - Good Faith Efforts, Exhibit 15-H, form with the bid showing that you made adequate good faith efforts to meet the goal. Only good faith efforts directed towards obtaining participation by DBEs will be considered. If good faith efforts documentation is not submitted with the bid, it must be received by the Agency no later than 4:00 p.m. on the 4th business day after bid opening.

If your DBE Commitment form shows that you have met the DBE goal or if you are required to submit the DBE Commitment form, you must also submit good faith efforts documentation within the specified time to protect your eligibility for award of the contract in the event the Agency finds that the DBE goal has not been met.

Good faith efforts documentation must include the following information and supporting documents, as necessary:

1. Items of work you have made available to DBE firms. Identify those items of work you might otherwise perform with its own forces and those items that have been broken down into economically feasible units to facilitate DBE participation. For each item listed, show the dollar value and percentage of the total contract. It is your responsibility to demonstrate that sufficient work to meet the goal was made available to DBE firms.
2. Names of certified DBEs and dates on which they were solicited to bid on the project. Include the items of work offered. Describe the methods used for following up initial solicitations to determine with certainty if the DBEs were interested, and the dates of the follow-up. Attach supporting documents such as copies of letters, memos, facsimiles sent, telephone logs, telephone billing

statements, and other evidence of solicitation. You are reminded to solicit certified DBEs through all reasonable and available means and provide sufficient time to allow DBEs to respond.

3. Name of selected firm and its status as a DBE for each item of work made available. Include name, address, and telephone number of each DBE that provided a quote and their price quote. If the firm selected for the item is not a DBE, provide the reasons for the selection.
4. Name and date of each publication in which you requested DBE participation for the project. Attach copies of the published advertisements.
5. Names of agencies and dates on which they were contacted to provide assistance in contacting, recruiting, and using DBE firms. If the agencies were contacted in writing, provide copies of supporting documents.
6. List of efforts made to provide interested DBEs with adequate information about the plans, specifications, and requirements of the contract to assist them in responding to a solicitation. If you have provided information, identify the name of the DBE assisted, the nature of the information provided, and date of contact. Provide copies of supporting documents, as appropriate.
7. List of efforts made to assist interested DBEs in obtaining bonding, lines of credit, insurance, necessary equipment, supplies, and materials, excluding supplies and equipment that the DBE subcontractor purchases or leases from the prime contractor or its affiliate. If such assistance is provided by you, identify the name of the DBE assisted, nature of the assistance offered, and date assistance was provided. Provide copies of supporting documents, as appropriate.
8. Any additional data to support demonstration of good faith efforts.

The Agency may consider DBE commitments of the 2nd and 3rd bidders when determining whether the low bidder made good faith efforts to meet the DBE goal.

**SUBCONTRACTOR AND DBE RECORDS**

Use each DBE subcontractor as listed on the List of Subcontractors form and the Local Agency Bidder DBE Commitment (Construction Contracts), Exhibit 15-G, forms unless you receive authorization for a substitution.
The Agency requests the Contractor to:

1. Notify the Engineer of any changes to its anticipated DBE participation
2. Provide this notification before starting the affected work

Maintain records including:

1. Name and business address of each 1st-tier subcontractor
2. Name and business address of each DBE subcontractor, DBE vendor, and DBE trucking company, regardless of tier
3. Date of payment and total amount paid to each business

If you are a DBE contractor, include the date of work performed by your own forces and the corresponding value of the work.

Before the 15th of each month, submit a Monthly DBE Trucking Verification form.

If a DBE is decertified before completing its work, the DBE must notify you in writing of the decertification date. If a business becomes a certified DBE before completing its work, the business must notify you in writing of the certification date. Submit the notifications. On work completion, complete a Disadvantaged Business Enterprises (DBE) Certification Status Change, Exhibit 17-O, form. Submit the form within 30 days of contract acceptance.

Upon work completion, complete a Final Report – Utilization of Disadvantaged Business Enterprises (DBE), First-Tier Subcontractors, Exhibit 17-F, form. Submit it within 90 days of contract acceptance. The Agency withholds $10,000 until the form is submitted. The Agency releases the withhold upon submission of the completed form.

**PERFORMANCE OF SUBCONTRACTORS**

DBEs must perform work or supply materials as listed in the Local Agency Bidder DBE Commitment (Construction Contracts), Exhibit 15-G, included in the Bid.

Do not terminate or substitute a listed DBE for convenience and perform the work with your own forces or obtain materials from other sources without authorization from the Agency.

The Agency authorizes a request to use other forces or sources of materials if it shows any of the following justifications:

1. Listed DBE fails or refuses to execute a written contract based on plans and specifications for the project.
2. You stipulated that a bond is a condition of executing the subcontract and the listed DBE fails to meet your bond requirements.
3. Work requires a contractor's license and listed DBE does not have a valid license under Contractors License Law.
4. Listed DBE fails or refuses to perform the work or furnish the listed materials.
5. Listed DBE's work is unsatisfactory and not in compliance with the contract.
6. Listed DBE is ineligible to work on the project because of suspension or debarment.
7. Listed DBE becomes bankrupt or insolvent.
8. Listed DBE voluntarily withdraws with written notice from the Contract.
9. Listed DBE is ineligible to receive credit for the type of work required.
10. Listed DBE owner dies or becomes disabled resulting in the inability to perform the work on the Contract.
11. Agency determines other documented good cause.

Notify the original DBE of your intent to use other forces or material sources and provide the reasons. Provide the DBE with 5 days to respond to your notice and advise you and the Agency of the reasons why the use of other forces or sources of materials should not occur. Your request to use other forces or material sources must include:

1. 1 or more of the reasons listed in the preceding paragraph
2. Notices from you to the DBE regarding the request
3. Notices from the DBEs to you regarding the request

If a listed DBE is terminated, make good faith efforts to find another DBE to substitute for the original DBE. The substitute DBE must perform at least the same amount of work as the original DBE under the contract to the extent needed to meet the DBE goal.

The substitute DBE must be certified as a DBE at the time of request for substitution. Unless the Agency authorizes (1) a request to use other forces or sources of materials or (2) a good faith effort for a substitution of a terminated DBE, the Agency does not pay for work listed on the Local Agency Bidder DBE Commitment (Construction Contracts), Exhibit 15-G, form unless it is performed or supplied by the listed DBE or an authorized substitute.

**SUBCONTRACTING**

No subcontract releases the Contractor from the contract or relieves the Contractor of their responsibility for a subcontractor's work.

If the Contractor violates Public Contract Code § 4100 et seq., the City of Irvine may exercise the remedies provided under Public Contract Code § 4110. The City of Irvine may refer the violation to the Contractors State License Board as provided under Public Contract Code § 4111.

The provisions in the third paragraph of Section 8-1.01, "Subcontracting," of the State Standard Specifications, 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" in these special provisions that the Contractor perform not less than 30 percent of the original contract work with the Contractor's own organization.

Each subcontract must comply with the contract.

Each subcontractor must have an active and valid State contractor's license with a classification appropriate for the work to be performed (Business & Professional Code, § 7000 et seq.).

Submit copies of subcontracts upon request by the Engineer.

Before subcontracted work starts, submit a Subcontracting Request form.

Do not use a debarred contractor; a current list of debarred contractors is available at the Department of Industrial Relations' Web site.

Upon request by the Engineer, immediately remove and not again use a subcontractor who fails to prosecute the work satisfactorily.

Each subcontract and any lower tier subcontract that may in turn be made shall include the "Required Contract Provisions Federal-Aid Construction Contracts" in of these special provisions. 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.

Pursuant to the provisions in Section 1777.1 of the Labor Code, 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 at:

http://www.dir.ca.gov/DLSE/Debar.html

## PROMPT PROGRESS PAYMENT TO SUBCONTRACTORS

A prime contractor or subcontractor shall pay to any subcontractor not later than 7-days of receipt of each progress payment, in accordance with the provision in Section 7108.5 of the California Business and Professions Code concerning prompt payment to subcontractors. The 7-days are applicable unless a longer period is agreed to in writing. Any delay or postponement of payment over 30-days may take place only for good cause and with the City of Irvine's prior written approval. Any violation of Section 7108.5 shall subject the violating contractor or subcontractor to the penalties, sanctions, and other remedies of that Section. These requirements shall not be construed to limit or impair any contractual, administrative, or judicial remedies, otherwise available to the contractor or subcontractor in the event of a dispute involving late payment or nonpayment by the contractor, deficient subcontractor performance, and/or noncompliance by a subcontractor. This clause applies to both DBE and non-DBE subcontractors.

## PROMPT PAYMENT OF WITHHELD FUNDS TO SUBCONTRACTORS

The City of Irvine shall hold retainage from the prime contractor and shall make prompt and regular incremental acceptances of portions, as determined by the City of Irvine, of the contract work, and pay retainage to the prime contractor based on these acceptances. The prime contractor or subcontractor shall return all monies withheld in retention from all subcontractors within 30-days after receiving payment for work satisfactorily completed and accepted including incremental acceptances of portions of the contract work by the City of Irvine. Federal law (49 CFR 26.29) requires any delay or postponement of payment over 30 days may take place only for good cause and with the City of Irvine's prior written approval. Any violation of these provisions shall subject the violating prime contractor to the penalties, sanctions, and other remedies specified in Section 7108.5 of the California Business Professions Code. These requirements shall not be construed to limit or impair any contractual, administrative, or judicial remedies, otherwise available to the contractor or subcontractor in the event of: a dispute involving late payment or nonpayment by the contractor; deficient subcontractor performance, and/or noncompliance by a subcontractor. This clause applies to both DBE and non-DBE subcontractors.

# BIDDER'S LIST OF SUBCONTRANCTORS (DBE AND NON-DBE) – PART I

The bidder shall list all subcontractors (both DBE and non-DBE) in accordance with Section 2-1.054 of the State Standard Specifications and per Title 49, Section 26.11 of the Code of Federal Regulations. This listing is required in addition to listing DBE Subcontractors elsewhere in the proposal. **Photocopy this form for additional firms.**

| **Firm Name/ Address/ City, State, ZIP** | **Phone/ Fax** | **Annual Gross Receipts** | **Description of Portion of Work to be Performed** | **Certified DBE?** |
|---|---|---|---|---|
| *Name* | *Phone* | ☐ < $1 million | | ☐ YES |
| | | ☐ < $5 million | | ☐ NO |
| *Address* | | ☐ < $10 million | | *If YES list DBE #:* |
| | *Fax* | ☐ < $15 million | | |
| *City State ZIP* | | ☐ > $15 million | | *Age of Firm (Yrs.)* |
| | | | | |
| *Name* | *Phone* | ☐ < $1 million | | ☐ YES |
| | | ☐ < $5 million | | ☐ NO |
| *Address* | | ☐ < $10 million | | *If YES list DBE #:* |
| | *Fax* | ☐ < $15 million | | |
| *City State ZIP* | | ☐ > $15 million | | *Age of Firm (Yrs.)* |
| | | | | |
| *Name* | *Phone* | ☐ < $1 million | | ☐ YES |
| | | ☐ < $5 million | | ☐ NO |
| *Address* | | ☐ < $10 million | | *If YES list DBE #:* |
| | *Fax* | ☐ < $15 million | | |
| *City State ZIP* | | ☐ > $15 million | | *Age of Firm (Yrs.)* |
| | | | | |
| *Name* | *Phone* | ☐ < $1 million | | ☐ YES |
| | | ☐ < $5 million | | ☐ NO |
| *Address* | | ☐ < $10 million | | *If YES list DBE #:* |
| | *Fax* | ☐ < $15 million | | |
| *City State ZIP* | | ☐ > $15 million | | *Age of Firm (Yrs.)* |
| | | | | |

**Distribution:** 1) Original – Local Agency File

# BIDDER'S LIST OF SUBCONTRACTORS (DBE AND NON-DBE) – PART II

The bidder shall list all subcontractors who provided a quote or proposal but were not selected to participate as a subcontractor on this project. This is required for compliance with Title 49, Section 26 of the Code of Federal Regulations. **Photocopy this form for additional firms.**

| Firm Name/ Address/ City, State, ZIP | Phone/ Fax | Annual Gross Receipts | Description of Portion of Work to be Performed | Certified DBE? |
|---|---|---|---|---|
| *Name* | *Phone* | ☐ < $1 million | | ☐ YES |
| | | ☐ < $5 million | | ☐ NO |
| *Address* | | ☐ < $10 million | | *If YES list DBE #:* |
| | *Fax* | ☐ < $15 million | | |
| *City State ZIP* | | ☐ > $15 million | | *Age of Firm (Yrs.)* |
| | | | | |
| *Name* | *Phone* | ☐ < $1 million | | ☐ YES |
| | | ☐ < $5 million | | ☐ NO |
| *Address* | | ☐ < $10 million | | *If YES list DBE #:* |
| | *Fax* | ☐ < $15 million | | |
| *City State ZIP* | | ☐ > $15 million | | *Age of Firm (Yrs.)* |
| | | | | |
| *Name* | *Phone* | ☐ < $1 million | | ☐ YES |
| | | ☐ < $5 million | | ☐ NO |
| *Address* | | ☐ < $10 million | | *If YES list DBE #:* |
| | *Fax* | ☐ < $15 million | | |
| *City State ZIP* | | ☐ > $15 million | | *Age of Firm (Yrs.)* |
| | | | | |
| *Name* | *Phone* | ☐ < $1 million | | ☐ YES |
| | | ☐ < $5 million | | ☐ NO |
| *Address* | | ☐ < $10 million | | *If YES list DBE #:* |
| | *Fax* | ☐ < $15 million | | |
| *City State ZIP* | | ☐ > $15 million | | *Age of Firm (Yrs.)* |
| | | | | |

**Distribution:** 1) Original – Local Agency File

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

# FINAL REPORT-UTILIZATION OF DISADVANTAGED BUSINESS ENTERPRISES (DBE), FIRST-TIER SUBCONTRACTORS

**ADA Notice**
For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814

CEM-2402F (REV 02/2008)

| CONTRACT NUMBER | COUNTY | ROUTE | POST MILES | FEDERAL AID PROJECT NO. | ADMINISTERING AGENCY | | CONTRACT COMPLETION DATE |
|---|---|---|---|---|---|---|---|
| PRIME CONTRACTOR | | | BUSINESS ADDRESS | | | ESTIMATED CONTRACT AMOUNT $ | |

| ITEM NO. | DESCRIPTION OF WORK PERFORMED AND MATERIAL PROVIDED | COMPANY NAME AND BUSINESS ADDRESS | DBE CERT. NUMBER | CONTRACT PAYMENTS | | DATE WORK COMPLETE | DATE OF FINAL PAYMENT |
|---|---|---|---|---|---|---|---|
| | | | | NON-DBE | DBE | | |
| | | | | $ | $ | | |
| | | | | $ | $ | | |
| | | | | $ | $ | | |
| | | | | $ | $ | | |
| | | | | $ | $ | | |
| | | | | $ | $ | | |
| | | | | $ | $ | | |
| | | | | $ | $ | | |
| | | | | $ | $ | | |
| | | | | $ | $ | | |
| | | | | $ | $ | | |
| | | | | $ | $ | | |
| ORIGINAL COMMITMENT $ | | | TOTAL | $ | $ | | |

DBE

List all First-Tier Subcontractors, Disadvantaged Business Enterprises (DBEs) regardless of tier, whether or not the firms were originally listed for goal credit. If actual DBE utilization (or item of work) was different than that approve d at time of award, provide comments on back of form. List actual amount paid to each entity.

**I CERTIFY THAT THE ABOVE INFORMATION IS COMPLETE AND CORRECT**

| CONTRACTOR REPRESENTATIVE'S SIGNATURE | BUSINESS PHONE NUMBER | DATE |
|---|---|---|

**TO THE BEST OF MY INFORMATION AND BELIEF, THE ABOVE INFORMATION IS COMPLETE AND CORRECT**

| RESIDENT ENGINEER'S SIGNATURE | BUSINESS PHONE NUMBER | DATE |
|---|---|---|
| | | |

Copy Distribution-Caltrans contracts: **Original** - District Construction; **Copy-** Business Enterprise Program; **Copy-** Contractor; **Copy** Resident Engineer

Copy Distribution-Local Agency contracts: **Original** - District Local Assistance Engineer (submitted with the Report of Expenditure; **Copy-** District Local Assistance Engineer; **Copy-** Local Agency file

# FINAL REPORT – UTILIZATION OF DISADVANTAGED BUSINESS ENTERPRISES (DBE), FIRST-TIER SUBCONTRACTORS CEM 2402(F) (Rev. 02/2008)

The form requires specific information regarding the construction project: Contract Number, County, Route, Post Miles, Federal-aid Project No., the Administering Agency, the Contract Completion Date and the Estimated Contract Amount. It requires the prime contractor name and business address. The focus of the form is to describe who did what by contract item number and descriptions, asking for specific dollar values of item work completed broken down by subcontractors who performed the work both DBE and non-DBE work forces. DBE prime contractors are required to show the date of work performed by their own forces along with the corresponding dollar value of work.

The form has a column to enter the Contract Item No. (or Item No's) and description of work performed or materials provided, as well as a column for the subcontractor name and business address. For those firms who are DBE, there is a column to enter their DBE Certification Number. The DBE should provide their certification number to the contractor and notify the contractor in writing with the date of the decertification if their status should change during the course of the project.
The form has six columns for the dollar value to be entered for the item work performed by the subcontractor.

The Non-DBE column is used to enter the dollar value of work performed for firms who are not certified
DBE.

The decision of which column to be used for entering the DBE dollar value is based on what program(s) status the firm is certified. This program status is determined by the California Unified Certification Program by ethnicity, gender, ownership, and control issues at time of certification. To confirm the certification status and program status, access the Department of Transportation Civil Rights web site at: http://www.dot.ca.gov/hq/bep or by calling (916) 324-1700 or the toll free number at (888) 810-6346.

Based on this DBE Program status, the following table depicts which column to be used:

| DBE Program Status | Column to be used |
|---|---|
| If program status shows DBE only with no other | DBE |

If a contractor performing work as a DBE on the project becomes decertified and still performs work after their decertification date, enter the total dollar value performed by this contractor under the appropriate DBE identification column.

If a contractor performing work as a non-DBE on the project becomes certified as a DBE, enter the dollar value of all work performed after certification as a DBE under the appropriate identification column.

Enter the total of each of the six columns in Form CEM-2402(F).

Any changes to DBE certification must also be submitted on Form-CEM 2403(F).

Enter the Date Work Completed as well as the Date of Final Payment (the date when the prime contractor made the “final payment” to the subcontractor for the portion of work listed as being completed).

The contractor and the resident engineer sign and date the form indicating that the information provided is complete and correct.

# Exhibit 15-G Local Agency Bidder DBE Commitment (Construction Contracts)

**NOTE: PLEASE REFER TO INSTRUCTIONS ON THE REVERSE SIDE OF THIS FORM**

LOCAL AGENCY: _____ b LOCATION: _____
PROJECTDESCRIPTION: _____
TOTAL CONTRACT AMOUNT: $ _____
BID DATE: _____
BIDDER'S NAME: _____
CONTRACT DBE GOAL**:** _____

| CONTRACT ITEM NO. | ITEM OF WORK AND DESCRIPTION OR SERVICES TO BE SUBCONTRACTED OR MATERIALS TO BE PROVIDED (or contracted if the bidder is a DBE) | DBE CERT NO. AND EXPIRATION DATE | NAME OF EACH DBE (Must be certified on the date bids are opened - include DBE address and phone number**)** | DOLLAR AMOUNT DBE |
|---|---|---|---|---|
| | | | | |
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## For Local Agency to Complete:

Local Agency Contract Number: _____
Federal-aid Project Number: _____
Federal Share: _____
Contract Award Date: _____

Total Claimed DBE Participation

$_____

_____%

Local Agency certifies that all DBE certifications have been verified and information is complete and accurate.

_____ _____ _____
Print Name Signature Date
Local Agency Representative

(Area Code) Telephone Number: _____

_____
Signature of Bidder

_____
Date (Area Code) Tel. No.

_____
Person to Contact (Please Type or Print)

Local Agency Bidder DBE Commitment (Construction Contracts)
(Rev 6/26/09)

**Distribution**: (1) Copy – Fax or scan a copy to the Caltrans District Local Assistance Engineer (DLAE) within 30 days of contract execution. Failure to send a copy to the DLAE within 30 days of contract execution may result in de-obligation of funds for this project.
(2) Copy – Include in award package to Caltrans District Local Assistance
(3) Original – Local agency files

# INSTRUCTIONS - LOCAL AGENCY BIDDER
# DBE COMMITMENT (CONSTRUCTION CONTRACTS)

**ALL BIDDERS:**

**PLEASE NOTE: This information may be submitted with your bid. If it is not, and you are the apparent low bidder or the second or third low bidder, it must be submitted and received as specified in the Special Provisions. Failure to submit the required DBE commitment will be grounds for finding the bid nonresponsive**

The form requires specific information regarding the construction contract: Local Agency, Location, Project Description, Total Contract Amount, Bid Date, Bidder's Name, and Contract DBE Goal.

The form has a column for the Contract Item Number and Item of Work and Description or Services to be Subcontracted or Materials to be provided by DBEs. Prime contractors shall indicate all work to be performed by DBEs including, if the prime is a DBE, work performed by its own forces, if a DBE. The DBE shall provide a certification number to the Contractor and expiration date. Enter the DBE prime's and subcontractors' certification numbers.The form has a column for the Names of DBE contractors to perform the work (who must be certified on the date bids are opened and include the DBE address and phone number).

IMPORTANT: Identify **all** DBE firms participating in the project regardless of tier. Names of the First-Tier DBE Subcontractors and their respective item(s) of work listed should be consistent, where applicable, with the names and items of work in the "List of Subcontractors" submitted with your bid.

There is a column for the DBE participation dollar amount. Enter the Total Claimed DBE Participation dollars and percentage amount of items of work submitted with your bid pursuant to the Special Provisions. (If 100% of item is not to be performed or furnished by the DBE, describe exact portion of time to be performed or furnished by the DBE.) See Section "Disadvantaged Business Enterprise (DBE)," of the Special Provisions (construction contracts), to determine how to count the participation of DBE firms.

Exhibit 15-G must be signed and dated by the person bidding. Also list a phone number in the space provided and print the name of the person to contact.

**Local agencies** should complete the Local Agency Contract Award, Federal-aid Project Number, Federal Share, Contract Award Date fields and verify that all information is complete and accurate before signing and filing.

# Exhibit 15-H DBE Information —Good Faith Efforts
## DBE INFORMATION - GOOD FAITH EFFORTS

Federal-aid Project No. _____ Bid Opening Date _____

The _____(City/County of)_____established a Disadvantaged Business Enterprise (DBE) goal of _____% for this project. The information provided herein shows that a good faith effort was made.

Lowest, second lowest and third lowest bidders shall submit the following information to document adequate good faith efforts. Bidders should submit the following information even if the "Local Agency Bidder DBE Commitment" form indicates that the bidder has met the DBE goal. This will protect the bidder's eligibility for award of the contract if the administering agency determines that the bidder failed to meet the goal for various reasons, e.g., a DBE firm was not certified at bid opening, or the bidder made a mathematical error.

Submittal of only the "Local Agency Bidder DBE Commitment" form may not provide sufficient documentation to demonstrate that adequate good faith efforts were made.

The following items are listed in the Section entitled "Submission of DBE Commitment" of the Special Provisions:

A. The names and dates of each publication in which a request for DBE participation for this project was placed by the bidder (please attach copies of advertisements or proofs of publication):

| **Publications** | **Dates of Advertisement** |
|---|---|
| | |
| | |
| | |

B. The names and dates of written notices sent to certified DBEs soliciting bids for this project and the dates and methods used for following up initial solicitations to determine with certainty whether the DBEs were interested (please attach copies of solicitations, telephone records, fax confirmations, etc.):

| **Names of DBEs Solicited** | **Date of Initial Solicitation** | **Follow Up Methods and Dates** |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

C. The items of work which the bidder made available to DBE firms including, where appropriate, any breaking down of the contract work items (including those items normally performed by the bidder with its own forces) into economically feasible units to facilitate DBE participation. It is the bidder's responsibility to demonstrate that sufficient work to facilitate DBE participation was made available to DBE firms.

| Items of Work | Bidder Normally Performs Item (Y/N) | Breakdown of Items | Amount ($) | Percentage Of Contract |
|---|---|---|---|---|

_____
_____
_____

D. The names, addresses and phone numbers of rejected DBE firms, the reasons for the bidder's rejection of the DBEs, the firms selected for that work (please attach copies of quotes from the firms involved), and the price difference for each DBE if the selected firm is not a DBE:

Names, addresses and phone numbers of rejected DBEs and the reasons for the bidder's rejection of the DBEs:

_____
_____
_____
_____

Names, addresses and phone numbers of firms selected for the work above:

_____
_____
_____
_____

E. Efforts made to assist interested DBEs in obtaining bonding, lines of credit or insurance, and any technical assistance or information related to the plans, specifications and requirements for the work which was provided to DBEs:

_____
_____
_____
_____

F. Efforts made to assist interested DBEs in obtaining necessary equipment, supplies, materials or related assistance or services, excluding supplies and equipment the DBE subcontractor purchases or leases from the prime contractor or its affiliate:

_____
_____
_____
_____

G. The names of agencies, organizations or groups contacted to provide assistance in contacting, recruiting and using DBE firms (please attach copies of requests to agencies and any responses received, i.e., lists, Internet page download, etc.):

| Name of Agency/Organization | Method/Date of Contact | Results |
|---|---|---|

_____
_____
_____

H. Any additional data to support a demonstration of good faith efforts (use additional sheets if necessary):

_____
_____
_____

**NOTE**: USE ADDITIONAL SHEETS OF PAPER IF NECESSARY.

# PUBLIC CONTRACT CODE
## Public Contract Code Section 10285.1 Statement

In conformance with Public Contract Code Section 10285.1 (Chapter 376, Stats. 1985), the bidder hereby declares under penalty of perjury under the laws of the State of California that the bidder has ___ , has not ___been convicted within the preceding three years of any offenses referred to in that section, including any charge of fraud, bribery, collusion, conspiracy, or any other act in violation of any state or Federal antitrust law in connection with the bidding upon, award of, or performance of, any public works contract, as defined in Public Contract Code Section 1101, with any public entity, as defined in Public Contract Code Section 1100, including the Regents of the University of California or the Trustees of the California State University. The term "bidder" is understood to include any partner, member, officer, director, responsible managing officer, or responsible managing employee thereof, as referred to in Section 10285.1.

Note: The bidder must place a check mark after "has" or "has not" in one of the blank spaces provided. The above Statement is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Statement. Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

---

**Public Contract Code Section 10162 Questionnaire**

In conformance with Public Contract Code Section 10162, the Bidder shall complete, under penalty of perjury, the following questionnaire:

Has the bidder, any officer of the bidder, or any employee of the bidder who has a 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 law or a safety regulation?

Yes _____ No _____

If the answer is yes, explain the circumstances in the following space.

## Public Contract Code 10232 Statement

In conformance with Public Contract Code Section 10232, the Contractor hereby states under penalty of perjury that no more than one final unappealable finding of contempt of court by a federal court has been issued against the Contractor within the immediately preceding two year period because of the Contractor's failure to comply with an order of a federal court which orders the Contractor to comply with an order of the National Labor Relations Board.

Note: The above Statement and Questionnaire are part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Statement and Questionnaire. Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

# BUY AMERICA REQUIREMENTS

Attention is directed to the "Buy America" requirements of the Surface Transportation Assistance Act of 1982 (Section 165) and the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) Sections 1041(a) and 1048(a), and the regulations adopted pursuant thereto. In conformance with the law and regulations, all manufacturing processes for steel and iron materials furnished for incorporation into the work on this project shall occur in the United States, with the exception that pig iron and processed, pelletized and reduced iron ore manufactured outside of the United States may be used in the domestic manufacturing process for such steel and iron materials. The application of coatings, such as epoxy coating, galvanizing, painting, and other coating that protects or enhances the value of steel or iron materials shall be considered a manufacturing process subject to the "Buy America" requirements.

A Certificate of Compliance, conforming to the provisions in Section 6-1.07, "Certificates of Compliance," of the State Standard Specifications, shall be furnished for steel and iron materials. The certificates, in addition to certifying that the materials comply with the specifications, shall specifically certify that all manufacturing processes for the materials occurred in the United States, except for the above exceptions.

The requirements imposed by the law and regulations do not prevent a minimal use of foreign steel and iron materials if the total combined cost of the materials used does not exceed one-tenth of one percent (0.1 percent) of the total contract cost or $2,500, whichever is greater. The Contractor shall furnish the Engineer acceptable documentation of the quantity and value of the foreign steel and iron prior to incorporating the materials into the work.

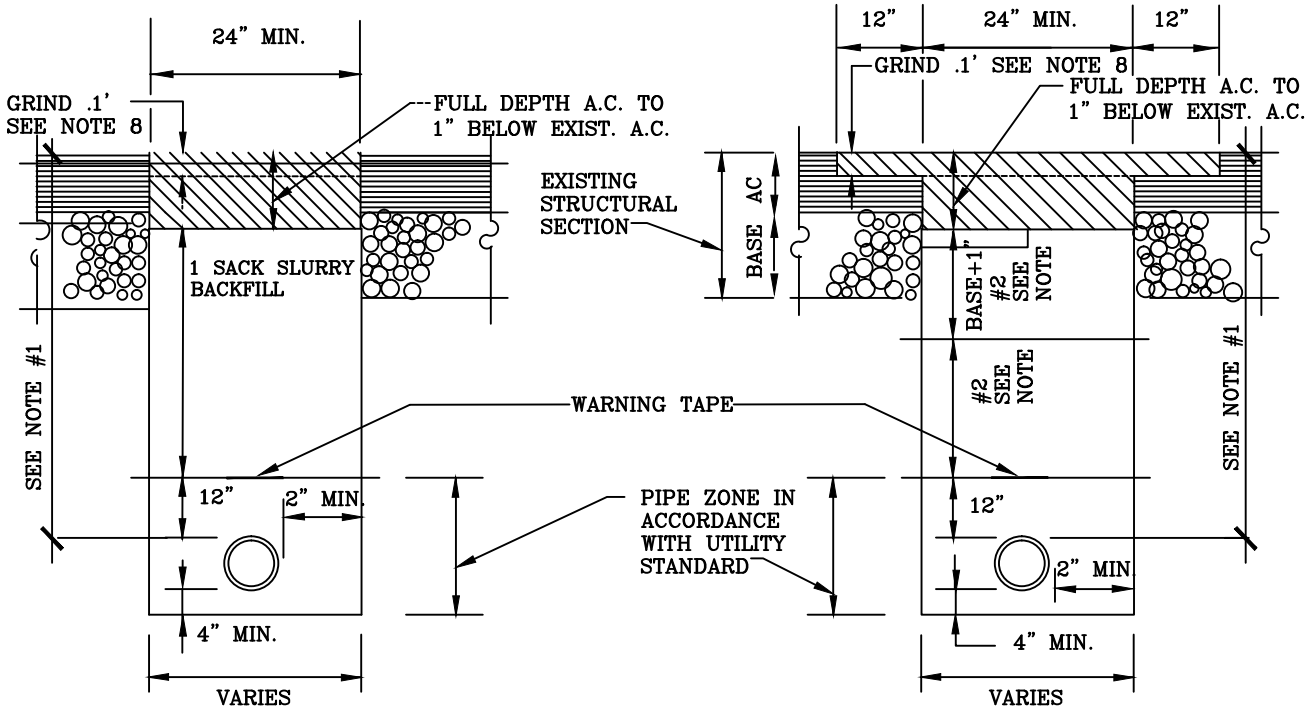
# APPENDIX A

## STANDARD PLANS

Copies of the following agency standard plans and/or details referenced by the plans or Special Provisions are attached hereto and are made a part of these Special Provisions.

| AGENCY: | STD. PLAN NO.: | DESCRIPTION: |
|---|---|---|
| City of Irvine | 223 | Utility Trench Repair |
| City of Irvine | 405 | Concrete Class Use Table |
| City of Irvine | 840 | Electrical Meter Pedestal |
| City of Irvine | TS-2 | Traffic Signal Pull Boxes |
| Orange County Public Works | 133-3 and 133-3-OC | AC Pavement Replacement |
| Standard Plans for Public Works Construction | 408-1 | Wiring Service Details |

# CITY OF IRVINE
# PUBLIC WORKS




NOTES:

1. DEPTH OF UTILITIES ON ARTERIAL STREETS SHALL BE 42 INCHES MINIMUM COVERAGE, OR AS APPROVED BY THE CITY ENGINEER. DEPTH OF UTILITIES ON NON-ARTERIAL STREETS SHALL BE 30 INCHES MINIMUM COVERAGE, OR AS APPROVED BY THE CITY ENGINEER.
2. BACK FILL ABOVE PIPE ZONE SHALL BE COMPACTED TO 90% MAXIMUM DENSITY WHEN SLURRY BACK FILL IS NOT USED (WITH THE EXCEPTION OF THE TWO FEET IMMEDIATELY UNDER THE ASPHALT WHICH SHALL BE UNTREATED BASE COMPACTED TO 95% MAXIMUM DENSITY). COMPACTION TESTS SHALL BE TAKEN BY CONTRACTOR AT RANDOM LOCATIONS FOR EVERY 8 INCHES OF LIFT. FLOODING OR JETTING SHALL NOT BE ALLOWED.
3. ALL UTILITIES TO BE INSTALLED BENEATH PUBLIC STREETS, INTERSECTIONS, AND STREET CROSSINGS (LOCAL STREETS EXCEPTED) SHALL BE BORED UNLESS OTHERWISE APPROVED BY THE INSPECTION SUPERINTENDENT. IF OPEN CUTTING OF A STREET IS ALLOWED, REPAIR OF THE STREET SHALL BE IN ACCORDANCE WITH THIS STANDARD PLAN.
4. THE EDGE OF THE TRENCH SHALL BE A NEAT CUT AS APPROVED BY THE CITY INSPECTOR. THE TRENCH SHALL BE CAPPED WITH AC EVEN WITH THE FINISHED GRADE TO THE SATISFACTION OF THE CITY INSPECTOR.
5. ALTERNATE A SHALL BE USED ON ARTERIAL STREETS, AT INTERSECTIONS, AND FOR STREET CROSSINGS, UNLESS CITY ENGINEER APPROVES THE USE OF ALTERNATE B. ALTERNATE B MAY BE USED FOR PARALLEL CUTS TO A STREET IF APPROVED BY THE CITY INSPECTOR.
6. TRENCHING WITH ROCK WHEELS SHALL NOT BE ALLOWED.
7. TRENCH WIDTH BELOW STRUCTURAL SECTION CAN BE LESS THAN 24 INCHES IF APPROVED BY THE CITY INSPECTOR.
8. UPON COMPLETION OF BACKFILLING THE TRENCH, ASPHALT CONCRETE SHALL BE INSTALLED FLUSH WITH THE EXISTING PAVEMENT. SEVEN CALENDAR DAYS AFTER COMPLETION OF AFOREMENTIONED ASPHALT CONCRETE IT SHALL BE GROUND TO 0.1 FOOT DEPTH FOR THE ENTIRE LENGTH OF THE TRENCH UNLESS OTHERWISE APPROVED BY THE CITY INSPECTOR. NEW ASPHALT CONCRETE SHALL BE INSTALLED EVEN WITH THE FINISH GRADE.
9. ALL TRENCHES SHALL BE COMPACTED BY SELF-PROPELLED ROLLERS. NO WHEEL ROLLING IS ALLOWED.

# UTILITY TRENCH REPAIR

MARK CARROLL, R.C.E. 31515
CITY OF IRVINE - CITY ENGINEER

151

AUGUST 2013
DATE

**STD. PLAN 223**

SHEET 1 OF 1

CITY OF IRVINE

# PUBLIC WORKS

## CONCRETE CLASS USE TABLE

| CONSTRUCTION | CONCRETE CLASS | MAX. SLUMP | EQUIV. SACK MIX |
|---|---|---|---|
| **STREET SURFACE IMPROVEMENTS** | | | |
| CONCRETE PAVEMENT (not integral with curb) | 520-A-2500 | 3" | 5.5 |
| CURB, INTEGRAL CURB & PAVEMENT, GUTTER, WALK, ALLEY APRONS, MEDIAN NOSE | 520-C-2500 | 4" | 5.5 |
| EXTRUDED CURB, CURB & GUTTER | 520-C-2500 | 1.5" | 5.5 |
| | 520-D-2500 | 1.5" | 5.5 |
| **SEWER & STORM DRAINAGE FACILITIES** | | | |
| PIPE COLLARS, BEAM SUPPORT FOR PIPE, PRE-CAST MANHOLE COMPONENTS, CATCH BASINS, SIDEWALK CULVERTS | 560-C-3250** | 5" | 6 |
| SIDEHILL SURFACE DRAINAGE FACILITIES | 500-C-2500 | 3" | 5.5 |
| PIPE BEDDING & ENCASEMENT*, ANCHORS & THRUST BLOCKS, WALL SUPPORT FOR PIPE | 420-C-2000** | 4" | 4.5 |
| TUNNEL BACKFILL | 480-C-2000 | 5" | 5 |
| TRENCH BACKFILL SLURRY | 100-E-100 | 5" | 1 |
| **REINFORCED STRUCTURES** | | | |
| BRIDGES, BUILDINGS, RETAINING WALLS | 560-C-3250** | 4" | 6 |
| CAST-IN-PLACE PILES | 560-C-3250** | 4" | 6 |
| CHANNELS & BOXES | | | |
| INVERT | 560-B-3250 | 4" | 6 |
| WALLS & DECK | 560-C-3250 | 5" | 6 |
| **MISCELLANEOUS** | | | |
| STREET LIGHT & TRAFFIC SIGNAL FOUNDATIONS, SURVEY MONUMENTS | 560-C-3250 | 4" | 6 |
| FENCE & GUARDRAIL POST FOUNDATIONS | 500-C-2500 | 5" | 5.5 |
| CONCRETE NOT OTHERWISE SPECIFIED | 560-C-3250 | 5" | 5.5 |
| AIR PLACED CONCRETE, METHOD B | 600-E-3250 | 4" | 6.5 |

*USE LIMITED TO BEDDING CONCRETE OVER WHICH BACKFILL WILL BE PLACED NOT LESS THAN 40 HOURS AFTER PLACEMENT. FOR BACKFILL AFTER 24 HOURS, ADD 3 PINTS (1.4L) OF CALCIUM CHLORIDE. FOR BACKFILL AFTER 16 HOURS & REMOVAL OF SHEETING AFTER 18 HOURS. USE 660-C-3750 WITH 3 PINTS (1.4L) CALCIUM CHLORIDE SOLUTION.

**USE B AGGREGATE GRADUATION WHEN CONDITIONS PERMIT.

FOR AGGREGATE GRADUATION SEE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION. CURRENT EDITION.

TYPE V-CEMENT (6-SACK) SHALL BE USED FOR ALL CONCRETE IN CONTACT WITH SOIL HAVING A HIGH SULFATE CONTENT OR AS SPECIFIED BY THE SOILS ENGINEER.

## CONCRETE CLASS USE TABLE

MARK CARROLL, R.C.E. 31515
CITY OF IRVINE - CITY ENGINEER

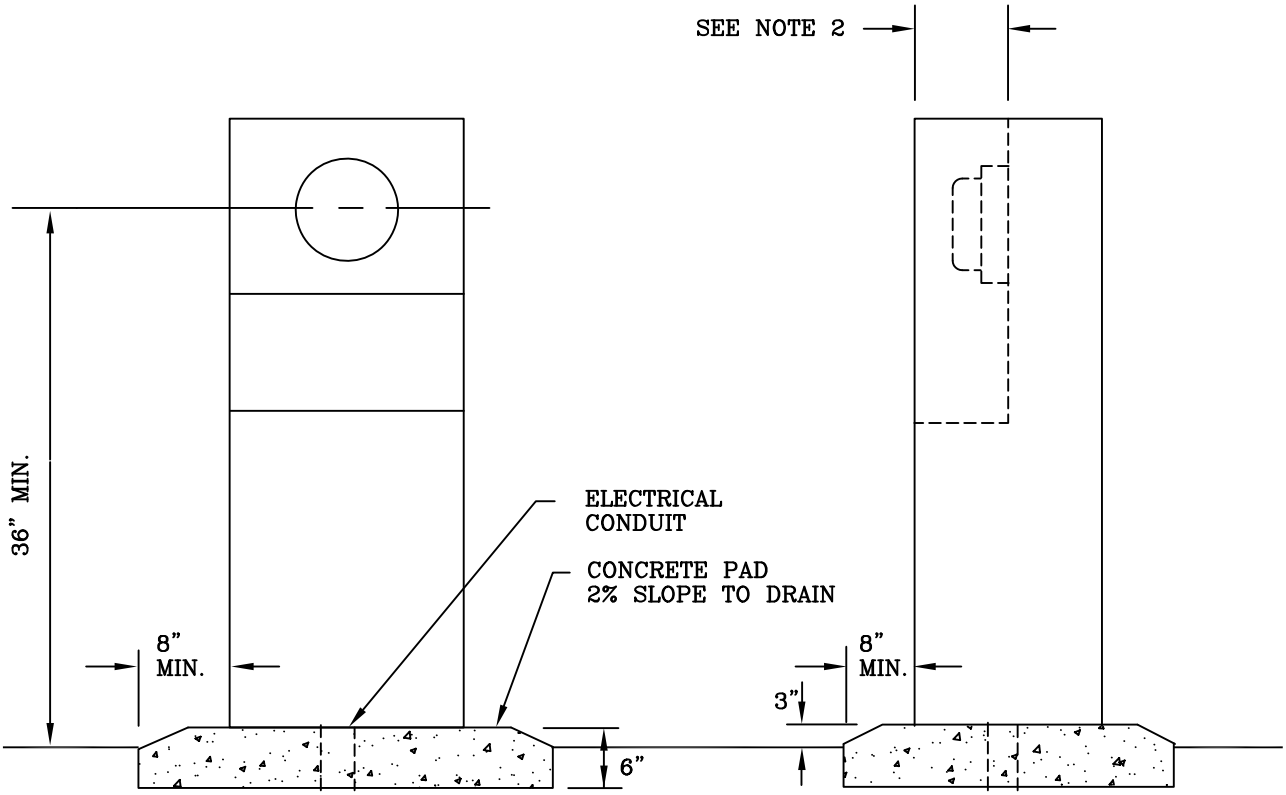
AUGUST 2013
DATE

152

**STD. PLAN 405**

SHEET 1 OF 1

# CITY OF IRVINE
# PUBLIC WORKS




NOTES:

1. ALL ELECTRICAL INSTALLATIONS SHALL CONFORM TO CITY CODES, ORDINANCES, SOUTHERN CALIFORNIA EDISON COMPANY SPECIFICATIONS, AND REQUIRE SEPARATE ELETRICAL PERMIT AND INSPECTION. ALL ELECTRICAL EQUIPMENT SHALL BE NEMA, TYPE 3, WATERPROOFED FOR EXTERIOR INSTALLATION.
2. THE ENCLOSING COVER SHALL BE HINGED OR REMOVABLE FOR METER TESTING AND INSPECTION AND SHALL HAVE A READING WINDOW. FOR SINGLE PHASE SERVICES, THE MINIMUM METER RECESS IS NINE INCHES, AND FOR THREE PHASE SERVICES, ELEVEN INCHES.
3. WHERE IRRIGATION CONTROLLER AND ELECTRIC METER PEDESTAL ARE ADJACENT, THEY MAY BE INSTALLED ON SAME CONCRETE PAD.
4. ELECTRICAL CONDUITS MUST BE INSTALLED THROUGH THE BOTTOM OF CONCRETE PAD.

# ELECTRICAL METER PEDESTAL

MARK CARROLL, R.C.E. 31515
CITY OF IRVINE - CITY ENGINEER

AUGUST 2013
DATE

153

**STD. PLAN 840**

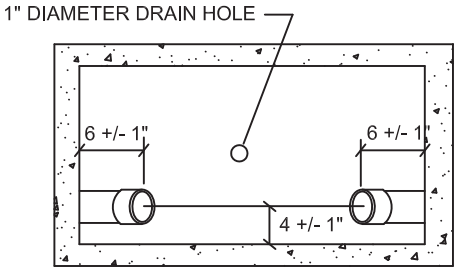
**SHEET 1 OF 1**

CITY OF IRVINE

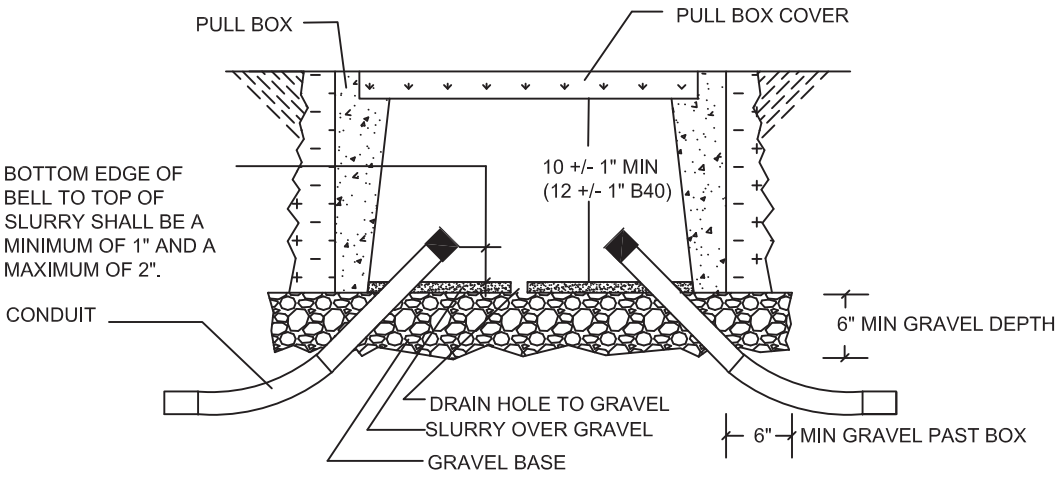
# PUBLIC WORKS

## MODIFIES CALTRANS STANDARD PLAN ES-8A

### TOP VIEW




### SIDE VIEW




1. INTERCONNECT PULL BOXES ARE TO BE NO. 6, EXCEPT FOR THE C40 ELECTRICAL BOX ADJACENT TO THE COMMUNICATION CABINET, PLACED NO GREATER THAN 400 FOOT INTERVALS, AND HAVE 45 DEGREE CONDUIT ELBOWS.
2. NO. 6 PULL BOXES SHALL HAVE FIBRELYTE COVERS. C40 PULL BOXES SHALL HAVE "LIGHTWEIGHT" POLYMER CONCRETE LID.
3. ALL PULL BOXES ARE TO BE MARKED "TRAFFIC SIGNAL" EXCEPT THE EDISON PULL BOX.
4. THERE SHALL BE A MINIMUM OF 10 INCHES (±1) OF VOID FROM TOP OF SLURRY TO THE BOTTOM OF THE COVER, IN A SINGLE STACK PULL BOX. B40 BOXES SHALL HAVE AN ADDITIONAL 2" SUMP.
5. GRAVEL BED SHALL BE 6" DEEP, BELOW PULL BOX AND EXTENDING 6" PAST THE OUTER EDGES IN ALL DIRECTIONS.
6. PULL BOX FLOOR SHALL HAVE CEMENT GROUT (MINIMAL SLOPE TO CENTER) COVERING BASE MATERIAL.
7. DRAIN HOLE SHALL ALLOW WATER TO DRAIN THROUGH GROUT TO GRAVEL BASE MATERIAL.
8. PULL BOXES SHALL BE INSPECTED FOR PROPER CONSTRUCTION PRIOR TO WIRE INSTALLATION.

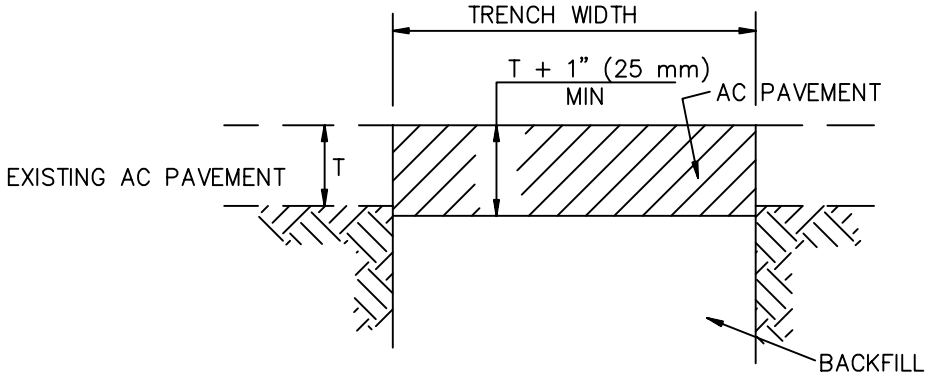
# TRAFFIC SIGNAL PULL BOXES

**TS-2**

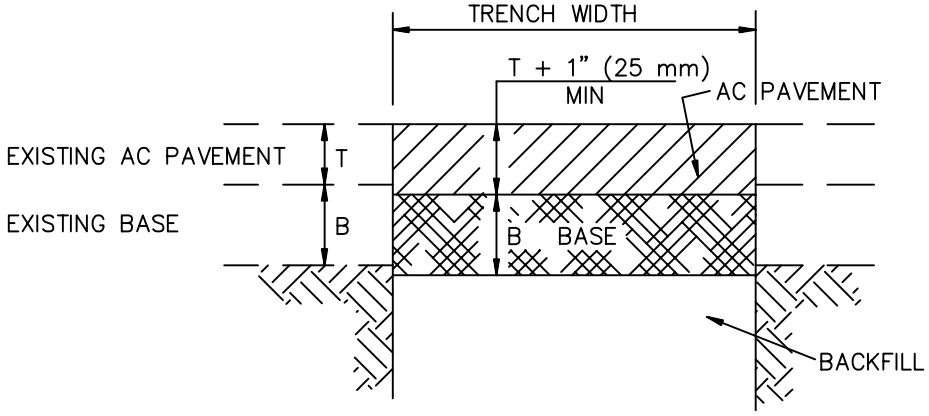
**SHEET 1 OF 1**

MARK CARROLL, R.C.E. 31515
CITY OF IRVINE - CITY ENGINEER

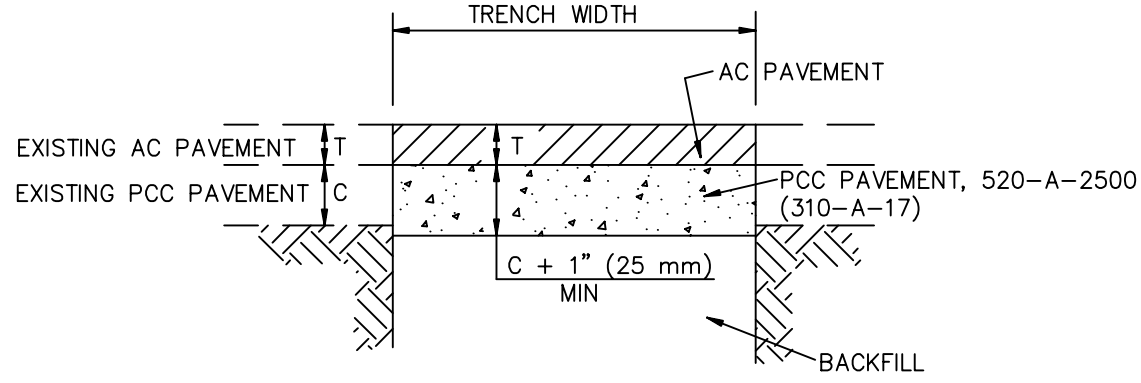
DECEMBER 2015
DATE




CASE I – WITHOUT BASE




CASE II – WITH BASE




CASE III – AC PVMT ON PCC PVMT

| STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION | | |
|---|---|---|
| PROMULGATED BY THE PUBLIC WORKS STANDARDS INC. GREENBOOK COMMITTEE 1993 REV. 2005, 2009 | **ASPHALT CONCRETE PAVEMENT REPLACEMENT** | STANDARD PLAN **133-3** |
| | USE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION | SHEET 1 OF 2 |



**SEE OCPW STANDARD PLAN 133-3-OC FOR CONDITIONS**

NOTES:

1. BACKFILL AND DENSIFICATION SHALL CONFORM TO SSPWC 306–1.3.

3. TEMPORARY RESURFACING SHALL BE PLACED PER SSPWC 306–1.5.1.



**SEE OCPW STANDARD PLAN 133-3-OC FOR CONDITIONS**

The following Standard Plans for Public Works Construction, 2009 Edition, of the Public Works Standards, Inc. have been adopted by OCPW with conditions which shall apply to OCPW use. The conditions are listed below.

| SPPWC # | OCPW # | Name and Conditions |
|---|---|---|
| 133-3 | 133-3-OC | Asphalt Concrete Pavement Replacement |

1. Delete Notes 1 and 3 of SPPWC Standard Plan 133-3.
2. Pavement replacement shall be "T-cut" to extend 12 inches beyond each side of trench width. Pavement removal in the area of additional width shall be by cold plane or other method approved by the Engineer. Depth of removal shall be at least 0.15 feet on arterial highways and at least 0.12 feet elsewhere.
3. Full travel lane replacement or grinding with at least 0.15 feet cap is required on all arterial highways in accordance with Section 6-3-60 (d) of the Orange County Codified Ordinance.
4. Full travel lane replacement or grinding with at least 0.12 feet cap is required on any street if the existing surface course has been in place for less than 2 years.
5. Surface course and base course asphalt concrete pavement shall be of the same mix as the existing asphalt concrete pavement(s) unless otherwise approved by the Engineer.
6. All pavement removals shall be made on straight line saw cuts a minimum of 1½ inches deep. If cut line is less than 36 inches from a cut line, expansion joint or edge, the existing pavement shall be removed to cut lines, expansion joint or edge or as directed by the Engineer.
7. During excavation and subgrade preparation, the contractor shall take all necessary steps to ensure the protection of all improvements, whether public or private, including utilities and their services, from any damage that could occur due to Contractor's operation.
8. Backfill and densification shall be done in conformance with Section 306-1.3, "Backfill and Densification," of the Greenbook, except as follows:

The following Standard Plans for Public Works Construction, 2009 Edition, of the Public Works Standards, Inc. have been adopted by OCPW with conditions which shall apply to OCPW use. The conditions are listed below.

| SPPWC # | OCPW # | Name and Conditions |
|---|---|---|
| 133-3 | 133-3-OC | Asphalt Concrete Pavement Replacement |

a) Trench backfill shall be densified to a minimum of 90 percent relative compaction.

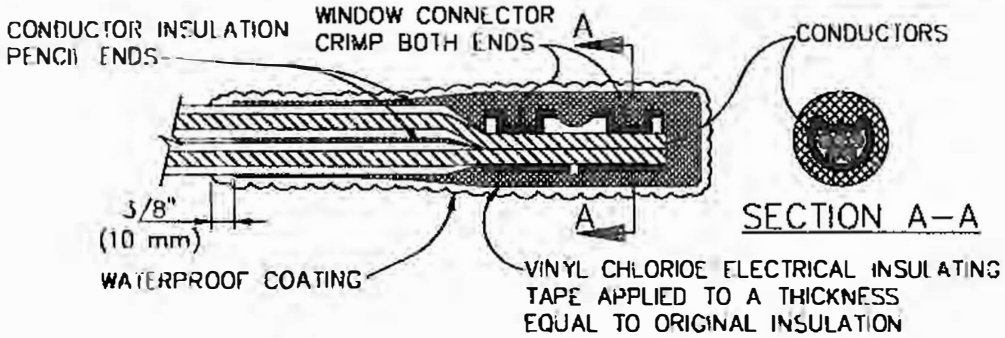
b) When pavement is to be placed directly on subgrade material, the top 6 inches of subgrade material shall be compacted to a relative compaction of 95 percent.

9. Temporary pavement replacement shall be placed at the Contractor's expense, unless otherwise specified by the Engineer. It shall be placed level with the existing pavement on compacted trench backfill and shall be a minimum of 2 inches thick.

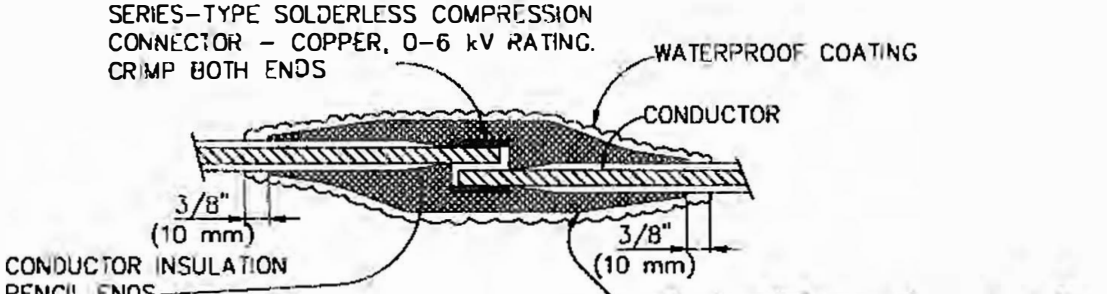
10. Permanent pavement resurfacing shall be done within two (2) weeks after backfilling of trenches has been completed, and only after settlement has taken place and the fill surface has sufficiently dried. All cuts shall be clean and straight.

11. Contact surfaces of existing pavement, manhole frames and shafts and concrete surfaces shall be given a tack coat before permanent asphalt trench resurfacing is placed.

12. Unless permanent pavement is placed immediately, temporary bituminous resurfacing 2 inches thick shall be placed and maintained at locations determined by the Engineer wherever excavation is made through pavement, sidewalk or driveways. In sidewalk areas, the temporary bituminous resurfacing shall be at least 1 inch thick; in all other areas it shall be at least 2 inches thick. At major intersections and other critical locations, a greater thickness may be ordered. Temporary resurfacing shall be placed as soon as the condition of the backfill is suitable to receive it and shall remain in place until the condition of the backfill is suitable for permanent resurfacing.



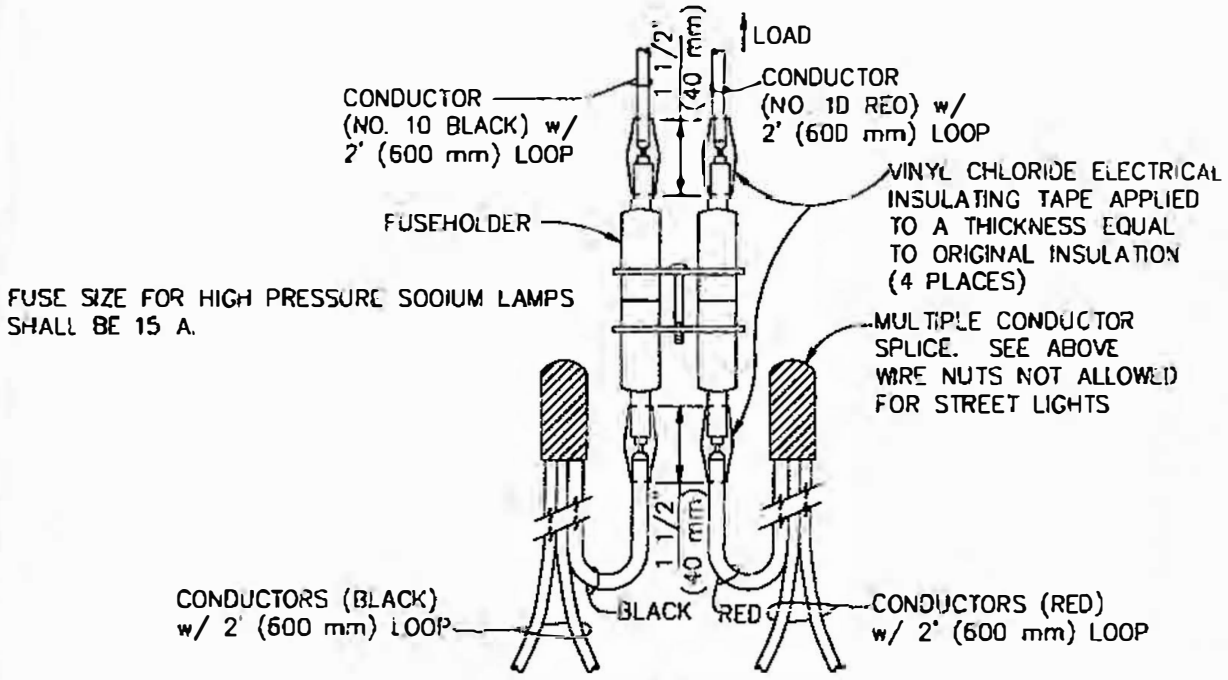

MULTIPLE CONDUCTOR TYPE
(MULTIPLE CIRCUITS)




SINGLE CONDUCTOR TYPE
(SERIES CIRCUITS)

## STREET LIGHTING WINDOW SPLICE CONNECTORS

NOTES:
1. WATERPROOF COATING SHALL BE SUBJECT TO ENGINEER'S APPROVAL
2. WIRE NUTS SHALL NOT BE USED FOR STREET LIGHTING SPLICES.




## IN–LINE FUSE HOLDER

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION

PROMULGATED BY THE PUBLIC WORKS STANDARDS INC. GREENBOOK COMMITTEE 2005 REV 2009

# WIRING SERVICE DETAILS

USE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION

STANDARD PLAN 408–1

SHEET 1 OF 2

# APPENDIX B

## FEDERAL WAGE RATES

The Contractor and all subcontractors shall pay all workers at least minimum prevailing wage rates as determined by the State Director of Industrial Relations or the federal minimum basic hourly rate and fringe benefits payments as most recently published, whichever is greater. The City has endeavored to obtain the latest federal wage rate copies of which are included, but does not guarantee their accuracy. State minimum prevailing wage rates are on file in the office of the City Clerk and the office of the City Engineer, City of Irvine, and in the office of the Associated General Contractors of America, California Chapter. It is the sole responsibility of the Contractor to ascertain the latest rates and comply with those rates.

Certified payroll reports are required for all persons working on the project.

CITY OF IRVINE
FREEWAY TRAIL LIGHTING IMPROVEMENTS
FROM SAN DIEGO CREEK TO CULVER DRIVE
CIP 341302

# SCHEDULE OF WORK AND BID PRICES

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 | UNIT PRICE | BID ITEM TOTAL |
|---|---|---|---|---|---|
| 1 | Mobilization | LS | 1 | $ | $ |
| 2 | Water Pollution Control Plan (WPCP) | LS | 1 | $ | $ |
| 3 | Trail Lights including Foundation, Pole, Fixture, Conductors and Conduit | EA | 42 | $ | $ |
| 4 | Philips Citytouch Plug-N-Play Cellular Connector Node | EA | 42 | $ | $ |
| 5 | Trenching, Conduit and Conductors | LF | 4,500 | $ | $ |
| 6 | Two (2) spare 2” Conduits within New Trench | LF | 4,500 | $ | $ |
| 7 | Trail Lighting Pull Box | EA | 53 | $ | $ |
| 8 | SCE Intercept Pull Box | EA | 2 | $ | $ |
| 9 | 3” Service Conduit, Including Pull Rope | LF | 30 | $ | $ |
| 10 | Remove Existing Single Meter Service Pedestal at Harvard Avenue | EA | 2 | $ | $ |
| 11 | Single Meter Service Pedestal at Harvard including Foundation | EA | 1 | $ | $ |
| 12 | Remove Existing Single Meter Service Pedestal at Claremont Street, including Chain Link Fence Removal | EA | 1 | $ | $ |
| 13 | Single Meter Service Pedestal at Claremont Street, including Foundation and Existing Branch Feeders | EA | 1 | $ | $ |
| 14 | Coordination with SCE for Service | EA | 2 | $ | $ |

TOTAL BID PRICE - BASE BID _____

_____

_____

(Amount written in words)

Total Bid Price - Base Bid (in figures) $_____

# Project Funding Summary

Freeway Trail Lighting Improvements from San Diego Creek to Culver Drive

CIP 341302

December 13, 2016

| Project Expenditures | |
|---|---|
| Design Engineering | $ 108,000 |
| Construction Contract (Engineer's Estimate) | $ 600,000 |
| Construction Engineering | $ 80,000 |
| Construction Contingency | $ 90,000 |
| **Total Estimated Project Cost** | **$ 878,000** |

| Project Funding | |
|---|---|
| CIP 341302 Freeway Trail Lighting | $ 878,000 |
| **Total Funding Available** | **$ 878,000** |

# 2.10

# REQUEST FOR CITY COUNCIL ACTION

**MEETING DATE:** DECEMBER 13, 2016

**TITLE:** NOTICE OF REVIEW AND PENDING APPROVAL FOR TRACT MAPS IN IRVINE BUSINESS COMPLEX

Director of Public Works

City Manager

**RECOMMENDED ACTION**

Receive and file.

**EXECUTIVE SUMMARY**

City of Irvine 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 to the City Council is provided in accordance with Ordinance No. 07-12, notifying the City Council of one final tract map under review by staff and one final tract map pending approval by the City Engineer. Maps covering property referenced in this staff report are located in the Irvine Business Complex and are available for public review in the Public Works Department.

**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 tentative maps referenced in this staff report have been approved by the Planning Commission as follows:

On December 17, 2015, the Planning Commission approved the underlying tentative map for Tract Map No. 17806 (Irvine Business Complex) by a vote of 4-1 (Commissioners Bartlett, Duong, Smith and Kuo voting in favor; Commissioner Gaido voting no). The property covered by this map is located near Cartwright and Main and contains the subdivision of a 7.52 acre parcel into 2 lots. One lot is proposed for construction of a new 272 apartment complex. The second lot contains an existing office building and a new parking structure.

On August 4, 2016, the Planning Commission approved the underlying tentative map for Tract Map No. 18021 (Irvine Business Complex) by a vote of 4-1 (Commissioners Bartlett, Duong, Smith and Kuo voting in favor; Commissioner Gaido voting no). The property covered by this map is located near Gillette and Main and contains the subdivision of a 1.97 acre parcel into 14 lots. The property is proposed for development

of 39 new condominium units with surface visitor parking and a central courtyard park area.

These development projects are consistent with the Irvine Business Complex Environmental Impact Report approved by the City Council in July 2010 that considered area-wide impacts associated with the ultimate build out for residential units in the Irvine Business Complex.

## ANALYSIS

The approval of tract maps is a multistep 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 received and are either under review for consistency with applicable City standards and corresponding Planning Commission tentative tract map conditions of approval, or have been reviewed and are pending City Engineer's final approval. Following approval and a 15-day appeal period, the maps 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 |
|---|---|---|---|---|
| J&R Main Street, LLC | 17806 | 2-lot map | Cartwright and Main *(Irvine Business Complex)* | Pending Approval |
| Meritage Homes of California, Inc. | 18021 | 14-lot map | Gillette and Main *(Irvine Business Complex)* | Under Review |

Tract Map No. 17806 was previously noticed to the City Council at the April 26, 2016 City Council Meeting.

## 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**

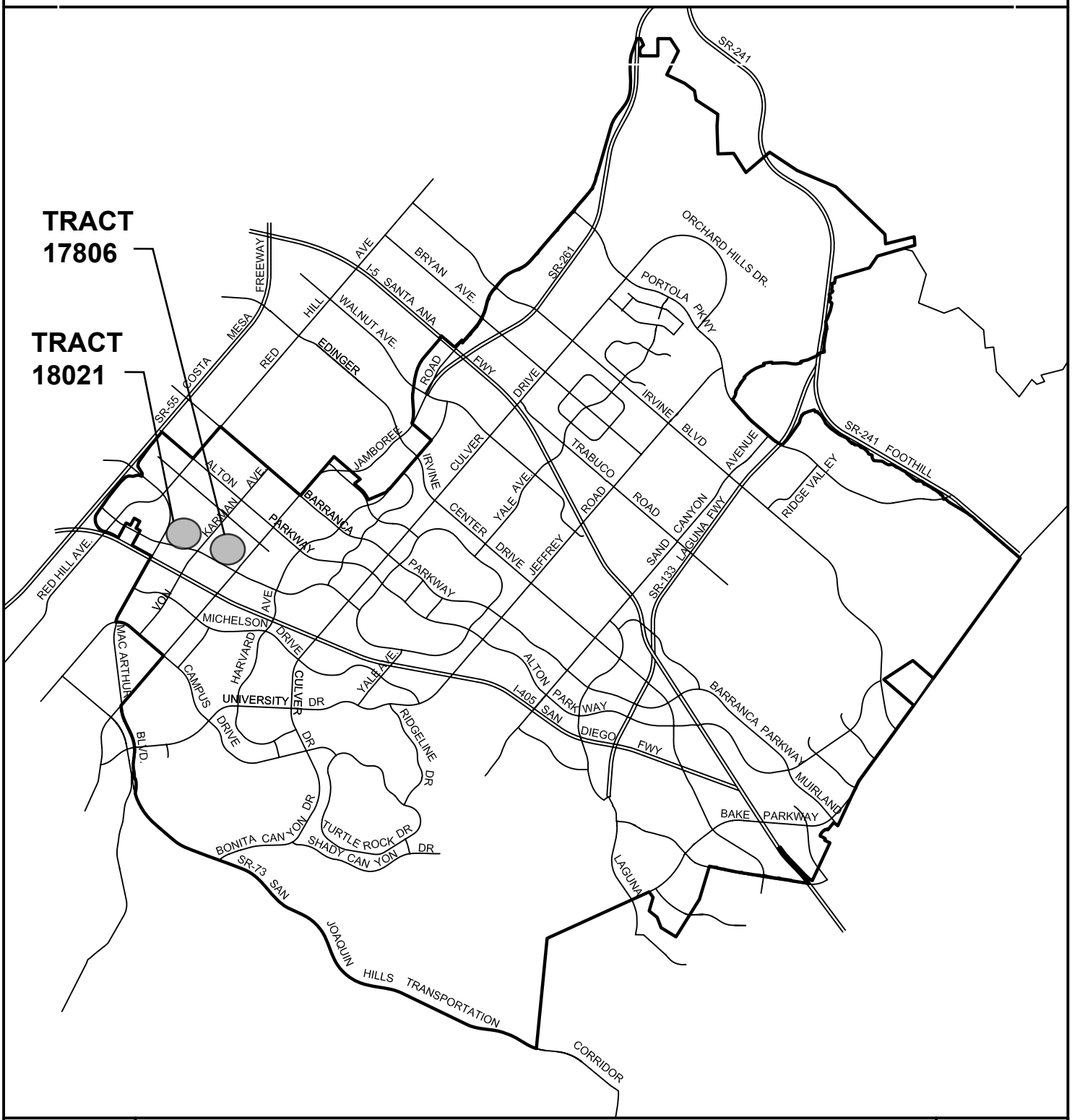
The administrative cost to the City for processing the maps is offset by developer fees paid by the applicant submitting the maps.

**REPORT PREPARED BY** Stacy DeLong, Associate Engineer

**ATTACHMENTS**

1. Vicinity Map
2. Site Map – Tracts 17806 and 18021 (Irvine Business Complex)

# FINAL TRACT MAP Nos. 17806 AND 18021



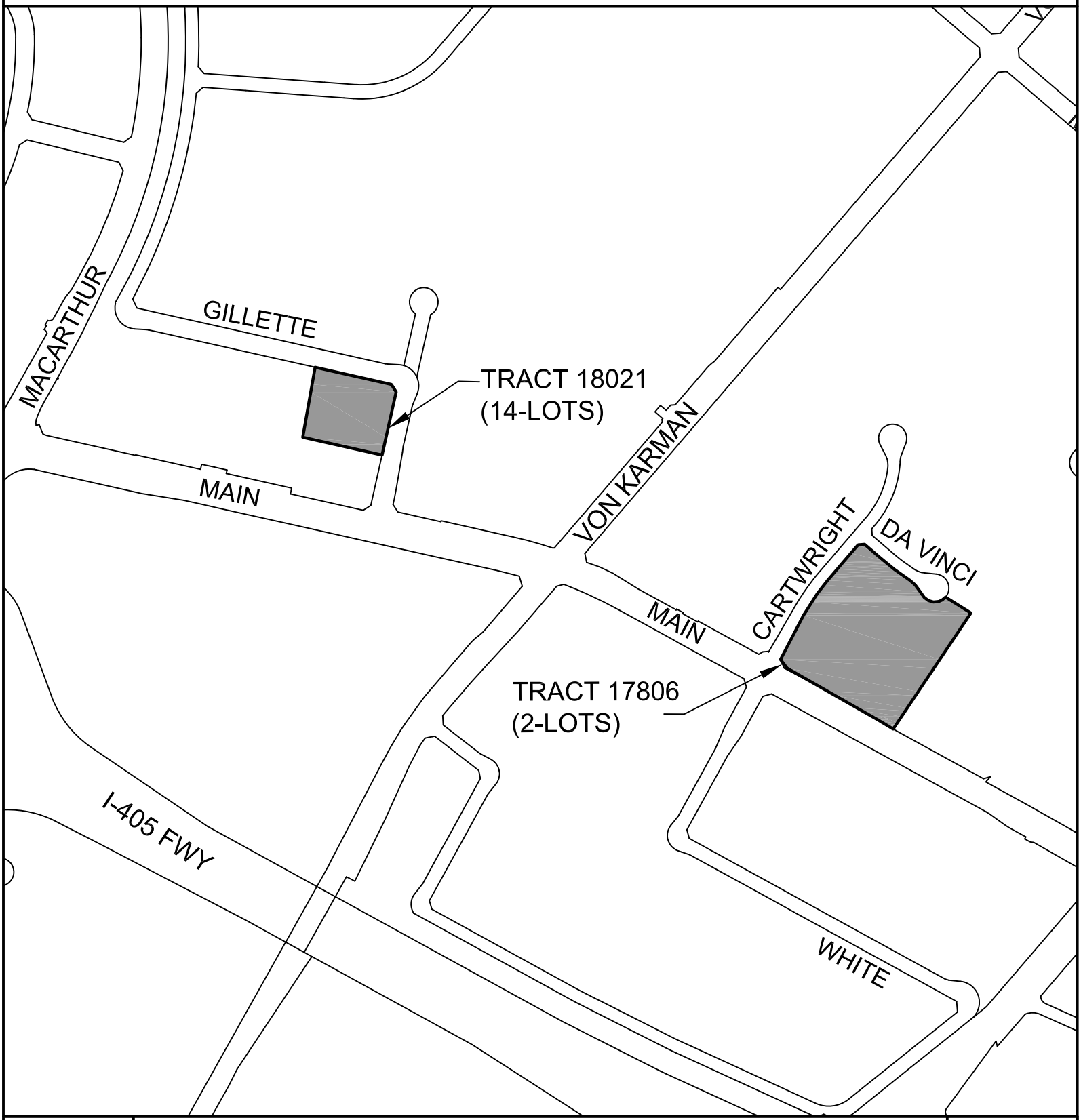

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# VICINITY MAP

CITY OF IRVINE 1971

ATTACHMENT 1

# FINAL TRACT MAP Nos. 17806 AND 18021




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# SITE MAP

CITY OF IRVINE 1971

ATTACHMENT 2

2.11

# REQUEST FOR CITY COUNCIL ACTION

**MEETING DATE:** DECEMBER 13, 2016

**TITLE:** APPROVAL OF PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS FOR HARVARD COMMUNITY PARK FACILITY IMPROVEMENTS

Director of Public Works

City Manager

## RECOMMENDED ACTION

1. Approve the plans, specifications and contract documents for the Harvard Community Park Facility Improvements, Capital Improvement Project 361702.

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.

## EXECUTIVE SUMMARY

Plans, specifications and contract documents for Harvard Community Park Facility Improvements are complete and ready for City Council approval. If the recommended actions are approved by the City Council, the proposed project will upgrade interior lighting in the community center, reconstruct and remodel the community center kitchen to be compliant with current ADA standards, provide interior maintenance and rehabilitation for the park concession stand and replace fencing and handrails in the four subgrade baseball field dugouts. The rehabilitation of these facility components will replenish the useful lifecycle of these assets and enhance the public's use, safety and enjoyment of these facilities.

The contract documents for the proposed project are available for public review in the Public Works department. Approval of the recommended actions will allow staff to proceed with solicitation of competitive bids for construction and award of contract to the lowest responsive and responsible bidder in accordance with the City's purchasing policies and procedures.

## COMMISSION/BOARD/COMMITTEE RECOMMENDATION

Not applicable.

## ANALYSIS

In October 2015, the City was awarded grant funds from the State Department of Housing and Community Development for rehabilitation improvements at Harvard Community Park. With the City Council approval of the Fiscal Year 2016-17 Capital Improvement Program budget, these grants funds were allocated for facility improvements including upgrading interior lighting in the community center with energy efficient light-emitting diode (LED) light fixtures to improve lighting efficiency, remodeling of the community center kitchen to be compliant with current ADA standards, interior maintenance and rehabilitation for the park concession stand and the replacement of fencing and upgrading of handrails in the four subgrade baseball field dugouts. The rehabilitation of these facility components will replenish the useful lifecycle of these assets and enhance the public's use, safety and enjoyment of these facilities.

The design and preparation of construction documents for the proposed improvements are complete and staff is seeking City Council approval to proceed with soliciting competitive bids for construction. A copy of the Construction Contract, Specifications, proposed Schedule of Work listing individual bid items and construction plans for this project are included as Attachment 2.

The construction contract estimate prepared by the consultant design engineer for the project is $239,000. A budget allowance of $58,000 for construction engineering (material testing and inspection services) and $47,800 for construction contingency is recommended as shown in the Project Funding Summary (Attachment 3). The total cost for this project is estimated at $383,800 leaving a balance of $33,200 in grant funds that would be returned to the State grant program. A bid alternative line item for upgrading the fire alarm system for the community center and concession stand has been included with the Schedule of Work to be awarded using the grant fund balance, if sufficient funds are available. The engineer's estimate for the alternate bid item is $ 20,000.

Construction is anticipated to begin in February 2017 with completion in April 2017. Work activity will take place primarily Monday through Friday between the hours of 7 a.m. and 3:30 p.m. and will be coordinated with Community Services to minimize disruption to scheduled facility activities. To remain eligible to receive the grant funds, the project must be completed no later than June 30, 2017.

## 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.

In accordance with Title 24 Code of Federal Regulations (CFR) 58.35, the project does not have a significant impact on the environment as defined by the National

Environmental Policy Act (NEPA); therefore, this project is a Categorical Exclusion under Title 24 CFR 58.35(a).

## ALTERNATIVES CONSIDERED

The City Council could elect not to approve the plans, specifications and contract documents and defer the project to a future date, or may direct staff to revise any portions of the scope of work. Staff does not recommend these alternatives as the proposed improvements are needed to maintain the facilities at Harvard Park consistent with City standards and the proposed improvements meet the grant funding eligibility criteria and requirements.

## FINANCIAL IMPACT

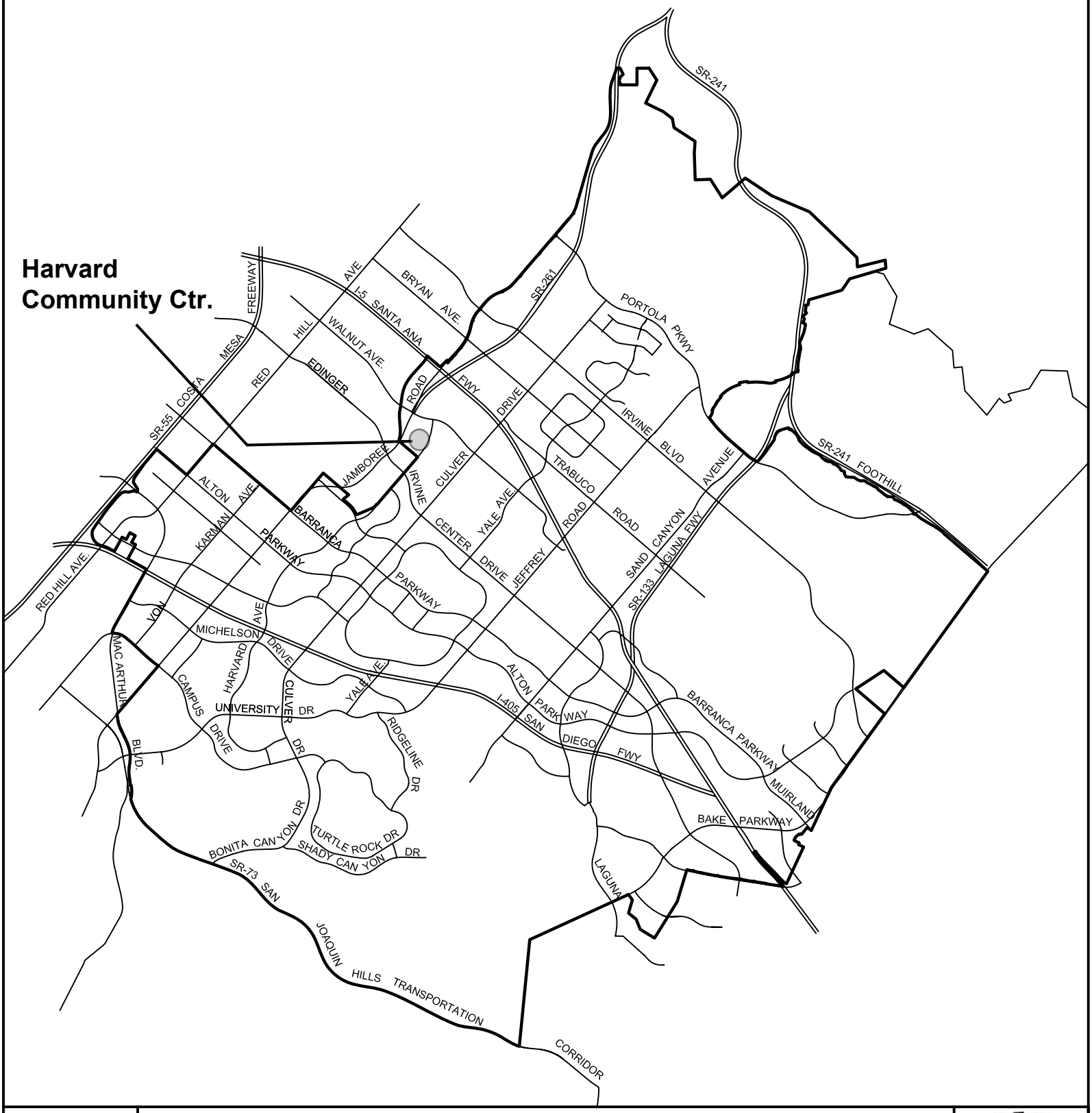
The City Council approved funding for this project in the Fiscal Year 2016-17 Capital Improvement Program budget and funding is available in CIP project number 361702 in the amount of $417,000 from State grant program funds. The construction contract estimate prepared by the design engineer is $239,000 for the base bid and $20,000 for the bid alternate. A complete funding summary for this project is provided in Attachment 3.

**REPORT PREPARED BY** Eric Gruber, Senior Project Manager

## ATTACHMENTS

1. Vicinity Map
2. Construction Contract, Specifications, Schedule of Work and Construction Plans
3. Project Funding Summary

# HARVARD PARK FACILITY IMPROVEMENTS
# CIP 361702




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# VICINITY MAP

ATTACHMENT 1

CITY OF IRVINE 1971

# CONSTRUCTION CONTRACT
# FOR CAPITAL IMPROVEMENTS

## CITY OF IRVINE

## HARVARD PARK FACILITY IMPROVEMENTS
## CIP 361702

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: Harvard Park Facility Improvements

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 CAP Architecture.

4. 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.

5. 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 **fifty (50) Working Days** after the date specified in the Notice to Proceed.

6. 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: _____ ($XXX) 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.

7. 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.

8. 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.

If there is a difference between the minimum wage rates predetermined by the Secretary of Labor and the general prevailing wage rates determined by the Director of the California Department of Industrial Relations for similar

classifications of labor, the CONTRACTOR and subcontractors shall pay not less than the higher wage rate. The CITY will not accept lower State wage rates not specifically included in the Federal minimum wage determinations. This includes "helper" (or other classifications based on hours of experience) or any other classification not appearing in the Federal wage determinations. Where Federal wage determinations do not contain the State wage rate determination otherwise available for use by the CONTRACTOR and subcontractors, the CONTRACTOR and subcontractors shall pay not less than the Federal minimum wage rate which most closely approximates the duties of the employees in question.

9. 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

# PROJECT MANUAL
# Harvard Park Facility Improvements
## 14701 Harvard Ave.
## Irvine, California

| | |
|---|---|
| **OWNER:** | **CITY OF IRVINE, CALIFORNIA**<br>**PUBLIC WORKS DEPARTMENT** |
| **ARCHITECT:** | **CAP Architecture Inc.**<br>8700 Warner Suite 280<br>Fountain Valley, California 92708<br>Office: 714.978.2550<br>Contact: Catherine Peppard |
| **DATE:** | **2016** |

**SECTION 000110**

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| 260534 | Conduit |
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| 260553 | Identification for Electrical Systems |
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All Requirements Report.


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## SECTION 00 7200
## GENERAL CONDITIONS

## DEFINITIONS

The terms used in these 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** - 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.

**General Requirements** - Division 01 Sections of the Specifications.

**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.

## ARTICLE 1 – SCOPE AND CONTROL OF WORK

**1-1 AWARD AND EXECUTION OF THE CONTRACT -** Award and execution of the Contract shall be as provided for in the Specifications, Instructions to Bidders, or Notice Inviting Bids.

**1-2 ASSIGNMENT -** No Contract or portion thereof may be assigned without consent of the City, except that the Contractor may assign money due or which will accrue to it under the Contract. If given written notice, such assignment will be recognized by the City to the extent permitted by law. Any assignment of money shall be subject to all proper withholdings in favor of the City and to all deductions provided for in the Contract. All money withheld, whether assigned or not, shall be subject to being used by the City for completion of the Work, should the Contractor be in default.

The performance of the Contract may not be assigned, except upon the written consent of the City. 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 City consent to any assignment of any part of the Work under the Contract.

**1-3 SUBCONTRACTS.**

**1-3.1 General.** Each Bidder shall 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 render service to the prime contractor in or about the construction of the Work or improvement, or a subcontractor licensed by the State of California who, under subcontract to the prime contractor, specially fabricates and installs a portion of the Work or improvement according to detailed drawings contained in the plans and specifications, in an amount in excess of one-half of 1 percent of the prime contractor's total bid.
B. The portion of the Work which will be done by each such subcontractor under this act. The prime contractor shall list only one subcontractor for each such portion as is defined by the prime contractor in his or her bid.

If the Contractor fails to specify a Subcontractor, or specifies more than one Subcontractor for the same portion of the Work to be performed under the Contract (in excess of one-half of 1 percent of the Contractor's total Bid), the Contractor shall be qualified to perform that portion itself, and shall perform that portion itself, except as otherwise provided in the Code.

Pursuant to Section 4107, no Contractor whose Bid is accepted shall substitute any person as a Subcontractor in place of a Subcontractor listed in the Bid, except for the causes and by the procedures established in Section 4107.5. This section provides procedures to correct a clerical error in the listing of a Subcontractor.

Section 4110 provides that a Contractor violating any of the provisions of Chapter 4 violates the Contract and the City may exercise the option either to cancel the Contract or assess the Contractor a penalty in an amount of not more than 10 percent of the subcontract involved, after a public hearing.

If the Contractor subcontracts any part of this Contract, the Contractor shall be as fully responsible to the City 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 City. 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 City before the subcontractor begins work. Each subcontract shall contain a reference to the Contract between the City 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 City if in the City's opinion the subcontractor fails to comply with the requirements of the Contract.

**1-3.2 Self Performance.** The Contractor shall perform, with its own organization, Contract work amounting to at least 15 percent of the Contract Price on building/facility contracts. 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 Contractor shall give personal attention to the fulfillment of the Contract. The Contractor shall keep the Work under its control. Subcontractors shall be considered employees of the Contractor, and the Contractor shall be responsible for their work.

**1-3.3 Status of Subcontractors.** 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.”

**1-4 CONTRACT BONDS.** Before execution of the Contract, the Bidder shall file surety bonds with the City for 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 said circular is sufficient to provide bonds in the amount required by the Contract shall be deemed to be approved unless specifically rejected by the City. Bonds from all other sureties shall be accompanied by all of the documents enumerated in the Code of Civil Procedure, Section 995.660 a). The Bidder shall pay all bond premiums, costs, and incidentals.
Each bond shall incorporate, by reference, the Contract and be signed by both the Bidder and the Surety. The signature of the authorized agent of the Surety shall be notarized.

The Bidder shall provide two good and sufficient surety bonds. The “Payment Bond” (Material and Labor Bond) shall be for not less than 100 percent of the Contract Price, to satisfy claims of material suppliers and mechanics and laborers employed by it on the Work. The bond shall be maintained by the Contractor in full force and effect until the Work is accepted by the City and until all claims for materials and labor are paid, and shall otherwise comply with the Civil Code.

The “Performance Bond” shall be for 100 percent of the Contract Price to guaranty faithful performance of all work, within the time prescribed, in a manner satisfactory to the City, and that all materials and workmanship will be free from original or developed defects. The bond must remain in effect until the end of all warranty periods set forth in the Contract Documents.

Should any bond become insufficient, the Contractor shall renew the bond within 10 days after receiving notice from the City.

Should any surety at any time be unsatisfactory to the City, notice to that effect will be given to the Contractor. No further payments shall be deemed due or will be made under the Contract until a new surety qualifies and is accepted by the City.

Changes in the Work or extensions of time, made pursuant to the Contract, shall in no way release the Contractor or the Surety from its obligations. Notice of such changes or extensions shall be waived by the Surety.

**1-5 THE CONTRACT DOCUMENTS.**

**1-5.1 General.** The Contractor shall keep at the Work site a copy of the Plans and Specifications, to which the Engineer shall have access at all times.

The Plans shall be supplemented by such working drawings and shop drawings as are necessary to adequately control the Work.

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 City 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 City in writing of such conflict.

The City, 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 City will provide, free of charge, three (3) copies of Plans and Specifications for the Contractor and one (1) copy of Plans and Specifications for each subcontractor listed in the Bidder's Proposal. Any Plans or Specifications required by the Contractor/subcontractor in addition to the aforementioned can be provided by City at Contractor's expense. The Contractor shall keep one set of Plans and Specifications in good order and available to the City Representative at the site of the Work.

The Contract Documents, including, without limitation, the Specifications, are divided into titled sections for convenience only and not to dictate or determine the trade or craft involved.

Where "as shown," "as indicated," "as detailed," or words of similar import are used, reference is made to the Drawings accompanying the Specifications unless otherwise stated. Where "provide," "furnish," "install," "complete," or words of similar import are used, it shall 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 import are used, the direction, requirement, permission, authorization, approval, acceptance, or selection by Engineer is intended unless otherwise stated.

The General Conditions, Supplementary Conditions and Division 01 General Requirements are a part of each and 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 such as "Contractor shall," "shall be," etc., are intentional. Nevertheless, the requirements of the Contract Documents are mandatory. Omitted words or phrases shall be supplied by inference.

Words in the singular shall include the plural whenever applicable or the context so indicates or requires.

In the interest of brevity, the Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an," but the fact a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

**1-5.2 Contract Documents are Complementary and Inclusive.** The Plans, Specifications, and other Contract Documents shall govern the Work. The Contract Documents are intended to be complementary and cooperative. Anything specified in the Specifications and not shown on the Plans, or shown on the Plans and not specified in the Specifications, shall be as though shown on or specified in both.

**1-5.3 Conformance with Laws**. As applicable, unless modified elsewhere in the Specifications, 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.

All work shall be performed in accordance to the current editions and City of Irvine Amendments of 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; All 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 the Construction Plans, and all applicable requirements.

Contractor shall check and review the Contract Documents from a construction standpoint for conformance 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. In the event Contractor observes any violation of any law, ordinance, code, rule or regulation, or inconsistency with any such restrictions or special requirements of the Contract Documents, Contractor shall provide notice to Engineer and shall ensure such violation or inconsistency is corrected in the prescribed manner prior to the commencement of said portion of the Work. Unless specifically stated otherwise in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any violation and/or inconsistency between the provisions of the Contract Documents and the provisions of any laws, ordinances, codes, rules and regulations applicable to the Work, unless such application of the provisions of the Contract Documents would directly result in a violation of such laws, ordinances, codes, rules, and/or regulations. In the event the requirements of this article or the written interpretation or clarifications of Engineer do not resolve the violation or inconsistency the decisions and directives of Engineer shall be final for the purpose of proceeding with the Work.

**1-5.4 Intent of Plans and Specifications.** The intent of the Plans and Specifications is to describe the Work to be performed by Contractor. The Specifications describe Work, which cannot be readily indicated on the Plans such as quality of materials, workmanship, and execution whereas the Plans generally describe dimensions, elevations and general layout of the Work. It is not the intent to specify every item of the Work in the Specifications, which is shown on the Plans, or to show on the Plans all items of the Work described or specified in the Specifications even if such items could have been shown and/or specified. All aspects of the Work, on the Plans or in the Specifications, or which are reasonably inferable therefrom as being necessary to complete the Work, shall be provided by Contractor whether or not such aspects of the Work are expressly covered in the Plans or the Specifications. It is intended the Work be of sound, quality construction, and Contractor is responsible for the inclusion of all direct and indirect costs and expenses to cover all items indicated, described, or implied in the Work to be performed.

**1-5.5 Ambiguity, Conflicts, Difference or Discrepancy**. In the event there is an ambiguity, conflict, difference or discrepancy between the various Contract Documents it is intended the more stringent, higher level of quality, greater quantity and/or higher level of workmanlike manner shall prevail and control. If discrepancies in the Contract Documents are not corrected by Addenda during the bid period, Contractor represents and warrants the scope and amount of its bid includes all materials, supplies, equipment, services, facilities, apparatus, and methods of construction that provides for the higher cost, quantity and quality.

**1-5.6 Priority of Addenda.** Addenda shall govern over all other Contract Documents at the time of bid. Subsequent Addenda issued shall govern over prior Addenda only to the extent specified. Where applicable, and in accordance with 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 is a reference to the respective organization's standard technical specifications, which are in effect on the date of bid submission for the Work. If applicable standard technical specifications are revised before completion of any part of the Work, Contractor may, if acceptable to Engineer, perform such Work in accordance with the revised standard technical specifications. The standard technical specifications, except as modified in the Contract Documents, shall have full force and effect as though printed in the Contract Documents. Before commencing any portion of the Work, Contractor shall 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. In the event Contractor observes a conflict, ambiguity or discrepancy between the provisions of the Contract Documents and standard technical specifications, Contractor shall provide notice to Engineer and shall ensure such conflict, ambiguity or discrepancy is corrected in the prescribed manner prior to the commencement of said portion of the Work. Unless stated otherwise in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, ambiguity or discrepancy between the provisions of the Contract Documents and standard technical specifications. In the event the requirements of this article or the written interpretation or clarifications of Engineer do not resolve the conflict, ambiguity or discrepancy the decisions and directives of Engineer shall be final for the purpose of proceeding with the Work. If Contractor believes an order by the Engineer establishes a basis for an adjustment in the Contract Amount, Milestones and/or Contract Time, Contractor shall, pursuant to Article 2, submit a Change Order Proposal within ten (10) days of the date of issuance of the Construction Directive.

**1-5.8 Rules of Contract Interpretation.** In case of conflict between the various sections of the Contract Documents including the Plans and Specifications, it is the intent of the Contract Documents that the more stringent, higher quality of material and/or workmanship, and/or greater quantities shall be provided by the Contractor into the Work.

Where applicable, the requirements approved by the City on any item submitted as a Deferred Approval in accordance with Title 24, California Code of Regulations, shall take precedence over any previously issued Addenda, Drawing or Specification.

Except as provided 1-5.8, in the event of conflict between the Plans, the following shall govern:

A. Specific notes shall govern over all other notes;
B. General notes, when identified as such, shall be incorporated into other portions of Drawings;
C. Schedules, when identified as such, are complementary with other notes and other portions of Drawings including those identified as general notes;
D. Larger scale Drawings shall govern over smaller scale Drawings;
E. Calculated, derived, or numerical dimensions shall govern over dimensions obtained by scaling and at no time shall Contractor perform and/or allow Work to be performed based on dimensions obtained by scaling of the Drawings.

**1-5.9 Ownership and Use of Contract Documents.** Neither Contractor, Subcontractor, or material or equipment supplier shall own or claim a copyright in the Plans, Specifications, and other Contract Documents. They are not to be used by Contractor, Subcontractor, or material or equipment supplier on other jobs.

**1-5.10 Document Retention Policy.** Contractor shall, at its sole expense, maintain a full set of project records including plans, specifications, correspondences, submittals, record documents and all other project documentation for a period of ten (10) years from the date the Notice of Completion is recorded. Such documents may be maintained in hard copy or electronic form and will be produced or made available for review and photocopying or electronic reproduction upon ten (10) days written request by the City or designated agent or representative.

**1-6 SUBMITTALS.**

**1-6.1 General**. Submittals shall be provided as specified or when requested by the Engineer. Materials shall neither be furnished nor fabricated, nor shall any work for which submittals are required be performed, before the required submittals have been reviewed and accepted by the Engineer. Neither review nor acceptance of submittals by the Engineer shall relieve the Contractor from responsibility for errors, omissions, or deviations from the Contract Documents, unless such deviations were specifically called to the attention of the Engineer in the letter of transmittal. The Contractor shall be responsible for the correctness of the submittals. The Contractor shall allow a minimum of 20 Working Days for review of submittals unless otherwise specified in the Specifications. Each submittal shall be accompanied by a letter of transmittal. Payment for submittals shall be included in the contract unit price for various bid items. The review period begins a new 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 Engineer, as required by individual Specifications section. Install each sample complete and finished. Finishes in place that have been accepted by the Engineer 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 City'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 City 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 City 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 City will return improperly numbered submittals and resubmittals 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 City 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 City 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 City. 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 City 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.

**1-7 WORK TO BE DONE.** The Contractor shall perform all work necessary to complete the Contract in a satisfactory manner. Unless otherwise provided, the Contractor shall furnish all materials, equipment, tools, labor, and incidentals necessary to complete the Work. 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 City thereof, all such improvements shall be removed, maintained, and permanently replaced by the Contractor at his 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 which have been drilled are available for inspection at the office of the Engineer. Additional subsurface exploration may be performed by Bidders or the Contractor at their own expense. The indicated groundwater elevation is that which existed on the date specified in the data. It is the Contractor's responsibility to determine and allow for the groundwater elevation on the date the Work is performed. A difference in groundwater elevation between what is shown in soil boring logs and what is actually encountered during construction will not be considered as a basis for Extra Work per 2-3.

**1-9 RIGHT OF WAY.**

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 City. Temporary right-of-way to construct one or more portions of the Work may also have been acquired by the City. 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 City, the Contractor shall be responsible for all costs incurred by the City to extend use of the temporary right of way.

**1-10 REFERENCE POINTS AND ELEVATIONS.**

**1-10.1 General.** When required by the scope of the Work, City will furnish at its expense, an engineering survey of the project site, giving as applicable, benchmark elevation points, property lines and corners. Contractor shall layout the Work and shall be responsible for the preservation of all established benchmark elevation points, property lines and comers and shall not demolish, relocate and/or change the location of any benchmark elevation point, property line or corner without the prior written approval of Engineer. Contractor shall, upon the loss, destruction and/or relocation of any benchmark elevation points, property line or corner promptly notify Engineer prior to such replacement and/or relocation of benchmark elevation point, property line or corner. Contractor shall, at expense of

Contractor, engage the services of State of California licensed surveyor to replace and/or relocate benchmark elevation points, property line or corners lost, destroyed and/or relocated.

**1-10.2 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.

**1-11 AUTHORITY OF THE ENGINEER.** The Engineer has the authority to enforce compliance with the Plans and Specifications. The Contractor shall promptly comply with instructions from the Engineer. The decision of the Engineer 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 shall be precedent to any payment under the Contract, unless otherwise ordered by the Engineer.

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 City or as part of any audit of the City, for a period of three (3) years after final payment under the Contract.

The City 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 City, Contractor shall prepare and submit to City any reports concerning Contractor's performance of the services rendered under this Contract. With 72 hours advance written notice delivered to Contractor, City 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 City and shall be delivered at no cost to City upon request of City 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 City of Irvine

**1-12 INSPECTION.**

**1-12.1 General.** Inspection of the Work will be conducted by City Representative and will include monitoring and enforcing compliance of materials, equipment, installations, workmanship, methods and requirements of the Contract Documents.

The City 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 Engineer so that inspection may be made.

All installations which are to be backfilled or otherwise covered will be inspected by the City Representative prior to backfilling or covering. The Contractor shall give the City Representative a minimum of two (2) Working 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 City, 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 City 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 City and the Contractor, related to inspection of the Work of this Contract, shall be directed to the Engineer.

**1-12.2 Inspection Requirements.** The Contractor shall notify the City Representative a minimum of two (2) Working Days hours before inspection is required.

A. Unless specified elsewhere in the Specifications, inspection of the Work will be provided by the City between the hours of 7:00 a.m. and 3:30 p.m., Monday through Friday, exclusive of City 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.

B. 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 City 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 City and/or Federal holidays plus associated overhead costs.

C. For purposes of this section, the following holidays are observed by the City:
    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 that each of the above holidays will be observed is available upon request from the Engineer.

D. The Contractor shall telephone the designated City 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.

E. In addition to any inspection required by Codes and/or Ordinances or Contract Documents, Contractor shall notify the Engineer a minimum of 2 Working 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
   9. Framing
   10. Insulation
   11. Waterproofing

**1-13 SPECIAL NOTICES.** When provided in the Specifications or directed by the Engineer, any notice required to be served in accordance with 1-13 shall be in writing, dated, and signed by the Contractor or the Engineer. Such notices shall be served by any of the following methods:
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 City, by personal delivery or by depositing the same in the United States mail, enclosed in a sealed envelope addressed to the City, 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.

**1-14 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.

**1-15 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 City, the Contractor shall hold coordination meetings and pre-installation conferences with City Representatives and subcontractors to assure coordination of Work.

Should the City 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 City's activities.

## ARTICLE 2 – CHANGES IN THE WORK

### 2-1 CHANGES REQUESTED BY THE CONTRACTOR.

**2-1.1 General** - Changes in the Plans and Specifications, requested in writing by the Contractor, which do not materially affect the Work and which are not detrimental to the Work or to the interests of the City, may be granted by the Engineer. Nothing herein shall be construed as granting a right to the Contractor to demand acceptance of such changes.

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

### 2-2 CHANGES REQUESTED BY THE CITY.

**2-2.1General.** The City 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 City 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 City’s issuance of a Change Order shall not constitute a waiver by the City of, or preclude the City 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 and time extension.

A Change Order is approved when the City signs the Change Order and a purchase order has been issued.

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 2-5 of the 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 City 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. Field Orders 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. The Engineer 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.

**2-2.2 Contract Unit Prices.**

**2-2.2.1 General.** If a change is ordered in an item of work covered by a Contract Unit Price, and such change does not involve a substantial change in character of the work from that shown on the Plans or specified in the Specifications, then an adjustment in payment will be made. This adjustment will be based upon the increase or decrease in quantity and the 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 made at the Contract Unit Price. If the actual quantity of said item of work varies from the Bid quantity by more than 25 percent, payment will be made per 2-2.2.2 or 2-2.2.3 as appropriate.

In the case of such an increase or decrease in a 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.

**2-2.2.2 Increases of more than 25 Percent.** Should the actual quantity of an item of work covered by a Contract Unit Price and constructed in conformance with the Plans and Specifications, exceed the Bid quantity by more than 25 percent, payment for the quantity in excess of 125 percent of the Bid quantity will be made on the basis of an adjustment in the Contract Unit Price mutually agreed to by the Contractor and the City, or at the option of the Engineer, on the basis of Extra Work per 2-3. The Extra Work per 3-3, basis of payment, shall not include fixed costs. Fixed costs shall be deemed to have been recovered by the Contractor through payment for 125 percent of the Bid quantity at the Contract Unit Price. If payment for units of a bid item that exceeds125 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.

**2-2.2.3 Decreases of More than 25 Percent.** Should the actual quantity of an item of work covered by a Contract Unit Price, and constructed in conformance with the Plans and Specifications, be less than 75 percent of the Bid quantity, an adjustment in payment will not be made unless so requested in writing by the Contractor. If the Contractor so requests, payment will be made on the basis of an adjustment in the Contract Unit Price mutually agreed to by the Contractor and the City, or at the option of the Engineer, on the basis of Extra Work per 2-3; however, in no case 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 can not be reached, the Engineer may direct the Contractor 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 shall be negotiated before commencement of the changed work.

**2-2.4 Eliminated Items**. Should any Bid item be eliminated in its entirety, payment will be made to the Contractor for its actual costs incurred in connection with the eliminated item prior to notification in writing from the Engineer so stating its elimination. If material conforming to the Plans and Specifications is ordered by the Contractor for use in the eliminated item prior to the date of notification of elimination by the Engineer, and if the order for that material cannot be canceled, payment will be made to the Contractor for the actual cost of the material. In this case, the material shall become the property of the City. Payment will be made to the Contractor for its actual costs for any further handling. If the material is returnable, the material shall be returned and payment will be made to the Contractor for the actual cost of charges made by the supplier for returning the material and for handling by the Contractor. Actual costs, as used herein, shall be computed on the basis of Extra Work per 2-3.

**2-2.5 Acceleration Clause.**

A. The City reserves the right to accelerate the work of the Contract. In the event that the City directs acceleration, such directive will be only in written form. The Contractor shall keep cost and other project records related to the acceleration directive separately from normal project costs and records and shall provide a written record of acceleration cost to the City on a daily basis.

B. In the event that the Contractor believes that some action or inaction on the part of the City constitutes an acceleration directive, the Contractor shall immediately notify the City in writing that the Contractor considers the actions an acceleration directive. This written notification shall detail the circumstances of the acceleration directive. The Contractor shall not accelerate their work efforts until the City responds to the written notification. If acceleration is then directed or required by the City, all cost records referred to above shall be maintained by the Contractor and provided to the City on a daily basis.

C. In order to recover additional costs due to acceleration, the Contractor must document that additional expenses were incurred and paid by the Contractor. Labor costs recoverable will be only overtime or shift premium costs or the cost of additional laborers brought to the site to accomplish the accelerated work effort. Equipment costs recoverable will be only the cost of added equipment mobilized to the site to accomplish the accelerated work effort.

**2-3 EXTRA WORK.**

**2-3.1 General.** New or unforeseen work will be classified as Extra Work when the Engineer determines that it is not covered by Contract Unit Prices.

All costs set forth in A through J are deemed to be part of the Contractor's overhead and profit, and are included in the Contract Amount and/or covered as set forth in 2-3.2.6. The following are **not** allowed in the Cost of the Work:

A. Payroll costs and other compensation of Contractor's project manager, superintendents, project engineers, officers, executives, principals, owners, general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expediters, timekeepers, clerks and other personnel employed by Contractor whether at the Project site or in Contractor principal or a branch office for general administration of the Work;
B. Costs and expenses of Contractor's principal office, branch offices and office located at the Project site;
C. Any part of Contractor capital expenses, including interest on Contractor capital employed for the Work and charges against Contractor for delinquent payments;
D. Cost of premiums for all bonds and for all insurance whether or not Contractor is required by the Contract Documents to purchase and maintain same except for the cost of premiums covered in 2-3.2.6;
E. Costs due to negligence, act or failure to act of Contractor, 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, the correction of defective Work, disposal of materials or equipment furnished in error and the repair and/or replacement of any damage to property;
F. Consumable materials, such as drill bits, abrasive discs, gloves, rags, rope, welding tips, etc.;
G. Tools and equipment with original costs of less than $1,000.00;
H. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly set forth in 2-3.2.6;
I. Consequential expenses including impairment of bonding capacity, lost opportunity, labor, wage or cost escalations, legal expenses or changes in taxes;
J. All costs set forth 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 the price for the extra work cannot be agreed upon prior to the commencement of the work, the City will pay for the extra work based on the accumulation of costs as provided herein.

**2-3.2.2 Basis for Establishing Costs.**

**A. Labor**. The cost of labor shall be the actual cost for wages of workers performing the Extra Work at the time the Extra Work is done, plus employer payments of 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.
The use of a labor classification which would increase the Extra Work cost will not be permitted unless the Contractor establishes the necessity for such additional costs. Labor costs for equipment operators and helpers shall be reported only when such costs are not included in the invoice for equipment rental. The labor cost for foremen shall be proportioned to all of their assigned work and only that applicable to the Extra Work.

**B. Materials.** The cost of materials reported shall be at invoice or lowest current price at which such materials are locally available and delivered to the Work site in the quantities involved, plus sales tax, freight, and delivery. The City reserves the right to approve materials and sources of supply, or to supply materials to the Contractor if necessary for the

**2-3.2.3 Tools and Equipment Rental.** 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 2-3.

The rental rates paid shall include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, and all incidentals. Necessary loading and transportation costs for equipment used on the Extra Work shall be included.

If equipment is used intermittently and, when not in use, could be returned to its rental source at less expense to the City than holding it at the Work site, it shall be returned, unless the Contractor elects to keep it at the Work site, at no expense to the City.

All equipment shall be acceptable to the Engineer, in good working condition, and suitable for the purpose for which it is to be used.

The reported rental time for equipment already at the Work site shall be the duration of its use on the Extra Work. This time shall begin 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 which may be required on the Extra Work, including labor, services, material, and equipment. These items must be different in their nature from those required for the Work, and be of a type not ordinarily available from the Contractor or Subcontractors.

**2-3.2.5 Invoices.** Vendors' invoices for material, equipment rental and other expenditures shall be submitted with the daily report per 2-3.3. If the daily report is not substantiated by invoices or other documentation, the City may establish the cost of the item involved at the lowest price which was current at the time of the report.

**2-3.2.6 Markup.**

**2-3.2.6.1 Work by Contractor**. The following percentages will be added to the Contractor's costs as determined under 2-3 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% |

**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 2-3.2.6.1 shall be applied to the subcontractor's actual cost of such work. Contractor markup on subcontractor work shall be limited to five percent (5%).

No payment shall be made for any item not set forth in 2-3.2.6.1 and 2-3.2.6.2, 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 City is responsible, which is unreasonable under the circumstances involved, and which was not within the contemplation of the City and the Contractor.

**2-3.3 Daily Reports by the Contractor.** When the cost for the Extra Work cannot be agreed upon, the Contractor shall submit a daily report to the Engineer on forms approved by the City. Applicable delivery tickets, listing all labor, materials, and equipment involved for that day, and other services and expenditures when authorized shall be included. Failure to submit the daily report by the close of the next working day may waive any rights for that day. An attempt shall be made to reconcile the report daily, and it shall be signed by the Engineer and the Contractor. In the event of a disagreement, pertinent notes shall be entered by each party to explain points which cannot be resolved immediately. Each party shall retain a signed copy of the report. Reports by Subcontractors or others shall be submitted through the Contractor.

The Contractor shall notify the City Representative at the beginning of each day when extra work is in progress. No payment will be made for work not verified by the City Representative.

The report shall:

A. List the names of workers, classifications, and hours worked
B. Describe and list quantities of materials used.

C. List the type of equipment, size, identification number, and hours of operation, including loading and transportation, if applicable.

D. Describe other services and expenditures in such detail as the City may require.

**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. The Contractor furnished cost or pricing data which was not accurate, complete and current as certified in the Contractor's Certificate of current Cost or Pricing Date;
   2. A Subcontractor, supplier, materialman, or prospective Subcontractor, at any tier, furnished cost or pricing data in support of a subcontract cost estimate furnished by the Contractor but which was not accurate, complete and current as of the date certified in the Contractor's Certificate of Current Cost or Pricing Data;or,
   3. The Contractor or a Subcontractor, supplier, materialman, or prospective Subcontractor, at any tier, furnished any data not within (A) or (B) above, which was not accurate as submitted.

B. The price shall be reduced accordingly and the Contractor shall be modified in writing as may be necessary to reflect such reduction. However, any reduction in the Contract price due to defective subcontract data of a prospective Subcontractor, when the subcontract was not subsequently awarded to such Subcontractor, will be limited to the amount (plus applicable overhead and profit) by which the actual subcontract or actual cost to the Contract if there was no Subcontract, was less than the prospective subcontract cost estimate submitted by the Contractor; provided that the actual subcontract price was not affected by defective cost or pricing data.

C. The following certification from the Contractor is required to be provided on all Change Order cost quotations or requests or all requests for equitable adjustment in excess of $5,000.00.

**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 impracticable, to the City in support of (proposal quotation, request for equitable adjustment, or other submissions involved, giving appropriate identification) are accurate, complete, and current as of (date).

Contract No. _____

Proposed Change Order No. _____

Company: _____

Name: _____

Title: _____

Date: _____

Signature: _____

**2-4 CHANGED CONDITIONS.** The Contractor shall notify the Engineer of the following Work site conditions (hereinafter called “changed conditions”), in writing, upon their discovery and before they are disturbed:

A. Subsurface or latent physical conditions differing materially from those represented in the Contract
B. Documents;
C. Unknown physical conditions of an unusual nature differing materially from those ordinarily
D. encountered and generally recognized as inherent in work of the character being performed; and
E. Material differing from that represented in the Contract Documents which the Contractor believes may be hazardous waste, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with the provisions of existing law.

The Engineer will investigate conditions which appear to be changed conditions. If the Engineer determines that the conditions are changed conditions and will materially affect costs, a Change Order will be issued adjusting the compensation for such portion of the Work in accordance with 2-2.2. If the Engineer determines that the conditions are changed conditions and will materially affect performance time, the Contractor, upon submitting a written request, will be granted an extension of time in accordance with 5-6.

If the Engineer determines that the conditions do not justify an adjustment in compensation, the Contractor will be so notified in writing. This notice will also advise the Contractor of its obligation to notify the Engineer in writing if the Contractor disagrees.

If the Contractor disagrees with the decision, it may submit a written notice of potential claim to the Engineer before commencing the disputed work. In the event of such a dispute, the Contractor shall not be excused from any scheduled completion date provided by the Contract and shall proceed with all work to be performed under the Contract. However, the Contractor shall retain any and all rights provided by either the Contract or by law which pertain to the resolution of disputes and protests between the contracting parties. The Contractor shall proceed in accordance with 2-5.

The Contractor's failure to give notice of changed conditions promptly upon their discovery and before they are disturbed shall constitute a waiver of all claims in connection therewith.

**2-5 DISPUTED WORK.** If the Contractor and the City are unable to reach agreement, the City may direct the Contractor to proceed with the Disputed Work. Payment shall be as later determined by 2-2, 2-3, mediation or arbitration, if the City and Contractor agree thereto, or as fixed in a court of law.

Although not to be construed as proceeding under 2-3, the Contractor shall keep and furnish records of Disputed Work to the Engineer in accordance with 2-3.

# ARTICLE 3 – CONTROL OF MATERIALS

## 3-1 MATERIALS AND WORKMANSHIP.

**3-1.1 General.** 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 City.

All materials, parts, and equipment furnished by the Contractor in the Work shall be new, high grade, and free from defects. Used or secondhand materials, parts, and equipment may be used only if so specified in the Specifications.

The quality of materials and workmanship shall be subject to approval by the Engineer. Materials and workmanship of quality not conforming to the requirements of the Specifications shall be considered defective and will be subject to rejection. Defective work or material, whether in place or not, shall be removed immediately from the work site by the Contractor, at its expense, when so directed by the Engineer.

If the Contractor fails to replace any defective or damaged work or material after reasonable notice, the Engineer may cause such work or materials to be replaced. The replacement expense will be deducted from the amount to be paid to the Contractor.

**3-1.1.1 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.

**3-1.1.2 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 City, 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

**3-1.2 Protection of Work and Materials.** The Contractor shall provide and maintain storage facilities and employ such measures as will preserve the specified quality of materials to be used in the Work. Stored materials shall be reasonably accessible for inspection. The Contractor shall also adequately protect new and existing work and all items of equipment for the duration of the Contract.

The Contractor shall not, without the City's consent, assign, sell, mortgage, hypothecate, or remove equipment or materials which have been installed or delivered and which may be necessary for the completion of the Work.

**3-1.3 Inspection Requirements.** 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 City 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.

**3-1.3.1 General.** 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 City assumes no obligation to inspect materials at the source of supply.

Unless otherwise specified 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. Additional materials and fabricated items which require inspection at the source shall be as specified in the Specifications.

Steel pipe in sizes less than 18 inches and vitrified clay and cast iron pipe in all sizes are acceptable upon certification as to compliance 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 subject to inspection at the Work site only. Special items of equipment such as designed electrical panel boards, large pumps, sewage plant equipment, etc., are subject to inspection at the source for performance testing only. Inspection at the source for other items shall be as provided in the Specifications.

**3-1.3.2 Inspection of Materials Not Locally Produced.** When the Contractor intends to purchase materials, fabricated products, or equipment from sources located more than 50 miles outside the geographical limits of the City, an inspector or accredited testing laboratory (approved by the Engineer),

shall be engaged by the Contractor at its expense, to inspect the materials, equipment or process. This approval shall be obtained before producing any material or equipment. The inspector or representative of the testing laboratory shall evaluate the materials for conformance with the requirements of the Plans and Specifications. The Contractor shall forward reports required by the Engineer. No materials or equipment shall be shipped nor shall any processing, fabrication or treatment of such materials be done without proper inspection by the approved agent. Approval by said agent shall not relieve the Contractor of 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 (80 km) of the geographical limits of the City.

**3-1.4 Test of Materials.** Before incorporation into the Work, the Contractor shall submit samples of materials, as the Engineer may require, at no cost to the City. The Contractor, at its expense, shall deliver the materials for testing to the place and at the time designated by the Engineer. Unless otherwise specified, all initial testing and a reasonable amount of retesting will be performed under the direction of the Engineer, and at no expense to the Contractor. If the Contractor is to provide and pay for testing, it will be so specified in the Specifications.

The Contractor shall notify the Engineer in writing, at least 15 Working Days in advance, of its intention to use materials for which tests are specified, to allow sufficient time to perform the tests. The notice shall name the proposed supplier and source of material.

If the notice of intent to use is sent before the materials are available for testing or inspection, or is sent so far in advance that the materials on hand at the time will not last but will be replaced by a new lot prior to use on the Work, it will be the Contractor's responsibility to re-notify the Engineer when samples which are representative may be obtained.

The Contractor shall furnish the City 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 City 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.

**3-1.4.1 Testing Laboratory.** The Contractor shall employ and pay for services of an independent testing laboratory, subject to approval by the City, 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 the Contractor of its obligation to perform the Work in accordance with Contract Documents.

Laboratory field technicians employed by the City 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 City Representative. Notify City 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.

**3-1.5 Certificate of Compliance.** A Certificate of compliance shall be furnished to the Engineer prior to the use of any material or assembled material for which the Specifications so require or if so required by the Engineer.

The Engineer may waive the materials testing requirements of the Specifications and accept the manufacturer’s written certificate of compliance that the materials to be supplied meet those requirements. Materials test data may be required by the Engineer to be included with the submittal.

Materials used on the basis of a Certificate of Compliance maybe sampled and tested at any time. The submission of a Certificate of Compliance shall not relieve the Contractor of responsibility for incorporating material into the Work which conforms to the requirements of the Contract Documents, and any material not conforming to the requirements will be subject to rejection by the Engineer whether in place or not.

**3-1.6 Trade Names or Equals.** The Contractor may supply any of the materials specified or offer an equivalent. The Engineer will determine whether the material offered is equivalent to that specified. Adequate time shall be allowed for the Engineer to make this determination.

A listing of materials is not intended to be comprehensive, or in order of preference. The Contractor may offer any material, process, or equipment considered to be equivalent to that indicated. The substantiation of offers shall be submitted as provided in the Contract Documents.

The Contractor shall, at its expense, furnish data concerning items offered by it as equivalent to those specified. The Contractor shall have the material tested as required by the Engineer to determine that the quality, strength, physical, chemical, or other characteristics, including durability, finish, efficiency, dimensions, service, and suitability are such that the item will fulfill its intended function.

Test methods shall be subject to the approval of the Engineer. Test results shall be reported promptly to the Engineer, who will evaluate the results and determine if the substitute item is equivalent. The Engineer’s findings shall be final. Installation and use of a substitute item shall not be made until approved by the Engineer.

If a substitute offered by the Contractor is not found to be equal to the specified material, the Contractor shall furnish and install the specified material. The specified Contract completion time shall not be affected by any circumstance developing from the provisions of this section.

The Contractor shall submit products list in accordance with the following:

A. Within the time provided in the Specifications, 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. 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.

B. 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.

C. Substitute products shall not be ordered or installed without written acceptance by the Engineer.

D. Only one request for substitution for each product line will be considered. When substitution is not accepted, provide specified product.

E. 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 1-6.

**3-1.7 Weighing and Metering Equipment.** Scales and metering equipment used for proportioning materials shall be 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.

The accuracy of the work of a scale service City, except as stated herein, shall meet the standards of the Business and Professions Code and the Code of Regulations pertaining to weighing devices. A Certificate of Compliance shall be presented, prior to operation, to the Engineer for approval and shall be renewed whenever required by the Engineer at no cost to the City.

Scales shall be arranged so they may be read easily from the operator's platform or area. They shall indicate the true net weight without the application of any factor. The figures of the scales shall be clearly legible. Scales shall be accurate to within 1 percent when tested with the plant shut down. Weighing equipment shall be so insulated against vibration or moving of other operating equipment in the plant area that the error in weighing with the entire plant running will not exceed 2 percent for any setting or 1.5 percent for any batch.

**3-1.8 Calibration of Testing Equipment.** Testing equipment, such as, but not limited to pressure gages, metering devices, hydraulic systems, force (load) measuring instruments, and strain-measuring devices shall be calibrated by a testing City acceptable to the Engineer at intervals not to exceed 12 months and following repairs, modification, or relocation of the equipment. Calibration certificates shall be provided when requested by the Engineer.

**3-1.9 City-Furnished Materials.** Materials which are listed as City-furnished materials in the Specifications will be available to the Contractor free of charge.

The Contractor shall submit a written request to the Engineer for the delivery of City-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 City-furnished materials will be available to the Contractor free of charge will be designated in the Specifications. 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 Specifications, the City-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 City-furnished material shall be considered as included in the price paid for the contract item involving the City-furnished material.

The Contractor shall be responsible for City-furnished materials furnished to the Contractor, and shall pay all demurrage and storage charges. City-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 City for the cost of replacing City-furnished materials, and those costs may be deducted from any monies due or to become due the Contractor. All City-furnished material that is not used on the Work shall remain the property of the City, and the Contractor shall arrange with the City Representative for delivery back to the City at Contractor's expense.

## ARTICLE 4 – UTILITIES

**4-1 GENERAL.** For purposes of this Article 4, 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 Article 4 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 to accommodate the Work.

**4-2 LOCATION.**

**4-2.1 General.** Known utilities and their respective owners are shown on the Plans or specified in the Specifications. Where underground utilities are shown on the Plans, the Contractor shall assume every property parcel will be served by a service connection for each type of utility.

Pursuant to § 4216 of the Government Code, the Contractor shall contact the appropriate regional notification center and obtain an inquiry identification number at least 2 Working Days, but not more than 14 Days prior to commencing any excavation required for the Work. Caltrans and certain other agencies are not required to become a member of a regional notification center. The Contractor shall contact non-member agencies directly and request they locate and mark their subsurface installations' Pursuant to § 4216.2, When any proposed excavation is within l0 feet of a high priority subsurface installation" the Contractor shall coordinate with the operator.

Before starting the work, the contractor shall physically locate subsurface installations within 24 inches of any side of excavations required for the Work. The contractor shall determine the horizontal and vertical location, alignment, depth, material type, and size of each subsurface installation. Excavation shall be performed pursuant to § 4216.4.The Contractor shall provide the subsurface installation location data to the Engineer within the time period specified in the Specifications.

The Contractor shall notify the Engineer in writing immediately after identifying potential physical conflicts between existing subsurface installations and the work. The written notification shall include;

A. Date of locating,
B. Method of locating,
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.

The contractor shall complete excavation, backfill, and placement of temporary resurfacing on the same day. Permanent resurfacing shall be placed within 5 Working Days unless otherwise specified in the Specifications or directed by the Engineer.

A list of utility companies that have facilities located within or near the construction area is included in the Specifications. 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 Specifications has not been verified and may not be accurate or complete. Except as expressly provided in this Article 4, 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 2-4 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 Article 2; 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 6-15 shall include (but not be limited to) the accurate locations of underground utilities determined pursuant to 4-2 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 § 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 Article 4 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.

**4-2.2 Payment.** Payment for utility location by the Contractor shall be included in the various items of work and no additional compensation will be allowed therefor.

**4-3 PROTECTION.** 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 Specifications, 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 Article 2, 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 4-2) or to otherwise exercise reasonable care, will be paid for as an addition to the Work in accordance with Article 2. 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 6-3.2 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 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 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.

**4-4 REMOVAL.** The Contractor shall remove all interfering portions of utilities shown on the Plans as "abandoned" or "to be abandoned in place". Before starting removal operations, the contractor shall ascertain from the City whether the abandonment is complete, and the costs involved in the removal and disposal shall be included in the Bid for the items of work necessitating such removals.

**4-5 RELOCATION.** When feasible, the owners responsible for utilities within the area affected by the Work will complete their necessary installations, relocations, repairs, or replacements before commencement of the work by the Contractor. When the Plans or Specifications indicate that utility installation is to be relocated, altered, or constructed by others, the City will conduct all negotiations with the owners and utility work will be done at no cost to the Contractor. Utilities which are relocated in order to avoid interference shall be protected in their position and the cost of such protection shall be included in the Bid for the items of work necessitating such relocation.

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 Article 2. Alternatively, the Engineer may order changes in the Work to avoid such interference, in accordance with Article 2. All work by the Contractor on utilities shall be done to the satisfaction of the utility owner as well as complying with the requirements of the Contract Documents.

When the Plans or Specifications 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 Article 2, 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.

The provisions of this paragraph are subject to the provisions of the previous paragraph. Where the Plans or Specifications 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.

The utility owner will relocate service connections as necessary within the limits of the Work or within temporary construction or slope easements. When directed by the Engineer, the Contractor shall

arrange for the relocation of service connections as necessary between the meter and property line, or between a meter and the limits of temporary construction or slope easements. Payment for the relocation of such service connections shall be in accordance with 2-2 or 2-3. Payment will include the restoration of all existing improvements which may be affected thereby. The contractor may agree with the owner of any utility to disconnect and reconnect interfering service connections. The City will not be involved in any such agreement.

**4-6 DELAYS.** The construction schedule developed in accordance with 5-1 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 5-6.1 or as provided below. Delays described below will not be considered delays for which the City is responsible within the meaning of 5-6.3.

A. Subject to 5-6.2 and 5-6.4, 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 Article 2. 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 4-6:

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 4-6. Delays described in 4-6 are not considered right of way delays within the scope of 1-9.

**4-7 COOPERATION.** When necessary, the Contractor shall so conduct its operations as to permit access to the Work site and provide time for utility work to be accomplished during the progress of the Work.

**4-8 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 City'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 City 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 therefor.

**4-9 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 City, shall be considered as included in the prices in the Bid for the related items of work.

## ARTICLE 5 – PROSECUTION, PROGRESS AND ACCEPTANCE OF THE WORK

**5-1 CONSTRUCTION SCHEDULE AND COMMENCEMENT OF WORK.**
The Contractor shall begin the Work on 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 City, begin work in advance of the date in the Notice to Proceed; however, **no work shall be started in advance of the completed execution of the Contract and approval of the construction progress schedule by the City**. The City may, but shall not be required to, provide access to the site prior to the date specified in the Notice to Proceed.

**5-1.1 General.** Within ten (10) days after the date of the City's execution of the Contract, the Contractor shall submit a proposed construction schedule to the Engineer for approval. The construction schedule shall be in accordance with 5-1.2 and 5-1.3 and shall be in sufficient detail to show chronological relationship of all activities of the Work. These include, but are not limited to, estimated starting and completion dates of various activities, submittal of shop drawings to the Engineer for approval, utility relocation efforts, and procurement of materials and scheduling of equipment.

Prior to issuing the Notice to Proceed, the Engineer will schedule a Pre-Construction Meeting with the Contractor to review the proposed construction schedule and delivery dates, arrange utility coordination and clarify inspection procedures.

Notwithstanding any other provisions of the contract, the Contractor shall not be obligated to perform any work and the City shall not be obligated to accept or pay for any work performed by the Contractor prior to delivery of the Notice to Proceed. The City's knowledge of work performed prior to the delivery of the Notice to Proceed shall not obligate the City to accept or pay for such work. The Contractor shall provide the required contract bonds and evidences of insurance prior to commencing work at the site.

**5-1.2 Definitions. The following definitions shall apply to this section:**

A. ACTIVITY — a task, event or other project element on a schedule that contributes to completing the project. Activities have a description, start date, finish date, duration and one or more logic ties.

B. BASELINE SCHEDULE — the initial schedule representing the Contractor's work plan on the first working day of the project.

C. CONTRACT COMPLETION DATE — the current extended date for completion of the contract shown on the Weekly Statement of Working Days furnished by the Engineer in conformance with the provisions in 6-7.

D. CRITICAL PATH — the longest continuous chain of activities for the project that has the least amount of total float of all chains. In general, a delay on the critical path will extend the scheduled completion date.

E. CRITICAL PATH METHOD (CPM) — a network based planning technique using activity durations and the relationships between activities to mathematically calculate a schedule for the entire project.

F. DATA DATE — the day after the date through which a schedule is current. Everything occurring earlier than the data date is "as-built" and everything on or after the data date is "planned."

G. FLOAT — the difference between the earliest and latest allowable start or finish times for an activity.

H. FRAGNET — a fragnet is defined as the sequence of new activities that are proposed to be added to the existing schedule, to demonstrate either added scope, or a change and the corresponding impact. The fragnet shall identify the predecessors to the new activities and demonstrate the impacts to successor activities.

I. MILESTONE — an event activity that has zero duration and is typically used to represent the beginning or end of a certain stage of the project.

J. NEAR CRITICAL PATH — a chain of activities with total float exceeding that of the critical path but having no more than ten (10) Working Days of total float.

K. SCHEDULED COMPLETION DATE — the planned project finish date shown on the current accepted schedule.

L. TOTAL FLOAT — the amount of time that an activity or chain of activities can be delayed before extending the scheduled completion date.

M. UPDATE SCHEDULE — a current schedule developed from the baseline or subsequent schedule through regular monthly review to incorporate as-built progress and any planned changes.

**5-1.3 General Requirements.** The Contractor shall meet with the Engineer on a date mutually agreed by the parties with the intent of discussing the schedule requirements. This meeting shall happen before the Contractor begins the work on the Baseline schedule.

The Contractor shall submit to the Engineer baseline, monthly update, look-ahead schedules and final update schedules, each consistent in all respects with the time and order of work requirements of the contract. The project work shall be executed in the sequence indicated on the current accepted schedule.

Schedules shall show the order in which the Contractor proposes to carry out the work with logical links between time-scaled work activities and calculations made using the critical path method to determine the controlling operation or operations. The Contractor is responsible for assuring that all activity sequences are logical and that each schedule shows a coordinated plan for complete performance of the work.

The Contractor shall produce schedules using computer software and shall furnish compatible software for the Engineer's exclusive possession and use. The Contractor shall furnish network diagrams and schedule data as parts of each schedule submittal.

The schedule shall be prepared using the latest version of Oracle’s Primavera P6 scheduling tool or approved equal. Any tool other than Primavera shall first require approval from the Engineer.

The Contractor shall not sequester float through strategies such as extending activity duration estimates to consume available float, using preferential logic, using extensive crew/resource constraints, using special lead/lag logic restraints, using imposed dates or other float suppression techniques.

Schedules shall include, but not be limited to, applicable activities that show the following:

A. Project characteristics, salient features, or interfaces, including those with outside entities that could affect time of completion.

B. Project start date, scheduled completion date and other milestones.

C. Work performed by the Contractor, subcontractors and suppliers.

D. Submittal development, delivery, review and approval, including those from the Contractor,

subcontractors and suppliers.

E. Procurement, delivery, installation and testing of materials, plants and equipment.
F. Testing and settlement periods.
G. Utility notification and relocation.
H. Erection and removal of false work and shoring.
I. Lane closures, ramp closures, etc.
J. Major traffic stage switches.
K. Finishing roadway and final cleanup.
L. Schedule shall further include the following:
    1. A clear and legible description for each activity.
    2. A detailed Work Breakdown Structure (WBS) or Activity Coding Structure, sufficient to clearly organize, sort and filter activities as needed.
    3. Duration of not less than one (1) Working Day, except for event activities, and not more than twenty (20) Working Days, unless otherwise authorized by the Engineer.
    4. At least one predecessor and one successor activity, except for project start and finish milestones.
    5. Required constraints.

The Engineer's review and acceptance of schedules shall not waive any contract requirements and shall not relieve the Contractor of any obligation thereunder or responsibility for submitting complete and accurate information. Schedules that are rejected shall be corrected by the Contractor and resubmitted to the Engineer within five (5) Working Days of notification by the Engineer, at which time a new review period of one week will begin.

Errors or omissions on schedules shall not relieve the Contractor from finishing all work within the time limit specified for completion of the contract. If, after a schedule has been accepted by the Engineer, either the Contractor or the Engineer discover that any aspect of the schedule has an error or omission, it shall be corrected by the Contractor on the next update schedule.

The Contractor shall include the following for each schedule submittal:

A. Two sets of originally plotted, time-scaled network diagrams.
B. Two copies of a narrative report.
C. Two copies of each of three (3) sorts of the CPM software-generated tabular reports.
D. Electronic copy of the schedule data.

The time-scaled network diagrams shall conform to the following:

A. Show a continuous flow of information from left to right.
B. Be based on early start and early finish dates of activities.
C. Clearly show the primary paths of criticality using graphical presentation.
D. Include a title block and a timeline on each page.

Tabular reports shall be software-generated and provide information for each activity included in the project schedule. Three different reports shall be sorted by (1) activity ID, (2) early start and (3) total float. Tabular reports shall be 8 ½” x 11” in size and shall include, as a minimum, the following applicable information:

A. Data date
B. Activity number and description
C. Predecessor and successor activity and numbers and descriptions
D. Activity codes
E. Scheduled, or actual and remaining durations (work days) for each activity
F. Earliest start (calendar) date
G. Earliest finish (calendar) date
H. Actual start (calendar) date
I. Actual finish (calendar) date
J. Latest start (calendar) date
K. Latest finish (calendar) date
L. Free float (working days)
M. Total float (working days)
N. Percentage of activity completed and remaining duration for incomplete activities
O. Lags
P. Required constraints

Schedule submittals will only be considered complete when all documents and data have been provided as described above.

**5-1.4 Computer Software.** The software shall be the current version of Oracle's Primavera P6 for Windows or equal. If the Contractor proposes to use different software than Primavera, the Contractor shall submit to the Engineer for approval a description of proposed software. All software shall be compatible with the latest Windows operating system.

The Contractor shall furnish schedule software and all original software instruction manuals to the Engineer with submittal of the baseline schedule. The furnished schedule software will be returned to the Contractor upon approval of retention release of final payment.

The Contractor shall instruct the Engineer in the use of the software and provide software support until the contract is accepted. Within twenty (20) Working Days of approval of the Contract, the Contractor shall provide a commercial 16-hour training session and training manuals for three (3) City employees in the use of the software at a location acceptable to the Engineer. It is recommended that the Contractor also send at least three (3) employees to the same training session to facilitate development of similar knowledge and skills in the use of the software.

**5-1.5 Schedule Submittals, Network Diagrams and Reports.**
The Contractor shall:

A. Submit the Baseline Schedule within twenty (20) Working Days after the approval of the Contract. Review 5-1.6 for more details on the Baseline Schedule requirements.
B. Contractor shall incorporate any revisions deemed necessary by the City after the City's review of the Baseline Schedule.
C. Once the City approves the Baseline Schedule, the Contractor shall submit two (2) color plots on "E" size sheets (approximately 34" x 44") of each required schedule, four (4) copies of the schedule in 11" x 17" format. A computer copy of the schedule data in the native file format

should also be presented.

D. Submit the Monthly Updated Schedules and reports along with the computer copy of the schedule file, on or within the first working day of each month. The Monthly Updated Schedule shall incorporate the Project's actual progress (or as-built information) as of the data date indicated on the update into the Baseline Schedule or the latest monthly update as appropriate.

E. Submit a 3-Week Look-Ahead Schedule weekly and at every progress meeting during construction.

F. Submit Final As-Built Schedule upon completion of the entire Project.

**5-1.6 Baseline Schedule.** The Contractor shall submit to the Engineer a baseline schedule within ten (10) days after the date of the City's execution of the Contract. The Contractor shall allow three (3) weeks for the Engineer's review after the baseline schedule and all support data are submitted. Beginning the week the baseline schedule is first submitted, the Contractor shall meet with the Engineer weekly to discuss and resolve schedule issues until the baseline schedule is accepted.
The baseline schedule shall include the entire scope of work and shall show how the Contractor plans to complete all work contemplated. The baseline schedule shall clearly identify the activities that define the critical path. Multiple critical paths and near-critical paths shall be kept to a minimum. Not more than 30 percent of the baseline schedule activities shall be critical or near critical, unless otherwise authorized by the Engineer.
The baseline schedule shall not extend beyond the number of Working Days originally provided in the Specifications. The baseline schedule shall have a data date of the first working day of the contract and not include any completed work to date. The baseline schedule shall not attribute negative float or negative lag to any activity.

Each baseline schedule submittal shall include the following:

A. A Baseline Narrative report which must include the following information:

   1. Explanation of the Contractor's general approach to this project and an explanation of what the Contractor considers as key factors to successfully complete the project within the contractual time.

   2. A brief explanation of where the work will begin and the how the work and crews will flow through the project.

   3. Describe how the City's jurisdictional requirements regarding working times and lane closures have been factored in the schedule.

   4. A general explanation of the anticipated workdays per week, number of shifts per day, number of hours per shift, and holidays observed.

   5. A description of problems, risks or issues anticipated.

   6. Typical crew sizes and major equipment to be used in the job.

   7. Long lead items.

B. Hard copy of the schedule in 11" x 17" format.

C. Color plots in "E" sheet (Approximately 34" x 44".)

**5-1.7 Update Schedule.** The Contractor shall submit an update schedule and meet with the Engineer to review contract progress, on or before the first day of each month, beginning one month after the baseline schedule is accepted. The Contractor shall allow two (2) weeks for the Engineer's review after the update schedule and all support data are submitted, except that the review period shall not start until any previous month's required schedule is accepted. Update schedules that are not accepted or rejected within the review period will be considered accepted by the Engineer.

The update schedule shall have a data date of the last date of the reporting period month or other date established by the Engineer. The update schedule shall show the status of work actually completed to date and the work yet to be performed as planned. The following shall be included with each monthly update:

A. The electronic copy of the schedule file in the native file format.

B. Hard copies of the schedule in 11" x 17" format and color plots in "E" sheet size.

C. A critical path report, showing only the longest path in the project.

D. A list and detailed description of all changes made to the schedule.

E. A narrative report. The narrative report shall be organized in the following sequence with all applicable documents included:

   1. Contractor's transmittal letter.
   2. Work completed during the period.
   3. Identification of unusual conditions or restrictions regarding labor, equipment or material; including multiple shifts, 6-day work weeks, specified overtime or work at times other than days or hours.
   4. Description of the critical path method.
   5. Changes to the critical path and scheduled completion date since the last schedule submittal.
   6. Description of the problem areas.
   7. Current and anticipated delays:
      a. Cause of Delay.
      b. Impacts of delay on other activities, milestones and completion dates.
      c. Corrective action and schedule adjustments to correct the delay.
   8. Pending Items and status thereof:
      a. Permits
      b. Change Orders
      c. Time adjustments
      d. Non-compliance notices
   9. Reasons for an early or late schedule completion date in comparison to the contract completion date.

**5-1.8 Look-Ahead Schedule.** The Contractor shall prepare and issue a 3-Week Look Ahead schedule to provide a more detailed day-to-day plan of upcoming work identified on the Baseline/Monthly Update. Each task in the Look Ahead Schedule shall be referenced back to a relevant Activity ID on the Master Schedule (Either the Baseline or the latest Monthly Update). Activities shall not exceed five (5) Working Days in duration and have sufficient level of detail to assign crews, tools and equipment required to complete the work. The Contractor shall update this schedule weekly.

**5-1.9 Time Impact Analysis (TIA).** The Contractor shall submit a written TIA to the Engineer with each request for adjustment of contract time, or when the Contractor or Engineer consider that an approved or anticipated change may impact the critical path or contract progress. The Contractor shall submit the TIA for review within ten (10) Working Days after the date of the alleged delay impact to the schedule or within ten (10) Working Days after receiving a written request for TIA from the Engineer. Delays of any

non-critical Work shall not be the basis for an extension of Contract time until the delays consume the float associated with that non-critical work activity and cause the work activity to become critical The City will not grant time extensions unless substantiated by the CPM Schedule, and then not until the project float becomes zero. If the Contractor fails to submit a TIA within the aforementioned time specified, then the City shall deem the Contractor to have agreed that there is no time impact and that the Contractor has irrevocably waived its rights to any additional Contract time.

For each TIA the Contractor shall provide information justifying the request and stating the extent of the adjustment requested for each specific change or alleged delay. Each TIA shall be in a form and content suitable to the Engineer and include the following:

A. The TIA shall illustrate the impacts of each change or delay on the current schedule completion date or internal milestones, as appropriate.

B. The TIA shall include a written narrative. The narrative shall detail the proposed methodology for creating the Fragnet, include a chronology of events leading to the delay, and an explanation of how the delay impacted the critical path.

C. The analysis shall use the accepted schedule that has a data date closest to and prior to the event. If the Engineer determines that the accepted schedule used does not appropriately represent the conditions prior to the event, the accepted schedule shall be updated to the day before the event being analyzed.

D. The TIA shall include an impact schedule developed from incorporating the event into the accepted schedule by adding or deleting activities, or by changing durations or logic of existing activities. If the impact schedule shows that incorporating the event modifies the critical path and completion date of the accepted schedule, the difference between schedule completion dates of the two schedules shall be equal to the adjustment of Contract time. The Engineer may construct and utilize an appropriate project schedule or other recognized method to determine adjustments in Contract time until the Contractor provides the TIA.

The Contractor shall allow the Engineer 2 weeks after receipt to approve or reject the submitted TIA. If the TIA is accepted, the contract completion time shall be adjusted accordingly. All approved TIA schedule changes shall be shown on the next update schedule.

If the TIA submitted by the Contractor is rejected by the Engineer, the Contractor shall meet with the Engineer to discuss and resolve issues related to the TIA. If agreement is not reached, the Contractor will be allowed 15 days from the meeting with the Engineer to give notice in conformance with the provisions in Section 3. The Contractor shall only show actual as-built work, not unapproved changes related to the TIA, in subsequent update in schedules. If agreement is reached at a later date, approved schedule changes shall be shown on the next update schedule.

**5-1.10 Final Update Schedule.** The Contractor shall submit a final update, as-built schedule with actual start and finish dates for the activities, within thirty (30) Calendar Days after completion of the Work. The Contractor shall provide a written certificate with this submittal signed by the Contractor's project manager and an officer of the company stating, **"To my knowledge and belief, the enclosed final update schedule reflects the actual start and finish dates of the actual activities for the project contained herein."** An officer of the company may delegate in writing the authority to sign the certificate to a responsible manager.

**5-1.11 Retention.** The City will retain an amount equal to 25 percent of the estimated value of the Work performed during each estimate period in which the Contractor fails to submit an acceptable schedule conforming to the requirements of these Specifications as determined by the Engineer. Schedule retentions will be released for payment on the next monthly estimate for partial payment following the date that acceptable schedules are submitted to the Engineer or as otherwise specified herein. Upon completion of all contract work and submittal of the final update schedule and certification, any

remaining retained funds associated with this section, “Progress Schedule (Critical Path Method),” will be released for payment. Retentions held in conformance with this section shall be in addition to other retentions provided for in the contract. No interest will be due the Contractor on retention amounts.

**5-1.12 Payment.** Payment for Construction Schedule (critical path method) shall be at the contract unit price per Lump Sum and shall include full compensation for furnishing all labor, materials, equipment, and incidentals, including computer software, and for doing all the work involved in preparing, furnishing, and updating schedules, and instructing and assisting the Engineer in the use of computer software, as specified in the Specifications, and as directed by the Engineer.

Payment for the construction schedule (critical path method) contract item will be made progressively as follows:

A. A total of 25 percent of the item amount will be paid upon achieving all of the following:
    1. Completion of 5 percent of all contract item work.
    2. Software training for City staff.
    3. Acceptance of all schedules and any time impact analyses required at the time 5 percent of all contract item work is complete.
B. A total of 50 percent of the item amount will be paid upon completion of 25 percent of all contract item work and acceptance of all schedules and time impact analyses required at the time 25 percent of all contract item work is complete.
C. A total of 75 percent of the item amount will be paid upon completion of 50 percent of all contract item work and acceptance of all schedules and time impact analyses required at the time 50 percent of all contract item work is complete.
D. A total of 100 percent of the item amount will be paid upon completion of all percent of all contract item work and acceptance of all schedules and time impact analyses required at the time all percent of all contract item work is complete, and submittal of the certified final update schedule.

If the Contractor fails to complete any of the work or provide any of the schedules required by this section, the Engineer shall make an adjustment in the compensation in conformance with the provisions in Article 2 “Changes of Work,” of the General Conditions for the work not performed. Adjustments in compensation for schedules will not be made for any increased or decreased work ordered by the Engineer in furnishing schedules.

Should the Contractor fail to meet the requirements under 5-1 of these Specifications, the Engineer reserves the right to withhold payment for work being performed. Furthermore, if after notice is given to the Contractor to perform work to meet these requirements, and the Contractor refuses or for any reason fails to perform sufficiently to meet these schedules, City may withhold or deny payment for work being performed.

**5-2 PROSECUTION OF THE WORK.** To minimize public inconvenience and possible hazard and to restore street and other work areas to their original condition and state of usefulness as soon as practicable, the Contractor shall diligently prosecute the Work to completion. If the Engineer determines that the Contractor is failing to prosecute the Work to the proper extent, the Contractor shall, upon orders from the Engineer, immediately take steps to remedy the situation. All costs of prosecuting the Work as specified herein shall be included in the Contract Price. Should the Contractor fail to take the necessary steps to fully accomplish said purposes, after orders of the Engineer, the Engineer may suspend the Work in whole or part, until the Contractor takes said steps. If Work is suspended through no fault of the City, all expenses and losses incurred by the Contractor during such suspensions shall be borne by the Contractor. If the Contractor fails to properly provide for public safety, traffic, and

protection of the Work during periods of suspension, the City may elect to do so, and deduct the cost thereof from monies due the Contractor. Such actions will not relieve the Contractor from liability.

**5-2.1 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 Contract Documents..

In accordance with Government Code § 53069.85, Contractor agrees to forfeit and pay to the City 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 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 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 City through its designated representative. If the material is indeed “hazardous waste” pursuant to Health and Safety Code § 25117, the City 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 Article 2. To the maximum extent permitted by law, the City 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 City, or acts of another contractor in the performance of a contract with the City, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather). Any such delays, except for acts of the City, 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 five (5) Calendar Days from the beginning of any such delay, notify the Engineer in writing of the cause of delay, whereupon the Engineer 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 Engineer’s findings of facts thereon shall be final and conclusive.

**5-2.2 Order of Work Requirements.** When required by the Specifications 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;

1. Concession Stand
2. Dugouts
3. Community Center

**5-3 SUSPENSION OF THE WORK.**

**5-3.1 General.** 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 City, for City'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 reminder of the project.

Such suspension shall be without liability to the Contractor on the part of the City except as otherwise specified in 5-6.3. For purposes of 5-6.3, 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 City is responsible.

In the event that a suspension of Work is ordered as provided herein, 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 the public during the period of that suspension as provided in 6-9, and as specified in the Specifications. In the event that the Contractor fails to perform the work above specified, the City 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 section, 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 5-7.2.

The suspension of Work shall not relieve the Contractor of the responsibilities as set forth in the Contract Documents.

**5-3.2 Archaeological and Paleontological Discoveries.** If discovery is made of items of archaeological or paleontological interest, the Contractor shall immediately cease excavation in the area of discovery and shall not continue until ordered by the Engineer. When resumed, excavation operations within the area of discovery shall be as directed by the Engineer.

Discoveries which may be encountered may include, but not be limited to, dwelling sites, stone implements or other artifacts, animal bones, human bones, and fossils.

The Contractor shall be 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, prior to the acceptance of the work, the contractor:

A. Becomes insolvent, assigns its assets for the benefit of its creditors, is unable to pay its debts as they become due, or is otherwise financially unable to complete the Work'
B. Abandons the work by failing to report to the work site and diligently prosecute the work to completion,
C. Disregards written instructions from the Engineer or materially violates provisions of the contract
D. Documents,
E. Fails to prosecute the Work according to the schedule approved by the Engineer,
F. Disregards laws or regulations of any public body having jurisdiction, or commits continuous or repeated violations of regulatory or statutory safety requirements, then the City will consider the contractor in default of the contract.

Notices and other written communications regarding default between the contractor, the City, and the surety shall be transmitted in accordance with 1-13.

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 5-5.

**5-4.2 Notice to Cure.** The City will issue a written notice to cure the default to the contractor and its surety. The contractor shall .commence satisfactory corrective actions within 5 Working Days after receipt.

**5-4.3 Notice of Termination for Default.** If the contractor fails to commence satisfactory corrective action within 5 Working Days after receipt of the notice to cure, or to diligently continue satisfactory and timely correction of the default thereafter, then the City will find the Contractor in default of the Contract and upon such finding the City:

A. Will terminate the contractor's right to perform under the contract by issuing a written notice of termination for default to the Contractor and its Surety.
B. May use any materials, equipment, tools or other facilities furnished by the Contractor to secure and maintain the Work site, and
C. May furnish labor, equipment, and materials the City deems necessary to secure and maintain the Work site.

The provisions of this subsection shall be in addition to all other legal rights and remedies available to the City.

**5-4.4 Responsibilities of the Surety**. Upon receipt of the written notice of termination for default, the Surety shall immediately assume all rights, obligations and liabilities of the Contractor 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 shall notify the City that it is assuming all rights, obligations and liabilities of the Contractor under the Contract and all money that is due, or would become due, to the Contractor shall be payable to the Surety as the Work progresses, subject to the terms of the Contact.

Within 15 Working Days of receipt of the written notice of termination for default, the Surety shall submit to 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 fails to submit a satisfactory plan, or if the Surety fails to maintain progress according to the plan accepted by the City, the City may, upon 48 hours written notice exclude the Surety from the premises, take possession of all material and equipment, and complete the Work in any way the City deems to be expedient. The cost of completing the Work by the City shall be charged against the Surety and may be deducted from any monies due, or which would become due, the Surety. If the amounts due under the Contract are insufficient for completion, the Surety shall pay to 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 Surety will be paid for completion of the Work in accordance with 8-3 less the value of damages caused to the City by acts of the Contractor.

**5-5 TERMINATION OF THE CONTRACT FOR CONVENIENCE.** The City 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 City.

If the City 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 3-1.2, 6-15 of the Specifications 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 City with good title to all materials purchased by the City hereunder, including materials for which partial payment has been made as provided in 8-3.2 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 City 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 City 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 City 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 City.

   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 City terminates the Contract for City'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 City 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 5-5, shall be open to inspection or audit by representatives of the City 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 City, the Engineer may make payments on the basis of interim estimates pending issuance of the final estimate in conformance with the provisions in 8-3.2 and 8-4, 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 5-5 SHALL BE PHYSICALLY INCLUDED IN ALL SUBCONTRACTS.**

## 5-6 DELAYS AND EXTENSIONS OF TIME.

**5-6.1 General.** If delays are caused by unforeseen events beyond the control of the Contractor, such delays will entitle the Contractor to an extension of the Contract time as provided herein, but the Contractor will not be entitled to damages or additional payment due to such delays, except as otherwise specified in 5-6.3. Such unforeseen events may include: war, government regulations, labor disputes, strikes, fires, floods, adverse weather or elements necessitating cessation of work, inability to obtain materials, labor or equipment, required extra work, or other specific events as may be further described in the Specifications.

No extension of time will be granted for a delay caused by the Contractor's inability to obtain materials unless the Contractor furnishes to the Engineer documentary proof. The proof must be provided in a timely manner in accordance with the sequence of the Contractor's operations and the approved construction schedule.

If delays beyond the Contractor's control are caused by events other than those mentioned above, the Engineer may deem an extension of time to be in the best interests of the City. The Contractor will not be entitled to damages or additional payment due to such delays, except as otherwise specified in 5-6.3.

If delays beyond the Contractor's control are caused solely by action or inaction by the City, such delays will entitle the Contractor to an extension of time per 5-6.2.

**5-6.2 Extension of Time.** The City 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 City before the expiration of the original time fixed in the Contract or as previously extended.

An extension of time may be granted by the City 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.

**5-6.3 Payment for Delays.** Pursuant to Section 7102 of the Public Contract Code, the Contractor will be compensated for damages incurred due to delays for which the City is responsible. Such actual costs will be determined by the Engineer. The City will not be liable for damages which the Contractor could have avoided by any reasonable means, such as judicious handling of forces, equipment, or plant. The determination of what damages the Contractor could have avoided will be made by the Engineer.

**5-6.4 Written Notice and Report.** If the Contractor desires payment for a delay as specified in 5-6.3 or an extension of time, it shall file with the Engineer a written request and report of cause within 15 Calendar Days after the beginning of the delay. The request for payment or extension must be made at least 15 Calendar Days before the specified completion date. Failure by the Contractor to file these items within the times specified will be considered grounds for refusal by the City to consider such request.

**5-7 TIME OF COMPLETION.**

**5-7.1 General.** The Contractor shall complete the Work within the time specified in the Contract or the Specifications. The Contractor shall complete each portion of the Work within the time specified as in the Contract or the Specifications for such portion. Unless otherwise specified in the Contract or the Specifications, the time of completion of the Contract shall be expressed in working days.

**5-7.2 Working Day.** A working day is any day within the period between the date of the start of the Contract time as specified in 5-1 and the date of field acceptance of the Work by the Engineer, other than:

A. Saturday,
B. Sunday,
C. Any day designated as a holiday by the City,
D. Any other day designated as a holiday in a Master Labor Agreement entered into by the Contractor or on behalf of the Contractor as an eligible member of a contractor association,
E. Any day the Contractor is prevented from working at the beginning of the workday for cause as specified in 5-6.1, or

F. Any day the Contractor is prevented from working during the first 5 hours with at least 60 percent of the normal work force for cause 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. These determinations will be discussed and the Contractor will be furnished 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 working days of Contract time remaining. If the Contractor does not agree with the statement, it shall file a written protest within 15 days after receipt, setting forth the facts of the protest. Otherwise, the statement will be deemed to have been accepted.

## 5-8 COMPLETION, ACCEPTANCE, AND WARRANTY.

**5-8.1 Completion.** 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 5-9.

Should City Representative's inspection find Work incomplete, City 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 City's option, result in reinspection(s) of the work to identify additional deficiencies, if any. City's costs associated with reinspection(s) are subject to provisions of 5-8.2.

When the City confirms Work is complete and, closeout submittals, as referred to in 5-8.3 have been provided, City Representative will notify Contractor of date of completion on the Weekly Statement of Working Days.

**5-8.2 Acceptance.** Acceptance will occur after all of the requirements contained in the Contract Documents have been fulfilled. If, in the Engineer's judgment, the Contractor has fully performed the contract, the Engineer will recommend the Contractor's performance of the Contract be accepted.

**5-8.3 Warranty.** The Work shall be warranted by the Contractor against defective materials and workmanship for a period of 1 year. The warranty period shall start on the-date the Work was completed as determined by the Engineer.

The warranty period for ,specific items covered under manufacturers' or suppliers, warranties shall commence on the date they are placed into service at the direction of or as approved by the Engineer in writing.

Warranties, express or implied, from subcontractors, manufacturers, or suppliers, of any tier, for the materials furnished and work performed shall be assigned, in writing, to the City, and such warranties shall be delivered to the Engineer prior to acceptance of the Contractor's performance of the Contract.

The contractor shall replace or repair defective materials and workmanship in a manner satisfactory to the Engineer, after notice to do so from the Engineer, and within the time specified in the notice. If the Contractor fails to make such replacement or repairs within the time specified in the notice, the City

may perform the replacement or repairs at the Contractor's expense. If the Contractor fails to reimburse the City for the actual costs, the Contractor's Surety shall be liable for the cost thereof.

**5-8.4 Reinspections.** Should status of completion of Work require reinspection(s) by City due to failure of the Contractor to make corrections on initial inspection, City 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 City will not be subject to provisions of this Section.

**5-8.5 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

**5-9 LIQUIDATED DAMAGES.** Liquidated damages shall be as specified in the Contract.

**5-10 USE OF IMPROVEMENT DURING CONSTRUCTION.** The City reserves the right to take over and utilize all or part of any completed facility or appurtenance. The contractor will be notified in writing in advance of such action. Such action by the City will relieve the Contractor of responsibility for injury or damage to said completed portions of the improvement resulting from use by the public or from the action of the elements or from any other cause, except Contractor operations or negligence. The Contractor will not be required to re-clean such portions of the improvement before field acceptance, except for cleanup made necessary by its operations. Nothing in this subsection shall be construed as relieving the contractor from full responsibility for correcting defective work or materials.

In the event the City exercises its right to place into service and utilize all or part of any completed facility or appurtenance, the City will assume the responsibility and liability for injury to persons or property resulting from the utilization of the facility or appurtenance so placed into service, except for any such injury to persons or property caused by any willful or negligent act or omission by the contractor, subcontractor, their officers, employees, or agents.

## ARTICLE 6 – RESPONSIBILITIES OF THE CONTRACTOR

### 6-1 THE CONTRACTOR'S EQUIPMENT AND FACILITIES.

**6-1.1 General.** The Contractor shall furnish and maintain in good condition all equipment and facilities as required for the proper execution and inspection of the Work Contractor shall provide and maintain enclosed toilets for the use of employees engaged in the Work.

These accommodations shall be maintained in a neat and sanitary condition, and regularly pumped out.

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.

**6-1.1.1 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 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

**6-1.2 Temporary Utility Services.** 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 City, patented specialty devices may be used, when in compliance with applicable codes and service company requirements.

**6.2 LABOR.**

**6-2.1 General.** The Contractor, its agents, and employees shall be bound by and comply with applicable provisions of the Labor Code and Federal, State, and local laws related to labor.

Any worker found by the Engineer to be incompetent, intemperate, troublesome, disorderly, or otherwise objectionable, or who fails to perform the Work properly and acceptably, shall be immediately removed from the Work site by the Contractor and shall not be reemployed in the performance of the Work.

**6-2.2 Prevailing Wages.** Pursuant to Section 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 (DIR) are on file at the office of the Engineer. The Contractor shall post a copy of these rates at the Work site. Pursuant to Section 1774 of the Labor Code, the Contractor and any Subcontractors shall pay not less than the specified prevailing rates of wages to workers employed on the Contract. If the Contract is Federally-funded, the Contractor and any Subcontractors shall not pay less than the higher of these rates or the rates determined by the United States Department of Labor. Pursuant to Section 1775 of the Labor Code, the Contractor and any Subcontractors, shall, as a penalty to the City, forfeit the prescribed amounts per calendar day, or portion thereof for each worker paid less than the prevailing wage rates.

**6-2.3 Payroll Records.** Pursuant to §1776 of the Labor Code the Contractor shall keep certified payroll records. 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 for the preceding until Notice of Completion is filed and recorded.

**6-2.4 Hours of Labor.** Pursuant to §1810 of the Labor Code, 8 hours of labor shall constitute a legal day's work. Pursuant to Section 1813 of the Labor Code, the Contractor and any Subcontractors, shall, as a penalty to the City, forfeit the prescribed amount per calendar day for each worker required or

permitted to work more than 8 hours in any one (1) Calendar Day and 40 hours in any one (1) Calendar Week without being compensated in accordance with §1815.

## 6-3 INSURANCE.

**6-3.1 General.** The Contractor shall provide and maintain insurance naming the City as an insured or additional insured with the Contractor regardless of any inconsistent statement in the policy or any subsequent endorsement whether liability is attributable to the Contractor or the City. The insurance provisions shall not be construed to limit the Contractor's indemnity obligations contained in the Contract. Except as otherwise specified in 5-10, the Contractor shall save, keep, and hold harmless the City its officers, employees, and agents from all damages, costs or expenses in law or equity that at any time arise to a person or property by reason of or in the course performing the work, or which may be caused by a negligent act or omission by the contractor, the contractor's employees, or a subcontractor. The City will not be liable for any accident, loss, or damage to the work prior to completion, except as otherwise specified in 5-10.

With the exception of workers' compensation insurance, the policies furnished by the Contractor shall be issued by an insurance company authorized by the Insurance Commissioner to transact business in the State of California. The insurance company shall have a policy holder rating of "A" or higher and a financial class VIII or higher as established by A.M. Best, or higher rating established by Moody's or Standard & Poor's.

The contractor shall notify the City in accordance with 1-13 within 5 Days of the date of being notified by its insurance carrier of any changes to or cancellation of the policy.

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 City 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 City 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.

The cost of the defense of any claims against the City shall not erode or take away from the specified limits of liability.

No separate payment will be made for insurance. Payment shall be considered as included in the Contract Price.

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 1-3 of the Specifications, 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 6-3.

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 6-3.

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**,** 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 City, the Engineer, the City Representative 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, 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 City, whether or not there is concurrent active or passive negligence on the part of City and/or City Personnel, but excluding such claims or liabilities arising from the active negligence or willful misconduct of City or City 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 City or any City Personnel for any such claims or liabilities.

C. In the event City and/or any City 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 City any and all costs and expenses incurred by City or City 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 City may be retained by the City 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 City prior to the execution of this Contract by City. Prior to commencing work, the Contractor will provide the City, in accordance with 6-3, written confirmation of the deductible for each insurance coverage required by this contract or in the case of no deductible.

**6-3.2 General Liability Insurance.** The policy shall insure the City, its officers, employees, and agents while acting within the scope of their duties on the Work, against any claims arising out of or in connection with the Work, except as otherwise specified in 5-10. This policy shall provide coverage for on-going and completed operations. The certificate of insurance submitted to the City shall state that the Contractor's 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, 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 6-3 of the General Conditions for a period of at least three (3) years from the time that all Work under this Contract is completed.**

The policy or policies shall 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, the Contractor shall secure, pay for, and maintain in full force for the duration of the Contract, workers' compensation insurance. The insurance company shall have a policy rating equal to or better than that of the California State Compensation Insurance Fund (SCIF). The City, its officers, employees and agents, shall not be held responsible for any claims in law or equity occasioned by failure of the Contractor to comply with this requirement.

Pursuant to §1860 and §1861 of the Labor Code, the contractor shall submit the following certification to the Engineer prior to execution of the contract by the City:

> "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 such provisions before commencing the performance of the work of this contract."

The policy or policies shall be endorsed to provide that the insurer will waive 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: 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 City in writing prior to City's execution of this Contract. City and City 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.

**6-3.4 Auto Liability Insurance**. The Contractor shall provide certificate of insurance to the City 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.** 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 One Million Dollars ($1,000,000) each loss and Two Million Dollars ($2,000,000) 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.

**6-3.6 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:

A waiver of subrogation stating that the insurer waives all rights of subrogation against the indemnified parties.

**6-3.7 Professional Liability Insurance.** At its own expense, the successful Contractor will be required to obtain, pay for, and maintain, for the duration of the Agreement and for a minimum of five (5) years thereafter, a Professional Liability Insurance Policy (that includes errors and omissions, and professional malpractice) with a minimum limit of Two Million Dollars ($2,000,000) per claim. The policy shall provide coverage for any loss arising out of or caused by the Contractors performance of the Agreement.

**6-3.8 Self-Insurance.** Self-insurance will be subject to the City'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 coverages 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 City of evidence of the Contractor's 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 would be afforded by first-dollar insurance.

**6-4 PERMITS AND LICENSES.** Except as otherwise provided in the Specifications, 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 City 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 City 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 City 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.

**6-5 THE CONTRACTOR'S REPRESENTATIVE.** Before starting the Work, the Contractor shall designate in writing a representative who shall have complete authority to act for it. An alternative representative may be designated as well. 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 Engineer shall be made for any emergency work, which may be required. Any order or communication given to this representative shall be deemed delivered to the Contractor. A joint venture shall designate only one representative and alternate. In the absence of the Contractor or its representative, instructions or directions may be given by the Engineer to the superintendent or person in charge of the specific work to which the order applies. Such order shall be complied with promptly and referred to the Contractor or its representative. 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 City 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 City 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.

In order to communicate with the City, the Contractor's representative, superintendent, or person in charge of specific work shall be able to speak, read, and write the English language.

**6-6 COOPERATION AND COLLATERAL WORK.** The Contractor shall be responsible for ascertaining the nature and extent of any simultaneous, collateral, and essential work by others. The City, its

workers and contractors and others, shall have the right to operate within or adjacent to the Work site during the performance of such work.

The City, the Contractor, and each of such workers, contractors and others, shall coordinate their operations and cooperate to minimize interference.

The Contractor shall include in its Bid all costs involved as a result of coordinating its work with others. The Contractor will not be entitled to additional compensation from the City for damages resulting from such simultaneous, collateral, and essential work. If necessary to avoid or minimize such damage or delay, the Contractor shall redeploy its work force to other parts of the Work.

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 City 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 City, the Engineer, the City 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 City, the Engineer, the City Representative, or their consultants on account of any damage alleged to have been so sustained, the City will notify the Contractor. To the maximum extent permitted by law, all obligations of the Contractor stated in 6-3.2 shall apply in the case of the assertion of any such claims or liabilities against the City, the Engineer, the City Representative and each of their officers, employees, and agents against any such claim.

**6-6.1 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.

The Contractor shall coordinate his operations with the operations of other contractors during stage construction and any other operation that may affect or have influence on 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, and until acceptance per 5-8, the Contractor shall keep the Work site clean and free from rubbish and debris. Rubbish and debris collected on the Work site shall only be stored in roll-off, enclosed containers prior to disposal. Stockpiles of such will not be allowed.

The Contractor shall provide a self-loading motorized street sweeper equipped with a functional water spray system. The sweeper shall clean all paved areas within the Work site and all paved haul routes at least once each working day.

The Contractor shall ensure there is no spillage along haul routes. Any such spillage shall be removed immediately and the area cleaned.

Should the Contractor fail to keep the Work site free from rubbish and debris, the Engineer may suspend the Work per 5-3 until the condition is corrected.

Section 6-7 includes specifications for performing work site maintenance; including spill prevention and control, material management, waste management, water pollution control and non-stormwater management.

Contractors 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 non-stormwater at the job site before they come in contact with storm drain systems and receiving waters.

Linear sediment barriers must comply with 6-7.6.2 of the Specifications.

**6-7.1.1 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, 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 City 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 City 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 City. 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 therefor.

**6-7.1.2 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.

**6-7.2 Air Pollution Control.** The Contractor shall not discharge smoke, dust, equipment exhaust, or any other air contaminants into the atmosphere in such quantity as will violate any Federal, State, or local regulations. The Contractor shall also abate dust nuisance by cleaning, sweeping and spraying with water, or other means as necessary. The use of water shall conform to 6-7.6.

**6-7.3 Noise Control.** Noise generated from the Contractor’s operations shall be controlled 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.** Materials and equipment shall be removed from the Work site as soon as they are no longer necessary. Before inspection by the Engineer for acceptance, the Work site shall be cleared of equipment, unused materials, and rubbish so as to present a satisfactory clean and neat appearance. Excess excavated material shall be removed from the Work site immediately.

Forms and form lumber shall be removed from the Work site as soon as practicable after stripping.

**6-7.4.2 Storage in Public Streets.** Construction materials and equipment shall not be stored in streets, roads, or highways.

Excavated material, except that which is to be used as backfill in the adjacent trench, shall not be stored in public streets unless otherwise specified or approved by the Engineer. Immediately after placing backfill, all excess material shall be removed from the Work site.

**6-7.4.3 Material Management.**

**6-7.4.3.1 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

**6-7.4.3.2 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 6-7 of the General

Conditions.

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.

**6-7.4.3.3 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 Portland cement concrete rubble, hot mixed asphalt, 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 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.

**6-7.5 Sanitary Sewers.**

**6-7.5.1 General.** The flow of sewage shall not be interrupted. Should the Contractor disrupt the operation of existing sanitary sewer facilities, or should disruption be necessary for performance of the work, the Contractor shall bypass the sewage flow around the Work. Sewage shall be conveyed in

closed conduits and disposed of in a sanitary sewer system. Sewage shall not be permitted to flow in trenches nor be covered by backfill.

Whenever sewage bypass and pumping is required by the Plans or Specifications, or the Contractor so elects to perform, the Contractor shall submit per 1-6 a Working Drawing conforming to 6-7.5.2 detailing its proposed plan of sewage bypass and pumping.

**6-7.5.2 Sewage Bypass and Pumping Plan.** The plan shall indicate the locations and capacities of all pumps, sumps, suction and discharge lines. Equipment and piping shall be sized to handle the peak flow of the section of sewer line to be bypassed and pumped. Equipment and piping shall conform to 6-9 and the plans. Bypass piping, when crossing areas subject to traffic loads, shall be constructed in trenches with adequate cover and otherwise protected from damage due to traffic. Lay-flat hose or aluminum piping with an adequate casing and/or traffic plates may be allowed if so approved by the Engineer. Bypass pump suction and discharge lines that extend into manholes shall be rigid hose or hard pipe. Lay-flat hose will not be allowed to extend into manholes. The Contractor shall provide a backup bypass pumping system in case of malfunction. The backup bypass system shall provide 100 percent standby capability, and be in place and ready for immediate use. Each standby pump shall be a complete unit with its own suction and discharge piping. In addition to the backup system, the Contractor shall furnish and operate vacuum trucks when required by the Plans or Specifications.

**6-7.5.3 Spill Prevention and Emergency Response Plan**. The Contractor shall prepare and submit per 1-6 spill prevention and emergency response plan. The plan shall address implementation of measures to prevent sewage spills, procedures for spill control and containment, notifications, emergency response, cleanup, and spill and damage reporting.

The plan shall account for all storm drain systems and water courses within the vicinity of the Work which could be affected by a sewage spill. Catch basins that could receive spilled sewage shall be identified. Unless otherwise specified, these catch basins shall be sealed prior to operating the bypass and pumping system. The Contractor shall remove all material used to seal the catch basins when the bypass and pumping system operations are complete.

The Contractor shall be fully responsible for containing any sewage spillage, preventing any sewage from reaching a watercourse, recovery and legal disposal of any spilled sewage, any fines or penalties associated with the sewage spill imposed upon by the City and/or the Contractor by jurisdictional regulatory agencies, and any other expenses or liabilities related to the sewage spill.

**6-7.5.3.1 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 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.

**6-7.5.3.2 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

**6-7.5.3.3 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.

**6-7.5.3.4 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 City 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.

**6-7.5.4 Waste Management.**

**6-7.5.4.1 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 sludge 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.

**6-7.5.4.2 Concrete Waste.** The Contractor shall use practices to prevent the discharge of asphalt concrete, Portland cement concrete, and hot mixed asphalt waste into storm drain systems and receiving waters.

The Contractor shall collect and dispose of asphalt concrete, Portland cement concrete, and hot mixed asphalt 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.

**6-7.5.4.3 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 City provisions if using an on-site disposal system.

**6-7.5.4.4 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. Dredging, including liquid waste from cleaning drainage systems

D. Liquid waste running off a surface, including wash or rinse water

E. Other non-stormwater 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 6-7 of the Specifications. 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 Regulations § 2511(g) may be dried by evaporation in a leak-proof container. The Contractor shall dispose of the remaining solid waste in accordance with 6-7 of the Specifications.

**6-7.5.5 Non-stormwater Management.**

**6-7.5.5.1 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.

**6-7.5.5.2 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

**6-7.5.5.3 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 6-9.2.4. 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, hot mixed asphalt, or Portland cement concrete
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.

**6-7.5.5.4 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.

**6-7.5.5.5 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 6-7 of the Specifications.

**6-7.5.5.6 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 Portland cement concrete grooving and grinding or saw cutting 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.

**6-7.5.5.7 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.

**6-7.5.5.8 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.

**6-7.5.5.9 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.

**6-7.5.5.10 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 require 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.

**6-7.5.5.11 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 non-stormwater 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.

**6-7.6 Water Pollution Control.**

**6-7.6.1 General.** The Contractor shall conform to all applicable local, state and Federal regulations and laws pertaining to water pollution control. The Contractor shall conduct and schedule its operations, and follow and implement best management practices in such a manner as to prevent water pollution. The Contractor shall also conform to the following requirements:

A. Sediments shall not be discharged to a storm drain system or receiving waters.
B. Sediments generated on the Work site shall be contained on the Work site using appropriate BMPs.
C. No construction-related materials, waste, spill, or residue shall be discharged from the Work site to streets, drainage facilities, receiving waters, or adjacent property by wind or runoff.
D. Non-storm water runoff from equipment, vehicle washing, or any other activity shall be contained within the Work site using appropriate BMPs.
E. Erosion shall be prevented. Erosion susceptible slopes shall be covered, planted or otherwise protected in a way that prevents discharge from the Work site.

**6-7.6.2 Best Management Practices (BMPs).** The Contractor shall implement and maintain such BMPs as are relevant to the Work, and as are specifically required by the Plans or Specifications.

The Contractor shall be responsible throughout the duration of the Contract for installing, constructing, inspecting, maintaining, removing and disposing of BMPs for wind erosion control, tracking control, erosion and sediment control, non-storm water control, and waste management and materials pollution control. Unless otherwise directed by the Engineer, the Contractor shall be responsible for BMP implementation and maintenance throughout any temporary suspension of the Work.

**6-7.6.3 Storm Water Pollution Prevention Plan (SWPPP).** When so specified in the Special Conditions, or if so required by a jurisdictional regulatory agency, the Contractor shall prepare and submit per 1-6 a storm water pollution prevention plan. The SWPPP shall conform to the requirements

specified in the Specifications and those of the jurisdictional regulatory agency. The Notice of Intent will be filed by the City.

**6-7.6.4 Payment.** Unless otherwise specified, payment for implementation and maintenance of BMPs shall be considered as included in the various items of work and no additional compensation will be allowed therefor.

**6-8 PROTECTION AND RESTORATION OF EXISTING IMPROVEMENTS**. Material shown on the Plans or designated in the Specifications 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.

The Contractor shall be responsible for the protection of public and private property adjacent to the Work and shall exercise due caution to avoid damage to such property.

The Contractor shall repair or replace all existing improvements within the right-of-way which are not designated for removal (e.g., curbs, sidewalks, driveways, fences, walls, signs, utility installations, pavement, structures, etc.) which are damaged or removed as a result of its operations. When a portion of a sprinkler system within the right-of-way must be removed, the remaining lines shall be capped. Repairs and replacements shall be at least equal to existing improvements and shall match them in finish and dimension.

Trees, lawns, and shrubbery that are not to be removed shall be protected from damage or injury. If damaged or removed due to Contractor's operations, they shall be restored or replaced in as nearly the original condition and location as is reasonably possible. Lawns shall be reseeded and covered with suitable mulch.

The Contractor shall give reasonable notice to occupants or owners of adjacent property to permit them to salvage or relocate plants, trees, fences, sprinklers, and other improvements, within the right-of-way which are designated for removal and would be destroyed because of the Work.

All costs to the Contractor for protecting, removing, and restoring existing improvements shall be included in the Bid.

**6-8.1 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 including adjacent structures 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 City 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.

**6-8.2 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, curb, and gutter conditions
I. Safety conditions
J. Unusual conditions or equipment
K. Interior and exterior surfaces
L. Condition of equipment (HVAC, Electrical, Fire, etc.)
M. 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 therefor.

**6-9 SAFETY**

**6-9.1 Work Site Safety.**

**6-9.1.1 General.** The Contractor shall provide safety measures as necessary to protect the public and workers within, or in the vicinity of, the Work site. The Contractor shall ensure its operations will not create safety hazards.

The Contractor shall provide safety equipment, material, and assistance to City personnel so that they may properly inspect all phases of the Work.

When asbestos is being removed, the requirements of the CCR Title 8, Div. 1, Chapter 4, Subchapter 4 and Subchapter 7 shall be implemented.

**6-9.1.2 Work Site Safety Official.** The Contractor shall designate in writing a “Project Safety Official” who shall be at the Work site at all times, and who shall be thoroughly familiar with the Contractor's injury and Illness Prevention Program (IIPP) and Code of Safe Practices. The Project

Safety Official shall be available at all times to abate any potential safety hazards and shall have the authority and responsibility to shut down an unsafe operation, if necessary.

Failure by the Contractor to provide the required Work Site Safety Official shall be grounds for the City to direct the cessation of all work activities and operations at no cost to the City until the Contractor is in compliance.

**6-9.1.3 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 City 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 City 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 therefor, duly certified by the City Representative, then said cost and expense will be paid by the City and shall thereafter be deducted from any amounts due, or which may become due to the Contractor. Failure of the City, 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 City.

**6-9.2 Safety Orders.**

**6-9.2.1 General.** The Contractor shall have at the Work site, copies or suitable extracts of Construction Safety Orders, Tunnel Safety Orders, and General Industry Safety Orders issued by the State Division of Industrial Safety.

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 City, the Engineer, the City 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 6-3.2 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 City 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.

**6-9.2.2 Shoring Plan.** Before excavating any trench 5 feet or more in depth, the Contractor shall submit in accordance with 1-6 a detailed Working Drawing (shoring plan) showing the design of the shoring, bracing, sloping, or other provisions used for the workers' protection . If the shoring plan varies from the shoring system standards, the shoring plan shall be prepared by a California registered Structural or Civil Engineer. The shoring plan shall accommodate existing underground utilities. No excavation shall start until the Engineer has accepted the shoring plan and the Contractor has obtained a permit from the State Division of Industrial Safety. A copy of this permit shall be submitted to the Engineer in accordance with 1-6. If the Contractor fails to submit a shoring plan or fails to comply with an accepted shoring plan, the Contractor shall suspend work at the affected location(s). Such suspended work shall not be the basis of a claim for Extra Work and the Contractor shall not receive additional compensation or Contract time.

**6-9.2.3 Payment.** Payment for shoring shall be included in the Bid item provided therefore. Payment for compliance with the provisions of the safety orders and all other laws, ordinances, and regulations shall be included in the various Bid items.

**6-9.2.4 Hazardous Substances.** An SDS as described in CCR, Title 8, Section 5194, shall be maintained at the Work site for all hazardous material used by the Contractor.

Material usage shall be accomplished with strict adherence to California Division of Industrial Safety requirements and all manufacturer warnings and application instructions listed on the MSDS and on the product container label.

The Contractor shall notify the Engineer if a specified product cannot be used under safe conditions.

**6-9.3 Confined Spaces.**

**6-9.3.1 Confined Space Entry Program (CSEP).** The Contractor shall be responsible for implementing, administering and maintaining a CSEP in accordance with CCR, Title 8, § 5156, 5157 and 5158.

Prior to the start of the Work, the Contractor shall prepare and submit a CSEP in accordance with 1-6. The CSEP shall address all potential physical and environmental hazards and contain procedures for safe entry into confined spaces such as the following:

A. Training of 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. Ventilation of the space.
G. Special hazards consideration.
H. Personal protective equipment.
I. Rescue plan provisions.

The submittal shall include the names of the Contractor's personnel, including each Subcontractor's personnel, assigned to the Work that will have CSEP responsibilities, their CSEP training, and their specific assignment and responsibility in carrying out the CSEP.

**6-9.3.2 Permit-Required Confined Spaces.** Entry into permit-required confined spaces as defined in CCR, Title 8, Section 5157 may be required as a part of the Work. Manholes, tanks, vaults, pipelines, excavations, or other enclosed or partially enclosed spaces shall be considered permit-required confined spaces until the pre-entry procedures demonstrate otherwise. The contractor shall implement a permit-required CSEP prior to performing any work in a permit-required confined space. A copy of the permit shall be available at all times for review by the Contractor and the Engineer at the Work site.

**6-9.3.3 payment**. Payment for the CSEP shall be included in the Bid items for which the CSEP is required.

**6-9.4 Security and Protective Devices**.

**6-9.4.1 General**. Security and protective devices shall consist of fencing, steel plates, or other devices as specified to protect open excavations.

**6-9.4.2 Security Fencing.** The Contractor shall completely fence open excavations. Security fencing shall remain in place unless workers are present and construction operations are in progress during which time the Contractor shall provide equivalent security.

**6-9.4.3 Steel plate covers**. The contractor shall provide steel plate covers as necessary to protect from accidental entry into openings, trenches, and excavations.

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 6-9.4.3(A):

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", 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 1-6, “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 City Representative, the City 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 City 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.

**6-10 PATENT FEES AND ROYALTIES.** 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 City, the Engineer, the City 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 6-3.2 shall apply in the case of any such claim, suit or action.

**6-11 ADVERTISING.** The names, addresses and specialties of contractors, subcontractors, architects, or engineers may be displayed on removable signs. The size and location shall be subject to the Engineer's approval.
Commercial advertising matter shall not be attached to or painted on the surfaces of buildings, fences, canopies, or barricades.

**6-12 LAWS TO BE OBSERVED.** 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 City 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 City, the Engineer, the City 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 6-3.2 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.

The Contractor shall comply with all applicable Federal laws, including those set forth in "Federal Requirements" of the Special Conditions.

**6-13 ANTITRUST CLAIMS.** Pursuant to §7103.5 0f 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 section 4 of the Clayton Act (15 U.S.C. Sec 15) or Cartwright Act (Chapter 2 [commencing with Section 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."

**6-13.1 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 City.

**6-13.2 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 City 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 City. 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 City.

**The provisions of this Section 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.**

**6-14 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 City) 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 City Representative, the Contractor shall at his expense properly store materials which have been partially paid for by the City or which have been furnished by the City. Such storage by the Contractor shall be on behalf of the City, the City 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 City.

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 City.

**6-15 PROJECT RECORD DOCUMENTS.**

**6-15.1 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 City Representative. Applications for partial payment will not be approved if the Record Documents are not kept current. The City Representative must so verify prior to submittal of each Application for Payment.

**6-15.2 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.

**6-15.3 Submittals.** At Contract closeout the Contractor shall deliver Record Documents and samples as specified in 6-15.1. 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.

**6-16 AUDIT AND ACCESS TO RECORDS.**

A. The Contractor shall maintain all books, records, documents, and other evidence directly pertinent to the performance of the work under this Contract in accordance with generally accepted accounting principles and practices consistently applied. The Contractor shall also maintain all financial information and data used by the Contractor in the preparation or support of any cost submission, including the Contractor's 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 shall have access upon twenty four hours advanced written notice, at all times during normal business hours, to all such books, records, documents, financial information, and all other evidence for the purpose of inspection, audit, and copying. The Contractor shall at no cost to the City, provide proper facilities for such access, inspection and copying purposes.

B. The Contractor agrees to make the provisions of this Section applicable to this Contract, and all Change Orders, claims or other requests for equitable adjustment affecting the Contract time or price. The Contractor agrees to physically include the provisions of this section in all subcontracts and sub-subcontracts or purchase orders, at any tier, and make this section applicable to all subcontracts, at any tier, in excess of $10,000 and to make the provisions of this Section applicable to all Change Orders, claims, and other requests for equitable adjustment related to project performance.

C. Audits conducted under this Section shall be in accordance with generally accepted auditing standards and established procedures and guidelines of the reviewing or audit agency.

D. The Contractor agrees to the disclosure of all information and reports resulting from access to records under the provisions of this Section, to the City and other affected agencies.

E. Records under the provisions of this Section shall be maintained and made available during the performance of the work under this Contract until three years past final payment, and until final settlement of all disputes, claims, or litigation, whichever occurs later. In addition, those records which relate to any portion of this Contract, to any Change Order, to any dispute, to any litigation, to the settlement of any claim arising out of such performance, or to the cost or items to which an audit exception has been taken, shall be maintained and made available until final payment or final resolution of such dispute, litigation, claim, or exception, whichever occurs later.

F. This right of access Section applies to all financial records and all Change Orders and claims. In addition, this right of access 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. If there is any indication that fraud, gross abuse, or corrupt practices may be involved;
   3. If the Contract is terminated for default or convenience.

G. Access to records is not limited to the required retention periods. The authorized representatives of the City shall have access to records at any reasonable time for as long as the records are maintained

**6-17 DAILY RECORDS.**

A. The Contractor shall prepare and maintain Daily Inspection Records to document the progress of the work on a daily basis. Such daily records shall include a daily accounting of all labor and all equipment on the site for the Contractor and all subcontractors, at any tier. Such daily records will make a clear distinction between work being performed under Change Order, base scope work and/or disputed work.
B. In the event that any labor or equipment is idled, solely as a result of City actions or inactions, the daily records shall record which laborers and equipment were idled and for how long. In the event that specific work activities were stopped, solely as a result of City actions or inactions, and labor and equipment was reassigned to perform work on other activities, the daily records will make a clear record of which activities were stopped and where labor and equipment was redirected to.
C. Such daily records shall be copied and provided to the City Representative at the end of every work day, or the beginning of the following work day.

# ARTICLE 7 – FACILITIES FOR CITY PERSONNEL

**7-1 GENERAL.** Facilities provided for City personnel shall be at suitable locations approved by the Engineer. Such facilities must be in a room, building, or trailer provided for this purpose with acceptable means for locking.

A Class “A” Field Office conforming to 7-2.1 shall be provided at any offsite plant facility furnishing pipe subject to City inspection during manufacture. A Field Laboratory conforming to 7-3.1 shall be provided at any offsite or Work site plant facility furnishing Portland cement concrete or asphalt concrete pavement. Any other facilities for City personnel shall be provided only when required by the Specifications.

Offices and laboratories at plants may be used concurrently by inspection personnel of other agencies provided such use does not seriously conflict with City use. When facilities are shared in this manner, at least one locker provided with a hasp for a padlock must be available for the exclusive use of the City. Otherwise any facilities furnished are for the exclusive use of the City.

Facilities shall conform to the applicable codes, ordinances, and regulations of the local jurisdiction and of the State of California, and shall conform to current practice. The interior shall be paneled or suitably lined to provide a facility of good appearance.

Prior to installation of field office, the Contractor shall consult with City Representative on location, access and related facilities. The facilities shall be structurally sound, weather tight, with floors raised above ground.

At Contractor's option, portable or mobile buildings may be used. Mobile homes, when used, shall be modified for office use. Mobile homes shall not be used for living quarters.

The Contractor shall pay fees and charges for applications, permits, and building inspections.

The Contractor shall fill and/or grade site for temporary structures to provide surface drainage. Construct temporary field office on proper foundations, provide connections for utility services. Secure portable or mobile buildings when used. Provide steps and landings at entrance doors.

With approval from the City Representative, the Contractor shall remove the temporary field office, contents and services when no longer needed. The Contractor shall remove foundations and debris and restore site to required elevations and clean the areas.

The Contractor shall provide janitorial and other maintenance services in all types of facilities provided. Such services shall include the supply of the appropriate paper products and dispensers. Trash receptacles shall be provided and emptied by the Contractor at weekly intervals or sooner as required. The trash shall be removed from the Work site.

All costs to furnish, maintain, service, and remove the specified facilities at the Work site shall be included in the price in the Bid for such facilities. If no Bid item is provided in the Proposal, costs shall be included in other Bid items.

The first progress payment will not be approved until all facilities are in place and fully comply with the Specifications.

**7-2 FIELD OFFICE FACILITIES.**

**7-2.1 Class “A” Field Office.** The office for City Representative shall be a separate space for sole use of the City with lockable entrance door and two (2) keys.

Interior lighting shall be provided at desk and table. Exterior lighting shall be provided at entrance door.

The office shall have a minimum floor space of 175 $ft^2$, at least one door, and window area of not less than 22 $ft^2$. All doors and windows shall be provided with screens.
Furniture shall be provided as follows: one plan table, one standard 5 feet long double-pedestal desk with a drawer suitable for holding files, two chairs, one drafting stool, and one plan rack.

Electric power shall be provided to include a minimum of four duplex convenience outlets. The office shall be illuminated at the tables and desk. An outdoor lighting fixture with a 300-watt bulb shall be installed.

Heating and air conditioning of sufficient capacity shall be provided at no expense to the City. The Contractor shall provide drinking water within the office and integral sanitary facilities directly adjoining. Sanitary facilities shall include a toilet and wash basin with hot and cold running water.

Extended area, non-coin-operated telephone service shall be provided within the office area. The installation shall include sufficient extension cord to serve the plan table and desk.

**7-2.2 Class "B" Field Office.** The office shall be the same as class "A" except that integrated sanitary facilities and air conditioning are not required. A chemical toilet facility shall be provided adjacent to the office.

**7-2.3 Class "C" Field Office.** The office shall have a minimum floor space of 120 $ft^2$ of floor area. It shall be equipped with one 3 feet x 5 feet, four chairs and one plan rack. It shall be adequately heated, ventilated, and lighted and 2 duplex convenience outlets shall be provided. Air conditioning, telephones, and sanitary facilities are not required.

**7-3 FIELD LABORATORIES.**

**7-3.1 Offsite at Manufacturing Plant.** Field laboratories shall conform to the requirements for a Class "C" Field Office specified in 7-2.3 except for the following:

A. Telephone service as specified in 7-2.1.
B. Chair.
C. Work table, 4 feet x 10 feet, 3 feet.
D. Sieves
E. Scales and weights.
F. Burner plate for heating samples.
G. Thermometer, with 200 to 400°F (90 to 260°C) degree range (asphalt concrete plants only).
H. Air meter for all concrete in accordance with ASTM C 231 of the type that indicates percentage of air directly (precast concrete plants only).

Sampling and testing equipment shall be maintained in satisfactory operating condition by the Contractor or the plant owner. Laboratories shall be located immediately adjacent to and with full view of batching and loading operations.

**7-3.2 At the Work Site.** Field laboratories shall conform to 7-3.1, except that sieves, scales, weights, burner plates, sampling devices, pans, and thermometers will be furnished by the City at no expense to the Contractor. If air entraining admixtures are being used in the concrete on the Work, an air meter of the type specified in 7-3.1 shall be furnished by the Contractor.

**7-4 BATHHOUSE FACILITIES.** When the Plans or Specifications require bathhouse facilities, the following shall be provided:

A. One lavatory with hot and cold water.
B. One toilet in a stall.
C. One 3-foot (1 m) trough-type urinal.

D. One enclosed shower at least 3 feet x 3 feet (1m x 1m) with hot and cold water.
E. One bench, 6 feet (2 m) long.
F. Soap dispensers.
G. Toilet paper holders.
H. Paper towel cabinet.
I. Wastepaper receptacle.

These facilities shall be serviced and provided with necessary sanitary supplies.
These facilities shall be for the exclusive use of City personnel. However, a separate building need not be provided for this purpose if such facilities are located in a separate room in a building which includes other facilities.

**7-5 REMOVAL OF FACILITIES.** Field offices, laboratories, and bathhouse facilities at the Work site shall be removed upon completion of the Work. Buildings and equipment furnished by the Contractor at the Work site under the provisions of this subsection shall remain the property of the Contractor.

**7-6 BASIS OF PAYMENT.** All costs incurred in furnishing, maintaining, servicing, and removing field offices laboratories, or bathhouse facilities required at the Work site shall be included in the Bid item for furnishing such facilities. If such facilities are required by the Plans and no Bid item is provided in the Proposal, the costs shall be included in other Bid items. Such costs incurred in connection with offices and laboratories at plants shall be borne by the plant owners.

## ARTICLE 8 – MEASUREMENT AND PAYMENT

### 8-1 MEASUREMENT OF QUANTITIES FOR UNIT PRICE WORK.

**8-1.1 General.** Unless otherwise specified, quantities of work shall be determined from measurements or dimensions in horizontal planes. However, linear quantities of pipe, piling, fencing and timber shall be considered as being the true length measured along longitudinal axis.

Unless otherwise provided in the Specifications, volumetric quantities shall be the product of the mean area of vertical or horizontal sections and the intervening horizontal or vertical dimension. The planimeter shall be considered an instrument of precision adapted to measurement of all areas.

Initial progress payment will not be made prior to approval by the Engineer of the Schedule of Values, the Construction Schedule, and the Contract required submittals.

No subsequent progress payment will be made prior to receipt by the Director of the monthly revision of the Construction Progress Schedule.

**8-1.2 Methods of Measurement.** Materials and items of work which are to be paid for on basis of measurement shall be measured in accordance with methods stipulated in the particular sections involved.

**8-1.3 Certified Weights.** When payment is to be made on the basis of weight, the weighing shall be done on certified platform scales or, when approved by the Engineer, on a completely automated weighing and recording system. The Contractor shall furnish the Engineer with 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.** Items, for which quantities are indicated "Lump Sum", "LS", or "Job", shall be paid for at the price indicated in the Bid. Such payment shall be full compensation for the items of work and all work appurtenant thereto.

**8-2.1 Detailed Schedule.** The Contractor shall furnish the City a cost break-down for all contract lump sum items. Cost break-down tables shall be submitted to the Engineer for acceptance within fifteen (15) Calendar Days after award of Contract. Cost break-down tables will be approved, in writing, by the Engineer 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 Engineer 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 Specifications.

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 Article 2 of the General Conditions.

**8-3 PAYMENT.**

**8-3.1 General.** The quantities listed in the Proposal will not govern final payment. Payment to the Contractor will be made only for actual quantities of Contract items constructed in accordance with the Contract Documents. Upon completion of the Work, if the actual quantities show either an increase or decrease from the quantities in the Proposal, the Contract Unit Prices will prevail except as otherwise specified in 2-2.2.

The unit and lump sum prices to be paid shall be full compensation for the items of work and all appurtenant work, including furnishing all materials, labor, equipment, tools, and incidentals.

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 therefor.

When an item of work is designated as (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) 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.”

Payment will not be made for materials wasted or disposed of in a manner not called for under the Contract. This includes rejected material not unloaded from vehicles, material rejected after it has been placed, and material placed outside of the Plan lines. No compensation will be allowed for disposing of rejected or excess material.

Payment for work performed or materials furnished under an Assessment Act Contract will be made as provided in particular proceedings or legislative act under which such contract was awarded.
Whenever any portion of the Work is performed by the City at the Contractor’s request, the cost thereof shall be charged against the Contractor, and may be deducted from any amount due or becoming due from the City.

Whenever immediate action is required to prevent injury, death, or property damage, and precautions which are the Contractor’s responsibility have not been taken and are not reasonably expected to be taken, the City may, after reasonable attempt to notify the Contractor, cause such precautions to be taken and shall charge the cost thereof against the Contractor, or may deduct such cost from any amount due or becoming due from the City. City action or inaction under such circumstances shall not be construed as relieving the Contractor or its Surety from liability.

Payment shall not relieve the Contractor from its obligations under the Contract; nor shall such payment be construed to be acceptance of any of the Work. Payment shall not be construed as the transfer of ownership of any equipment or materials to the City. Responsibility of ownership shall remain with the Contractor who shall be obligated to store any fully or partially completed work or structure for which payment has been made; or replace any materials or equipment required to be provided under the Contract which may be damaged, lost, stolen or otherwise degraded in any way prior to acceptance of the Work, except as otherwise specified in 6-9.

Warranty periods shall not be affected by any payment.

If, within the time fixed by law, a properly executed notice to stop payment is filed with the City, due to the Contractor's failure to pay for labor or materials used in the Work, all money due for such labor or materials will be withheld from payment to the Contractor in accordance with applicable laws.
At the expiration of 60 days from the date of acceptance of the Work by the City, or as prescribed by law, the amount deducted from the final estimate and retained by the City will be paid to the Contractor except such amounts as are required by law to be withheld by properly executed and filed notices to stop payment, or as may be authorized by the Contract to be further retained.

**8-3.1.1 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 City 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 8-3.2; 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 Engineer 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.

Each Application for Payment shall be signed by Contractor with a certification by Contractor to City that:

A. The data comprising the Application for Payment is accurate and the Work has progressed to the point indicated;
B. To the best of Contractor's knowledge, information and belief, the Work is in accordance with the Contract Documents;
C. Contractor is entitled to payment in the amount certified; and
D. All sums previously applied for by Contractor on account of Work performed by Subcontractors and that have been paid by City have been paid to the Subcontractors performing such Work, without any retention, withholding or back charge by Contractor.

**8-3.2 Progress Payments**

**8-3.2.1 Conditions to Progress Payments.** Contractor shall submit its Application for Payment to the Engineer, using City of Irvine Certified Invoice for Progress Payment Form, once a month The Contractor shall submit invoices within fifteen (15) days from the end of each month. 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.

Without limitation to any other provisions of the Contract Documents, the following shall be conditions precedent to a proper submission and to the Director approval of each Application for Payment:

A. Submission of the detailed Schedule per 8-2.1;
B. Submission of the Contractor's certification required by 8-3.1.1;
C. Submission of conditional releases of stop notice, if any, and bond rights upon progress payment, complying with California Civil Code Section 8132, for all Work performed during the time period covered by the current Application for Payment, signed by Contractor, its Subcontractors of every tier, and all material suppliers to each, and forms of unconditional release of stop notice and bond rights upon progress payment, complying with California Civil Code Section 8134, for all Work performed during the time period covered by the previous Application for Payment, signed by Contractor, its Subcontractors of every tier and all material suppliers to each;
D. Compliance by Contractor with its obligation for maintenance of Record Drawings as required by the Contract Documents;
E. Compliance by Contractor with its obligation for submission of monthly and daily reports as required by the Contract Documents;
F. Compliance by Contractor with its obligations for submission of scheduling information and updating of the Construction Schedule as required by the Contract Documents pertaining to preparation or updating of schedule information;
G. Submission of certified payroll records as required by the Contract Documents;
H. Compliance by Contractor with all of its other obligations for submission of documentation or performance of conditions which, by the terms of the Contract Documents, constitute conditions to Contractor's right to receive payment for Work performed.

**8-3.2.2 Payments by City.** Pursuant to California Public Contract Code Section 20104.50, City shall make progress payment of undisputed sums due within thirty (30) Days after receipt by Director of an undisputed and properly submitted Application for Payment, calculated on the basis of ninety percent (90%) of value determined pursuant to 8-2.1of the following:

A. The portion of the Work permanently installed and in place;
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.** Any Application for Payment determined not to be undisputed, proper and suitable for payment shall be returned to Contractor as soon as practicable, but not later than seven (7) Days, after receipt by City accompanied by an written explanation of the reasons why the payment request was rejected. Failure by City to either timely reject an Application for Payment or specify any grounds for rejection shall not constitute a waiver of any rights by City. Applications for Payment that are rejected shall be corrected and resubmitted within seven (7) Days after receipt by Contractor.

**8-3.3 Final Payment.**

**8-3.3.1 Retention.** In addition to withholdings permitted by 8.37, a sum equal to five percent (5%) of all sums otherwise due to Contractor as progress payments shall be withheld by City pursuant to 8-2.1 from each progress payment ("Retention") and retained until such time as it is due as described herein.

**8-3.3.2 Conditions to Final Payment.** Contractor shall submit its Application for Final Payment using City of Irvine Certified Invoice for Progress Payment Form, prior to requesting a final inspection of the Work in accordance with 5-8. Such Application for Final Payment shall be accompanied by all the following:

A. An affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the project for which City or City's property or funds might be liable have been paid or otherwise satisfied;
B. Contractor's certification as required by 8-3.1;
C. Consent of surety 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 Section 8136 executed by Contractor, all Subcontractors of every tier and by all material suppliers of each, covering the final payment period;
F. Unconditional Waiver and Release Upon Progress Payment in the form required by California Civil Code Section 8134 executed by Contractor, all Subcontractors of every tier and by all material suppliers of each, covering the previous payment period;
G. All Record Documents (including, without limitation, complete and accurate record drawings which shall be kept up to date during the performance of the Work);
H. Documentation that Contractor has inspected, tested, and adjusted performance if every system or facility of the Work to ensure that overall performance is in compliance 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, as 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 the Public Contract Code Section 7107, within sixty (60) Days after City issues the Notice of Completion to Contractor, the Final Payment, including Retention withheld, shall be released to Contractor, 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, City may deduct and withhold from the Final Payment due under 8-3.3.3, an amount up to 150% of any disputed amounts, including, without limitation, amounts to protect City against any loss caused or threatened as a result of Contractor's failure to fully perform all of those obligations that are required to be fulfilled by Contractor as a condition to Completion and Final Payment. Alternatively, City may elect, in its sole discretion, to accept the Work without correction or completion and adjust the Contract Sum pursuant to the Contract Documents.

**8-3.3.5 Acceptance of Final Payment.** Acceptance of Final Payment by Contractor shall constitute a waiver of all rights by Contractor against City for recovery of any loss, excepting only those Claims that have been submitted by Contractor in the manner required by the Contract Documents prior to or at the time of the Final Payment.

**8-3.4 Miscellaneous.**

**8-3.4.1 Joint Payment.** City shall have the right, if deemed necessary in its sole discretion, to issue joint checks made payable to Contractor and any Subcontractor(s) of any Tier. The joint check payees shall be solely responsible for the allocation and disbursement of funds included as part of any such joint payment. Endorsement on such check by a payee shall be conclusively presumed to constitute receipt of payment by such payee. In no event shall any joint check payment be construed to create any contract between City and a Subcontractor of any Tier, any obligation from City to such Subcontractor or any third party rights against City or Director.

**8-3.4.2 Withholding/Duty to Proceed.** The payment, withholding or retention of all or any portion of any payment claimed to be due and owing to Contractor shall not operate in any way to relieve Contractor from its obligations under the Contract Documents. Contractor shall continue diligently to prosecute the Work without reference to the payment, withholding or retention of any payment. The

partial payment, withholding or retention by City in good .faith of any disputed portion of a payment, whether ultimately determined to be correctly or incorrectly asserted, shall not constitute a breach by City of the Construction Contract and shall not be grounds for an adjustment of the Contract Sum or Contract Time.

**8-3.4.3 No Acceptance.** No payment by City or partial or entire use of the Work by City shall be construed as approval or acceptance of the Work, or any portion thereof.

**8-3.4.4 Contractor Payment Warranty.** Submission of an Application for Payment shall constitute a representation and warranty by Contractor that:

A. Title to Work covered by an Application for Payment will pass to City either by incorporation into the construction or upon receipt of payment by Contractor, 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 imposed by the Contractor or any other person.

**8-3.4.5 Corrections.** No inaccuracy or error in any Application for Payment provided by Contractor shall operate to release Contractor from the error, or from losses arising from the Work, or from any obligation imposed by the Contract Documents. City retains the right to subsequently correct any error made in any previously approved Application for Payment, or progress payment issued, by adjustments to subsequent payments.

**8-3.5 Payments By Contractor.** Contractor shall not include in its Applications for Payment sums on account of any Subcontractor's portion of the Work that it does not intend to pay to such Subcontractor. Upon receipt of payment from City, Contractor shall pay the Subcontractor performing Work on the Project, out of the amount paid to Contractor on account of such Subcontractor's portion of the Work, the amount to which said Subcontractor is entitled in accordance with the terms of its contract with Contractor and applicable laws, including, without limitation, California Public Contract Code Section 7107. Contractor shall remain responsible notwithstanding a withholding by City pursuant to the terms of these Contract Documents, to promptly satisfy from its own funds sums due to all Subcontractors who have performed Work that is included in Contractor's Application for Payment. Contractor shall, by appropriate agreement, require each Subcontractor to make payments to its subcontractors and material suppliers in similar manner. City shall have no obligation to pay or be responsible in any way for payment to 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 which City may have the right to retain under the Contract Documents, City may withhold a sufficient amount of any payment otherwise due to Contractor as City, in its sole discretion, may deem 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 probable filing of such claims or stop notices;
B. Defective Work. Defective Work not remedied;
C. Nonpayment. Failure of Contractor to make proper payments to its Subcontractors for services, labor, materials or equipment;
D. Inability to Complete. Reasonable doubt that the Work can be completed for the then unpaid balance of the Contract Sum or within the Contract Time;
E. Violation of Applicable Laws. Failure of Contractor or its Subcontractors to comply with applicable laws or lawful orders of governmental authorities;
F. Penalty. Any claim or penalty asserted against City by virtue of Contractor's failure 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 as a result of Contractor failing to meet the Construction Schedule or failing 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 City to a set-off or recoupment;

I. Consultant Services. Additional professional, consultant or inspection services required due to Contractor's failure to comply with the Contract Documents.
J. Liquidated Damages. Liquidated damages assessed against Contractor
K. Materials. Materials ordered by City pursuant to the Contract Documents.
L. Damages. Loss caused by Contractor or Subcontractor to City, Separate Contractors or any other person or entity under contract to City.
M. Clean Up. Clean up performed by City and chargeable to Contractor pursuant to the Contract Documents.
N. Employee Benefits. Failure of Contractor to pay contributions due and owing to employee benefits funds pursuant to any applicable collective bargaining agreement or trust agreement.
O. Required Documents. Failure of Contractor 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 and when City determines, in its sole discretion, that the above grounds for withholding have been removed and that all losses incurred or threatened have been paid, credited or otherwise satisfied, then payment shall be made for amounts withheld because of them.

**8-3.6.3 Application of Withholding.** City may apply sums withheld pursuant to 8-3.6.1 in payment of any loss or threatened loss as City determines, in its sole discretion, to be appropriate. Such payments may be made without a prior judicial determination of City's actual rights with respect to such loss. Contractor agrees and hereby designates City as its agent for such purposes, and agrees that such payments shall be considered as payments made under the Contract by City to Contractor. City shall not be liable to Contractor for such payments made in good faith. City shall submit to Contractor an accounting of such funds disbursed on behalf of Contractor. As an alternative to such payment, city may, in its sole discretion, elect to exercise its right to adjust the Contract Sum as provided in the Contract Documents.

**8-3.6.4 Continuous Performance.** Provided City pays the undisputed portion, if any, of funds withheld in good faith, Contractor shall maintain continuous and uninterrupted performance of the Work during the pendency of any disputes or disagreements with City.

**8-3.7 Substitution of Securities.** Upon the Contractor's request, the City will make payment of funds withheld from progress payments pursuant to the requirements of Public Contract Code § 22300 if the Contractor deposits in escrow with a bank acceptable to the City, 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 City 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 City, 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.

**8-3.8 Delivered Materials.** Payments may be made by City, at its discretion, on account of materials or equipment not incorporated into the Work but delivered on the ground at the Site and suitably stored by Contractor or stored off-Site under the control of City. Such payments shall only be considered upon submission by Contractor of satisfactory evidence that it has acquired title to same, that the material or equipment will be utilized in the Work and that the material is satisfactorily stored, protected and insured, and that such other procedures are in place satisfactory to City to protect City's interests. To be considered for payment, materials or equipment stored off-Site shall, in addition to the above requirements and unless otherwise specifically approved by City in writing, be stored in a bonded warehouse, fully insured, and available to City for inspection. City shall have sole discretion to determine the amount of material and equipment that may be stored on the Site at any given time.

**8-3.9 Mobilization**

**8-3.9.1 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 City's Representative.

**8-3.9.2 Measurement and Payment.** Mobilization is eligible for partial payment if the Contract includes a bid item for mobilization. Payment for mobilization shall be per the Lump-Sum (LS) price bid and 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.

**8-4 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. 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 in 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.

**8-6 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*.

**8-6.1 Claims Submission and Documentation.**

A. The Contractor may submit a claim concerning a matter properly noticed in accordance with the requirements of this Contract.
B. The Contractor shall furnish all claim documentation as specified herein no later than thirty (30) days after the event or situation causing the claim has been overcome. Failure by the Contractor to furnish the required claim documentation within the time set forth above shall constitute waiver of the Contractor's right to compensation for such claim.
C. Contractor shall furnish three (3) certified copies of the requirement claim documentation. The claim documentation shall be complete when furnished. The evaluation of the Contractor's claim will be based upon City project records and the Contractor's furnished claim documentation.
D. Claim documentation shall conform to Generally Accepted Accounting Principles and shall be in the following format:
    1. General Introduction
    2. General Background Discussion
    3. Issues
    4. Index of Issues (listed numerically)
    5. For each issue
        a. Background
        b. Chronology
        c. Contractor's position (reason for City's potential liability)
        d. Supporting documentation of merit or entitlement
        e. Supporting documentation of damages
        f. Begin each issue on a new page
    6. All critical path method schedules, both as-planned, monthly updates, schedule revisions, and as-built along with the computer disks of all schedules related to the claim.
    7. Productivity exhibits (if appropriate)
    8. Summary of Issues and Damages
E. Supporting documentation of merit for each issue shall be cited by reference, photocopies, or explanation. Supporting documentation may include, but shall 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 necessary to support the Contractor's claim.
F. Supporting documentation of damages for each issue shall be cited, photocopied, or explained. Supporting documentation may include, but shall not be limited to, any or all documents related to the preparation and submission of the bid; certified, detailed labor records including labor

distribution reports; material and equipment procurement records; construction equipment ownership cost records 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 necessary to support the Contractor's claim.

G. Each copy of the claim documentation shall be certified by a responsible office of the Contractor in accordance with the requirements of these Contract Documents.

H. Should the Contractor be unable to support any part of the claim and it is determined that such inability is attributable to falsity of such certification or misrepresentation of fact or fraud on the part of the Contractor, the Contractor shall be liable to the City as provided for under California Government Code Section 12650 et. seq.

I. Claims submitted by the Contractor shall 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 Section 12650 et. seq., the undersigned,

(Name) _____

(Title) _____

(Company) _____

hereby certifies that the claim for the additional compensation and time, if any, made herein 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 _____

Failure to submit the notarized certificate will be cause for denying the claim.

**SECTION 011000**

**SUMMARY**

**PART 1 - GENERAL**

1.1 PROJECT

A. Project Name: Harvard Park Facility Improvements, Irvine, California.
B. Owner's Name: City of Irvine, California, Department of Public Works.
C. Architect's Name: CAP Architecture

1.2 USE OF 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.
        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.

1.3 OCCUPANCY REQUIREMENTS

A. 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.
    2. Provide not less than 72 hours notice to Owner of activities that will affect Owner's operations.

**PART 2 - PRODUCTS - NOT USED**

**PART 3 - EXECUTION - NOT USED**

**END OF SECTION**

**SECTION 014000**

**QUALITY REQUIREMENTS**

## PART 1 - GENERAL

1.1 SECTION INCLUDES

A. References and standards.
B. Quality assurance submittals.
C. Mock-ups.
D. Control of installation.
E. Tolerances.
F. Testing and inspection services.
G. Manufacturers' field services.

1.2 SUBMITTALS

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.

B. Design Data: Submit for Architect'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 copy of report to Architect and to Contractor via email.
   1. Test report submittals are for Architect'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 Architect, 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 Architect.

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. Whenever a manufacturer recommends addressing provisions for interaction of dis-similar materials, follow those recommendations after consultation with Architect.

F. Manufacturer's Field Reports: Submit reports for Architect'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.

G. Erection Drawings: Submit drawings for Architect'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.

1.3 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 Architect before proceeding.

F. Neither the contractual relationships, duties, responsibilities of the parties in Contract nor those of Architect shall be altered from the Contract Documents by mention or inference otherwise in any reference document.

1.4 TESTING AND INSPECTION AGENCIES

A. Contractor will employ services of an independent testing agency to perform specified testing, unless otherwise indicated for Owner to provide in Owner-Contractor agreement.

B. Employment of agency in no way relieves Contractor of obligation to perform Work in accordance with requirements of Contract Documents.

**PART 2 - PRODUCTS - NOT USED**

**PART 3 - EXECUTION**

3.1 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 Architect 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.

3.2 MOCK-UPS

A. Apply finish materials to demonstrate the proposed range of materials, colors, and workmanship.

B. Tests will be performed under provisions identified in this section and identified in the respective product specification sections.

C. Assemble and erect specified items with specified attachment and anchorage devices, flashings, weather barriers, seals, and finishes.

D. Accepted mock-ups shall be a comparison standard for the remaining Work.

E. Where mock-up has been accepted by Architect and is indicated to be removed, remove mock-up and clear area when directed to do so by Architect or Owner.

3.3 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 Architect before proceeding.

C. Adjust products to appropriate dimensions; position before securing products in place.

3.4 TESTING AND INSPECTION

A. See individual specification sections for testing required.

B. Testing Agency Duties:

1. Provide qualified personnel at site. Cooperate with Architect and Contractor in performance of services.
2. Perform specified sampling and testing of products in accordance with specified standards.
3. Ascertain compliance of materials and mixes with requirements of Contract Documents.
4. Promptly notify Architect and Contractor of observed irregularities or non-conformance of Work or products.
5. Perform additional tests and inspections required by Architect.
6. 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 Architect 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 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 Architect.

F. Re-testing required because of non-conformance to specified requirements shall be paid for by Contractor.

3.5 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, as applicable, and to initiate instructions when necessary.

B. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

3.6 DEFECT ASSESSMENT

A. Replace Work or portions of the Work not conforming to specified requirements.

B. If, in the opinion of Architect, it is not practical to remove and replace the Work, Architect will direct an appropriate remedy or adjust payment.

**END OF SECTION**

**SECTION 015000**

**TEMPORARY FACILITIES AND CONTROLS**

**PART 1 - GENERAL**

1.1 SECTION INCLUDES
- A. Temporary telecommunications services.
- B. Temporary sanitary facilities.
- C. Temporary Controls: Barriers, enclosures, and fencing.
- D. Vehicular access and parking.
- E. Waste removal facilities and services.

1.2 RELATED REQUIREMENTS
- A. NFPA 241: Standard For Safeguarding Construction, Alteration, and Demolition Operations". www.nfpa.org.

1.3 TELECOMMUNICATIONS SERVICES
- A. Provide superintendent with cell phone.

1.4 TEMPORARY SANITARY FACILITIES
- A. Provide and maintain required facilities and enclosures. Provide at time of project mobilization.
- B. New permanent facilities may not be used during construction operations.
- C. Maintain daily in clean and sanitary condition.
- D. At end of construction, return facilities to same or better condition as originally found.

1.5 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 governing authorities for public rights-of-way and for public access to existing building.
- C. Protect non-owned vehicular traffic, stored materials, site, and structures from damage.

1.6 VEHICULAR ACCESS AND PARKING
- 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 Owner.
- C. Provide and maintain access to fire hydrants, free of obstructions.
- D. Provide means of removing mud from vehicle wheels before entering streets.
- E. Provide temporary parking areas to accommodate construction personnel. When site space is not adequate, provide additional off-site parking.

1.7 WASTE REMOVAL
- A. Provide waste removal facilities and services as required to maintain the site in clean and orderly condition.
- B. Provide containers with lids. Remove trash from site periodically.
- C. 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.
- D. Open free-fall chutes are not permitted. Terminate closed chutes into appropriate containers with lids.
- E. If required by code or in order to meet required sustainability credits, provide waste management plan.

1.8 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS
- A. Remove temporary utilities, equipment, facilities, and materials prior to 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 new permanent facilities used during construction to specified condition.

**PART 2 - PRODUCTS - NOT USED**

**PART 3 - EXECUTION - NOT USED**

**END OF SECTION**

**SECTION 016000**

**PRODUCT REQUIREMENTS**

## PART 1 - GENERAL

1.1 SECTION INCLUDES

A. General product requirements.
B. Transportation, handling, storage and protection.
C. Product option requirements.
D. Substitution limitations and procedures.
E. Maintenance materials, including extra materials, spare parts, tools, and software.

1.2 SUBMITTALS

A. Proposed Products List: Submit list, in table format, 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. Identify minimum required service and installation clearances for the installation and maintenance of all components.
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.
E. Provide a written explanation for omissions of data and for known variations form contract requirements.

## PART 2 - PRODUCTS

2.1 NEW PRODUCTS

A. Provide new products unless specifically required or permitted by the Contract Documents.
B. Where all other criteria are met, Contractor shall give preference to products that:
   1. Are extracted, harvested, and/or manufactured closer to the location of the project.
   2. Have longer documented life span under normal use.
   3. Result in less construction waste.
   4. Are made of vegetable materials that are rapidly renewable.
   5. Are manufactured in the country where the project is constructed.
C. Provide interchangeable components of the same manufacture for components being replaced.
D. 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.
E. Cord and Plug: Provide minimum 6 foot cord and plug including grounding connector for connection to electric wiring system. Cord of longer length is specified in individual specification sections.

2.2 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 other options or substitutions allowed.
C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Prior to the bid procedure, submit a request for substitution for any manufacturer not named, using the “Substitution Request Form”, CSI 13.1A, included at the end of this section.

2.3 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 and store in location as directed by Owner; obtain receipt prior to final payment.

**PART 3 - EXECUTION**

3.1 SUBSTITUTION PROCEDURES

A. Comply with requirements specified in this section. Substitutions shall be considered for comparable product(s) which have the indicated qualities or basis-of-design characteristics related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of the specified product(s).

B. Architect will consider requests for substitutions only within 15 days after date of Agreement.

C. Substitutions will be considered when a product becomes unavailable through no fault of the Contractor.

D. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents.

E. 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. Will provide the same warranty for the substitution as for the specified product.
3. Will 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.

F. Substitutions will not be considered at any time, when they are indicated or implied on shop drawing or product data submittals, without separate written request on form hereto attached, or when acceptance will require revision to the Contract Documents.

G. Substitution Submittal Procedure:

1. Submit one PDF of request for substitution for consideration. Limit each request to one proposed substitution. Submit on form at the end of this Section.
2. Submit shop drawings, product data, and certified test results attesting to the proposed product equivalence. Burden of proof is on proposer.
3. The Architect will notify Contractor in writing of decision to accept or reject request.
4. If substitution is not acceptable, Contractor will provide specified product (s).

3.2 TRANSPORTATION AND HANDLING

A. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to stored materials.

B. Transport and handle products in accordance with manufacturer's instructions.

C. Transport materials in covered trucks to prevent contamination of product and littering of surrounding areas.

D. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.

E. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.

F. Arrange for the return of packing materials, such as wood pallets, where economically feasible.

3.3 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 materials in a manner which will not endanger Project structure or installed Work.

C. Store and protect products in accordance with manufacturers' instructions.

D. Store with seals and labels intact and legible.

E. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product.

F. For exterior storage of fabricated products, place on sloped supports above ground.

G. Provide bonded off-site storage and protection when site does not permit on-site storage or protection.

H. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.

I. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.

J. Prevent contact with material that may cause corrosion, discoloration, or staining.

K. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.

L. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

**SUBSTITUTION REQUEST FORM**

PROJECT: _____ **(After Contract Award)**

TO: _____

_____

NO. _____ DATE: _____

Contractor hereby requests acceptance of the following product or system as a substitution in accordance with provisions of Division 01 Section "Substitution Procedures:"

**1. SPECIFIED PRODUCT OR SYSTEM**

Substitution request for: _____

Specification Section No.: _____ Article/ Paragraph: _____

**2. REASON FOR SUBSTITUTION REQUEST**

SPECIFIED PRODUCT . . .

- ☐ Is no longer available.
- ☐ Is unable to meet project schedule.
- ☐ Is unsuitable for the designated application.
- ☐ Cannot interface with adjacent materials.
- ☐ Is not compatible with adjacent materials.
- ☐ Cannot provide the specified warranty.
- ☐ Cannot be constructed as indicated
- ☐ Cannot be obtained due to one or more of the following:
  - ☐ Strike
  - ☐ Lockout
  - ☐ Bankruptcy of manufacturer or supplier
  - ☐ Similar occurrence (explain below)

PROPOSED PRODUCT . . .

- ☐ Will reduce construction time
- ☐ Will result in cost savings of $ _____ to Project
- ☐ Is for supplier's convenience
- ☐ Is for subcontractor's convenience
- ☐ Other: _____

_____

**3. SUPPORTING DATA**

- ☐ Drawings, specifications, product data, performance data, test data, and any other necessary information to facilitate review of the Substitution Request are attached.
- ☐ Sample is attached.
- ☐ Sample will be sent if requested.

**4. QUALITY COMPARISON**

Provide all necessary side-by-side comparative data as required to facilitate review of Substitution Request:

| | SPECIFIED PRODUCT | PROPOSED PRODUCT |
|---|---|---|
| Manufacturer: | | |
| Name / Brand: | | |
| Catalog No.: | | |
| Vendor: | | |
| Variations: | | |

(Add Additional Sheets If Necessary)

Local Distributor or Supplier: _____

Maintenance Service Available: ☐ Yes ☐ No

Spare Parts Source: _____

Warranty: ☐ Yes ☐ No _____ Years

**5. PREVIOUS INSTALLATIONS**

Identification of at least three similar projects on which proposed substitution was used:

PROJECT #1:

Project: _____

Address: _____

_____

Architect: _____

Owner: _____

Contractor: _____

Date Installed: _____

PROJECT #2:

Project: _____

Address: _____

_____

Architect: _____

Owner: _____

Contractor: _____

Date Installed: _____

PROJECT #3:

Project: _____

Address: _____

_____

Architect: _____

Owner: _____

Contractor: _____

Date Installed: _____

**6. EFFECT OF SUBSTITUTION**

Proposed substitution affects other work or trades: ☐ No ☐ Yes (if Yes, explain)

_____

_____

Proposed substitution requires dimensional revisions or redesign of architectural, structural, M-E-P, life safety, or other work:

☐ No ☐ Yes (if Yes, attach data explaining revisions)

**7. STATEMENT OF CONFORMANCE OF REQUEST TO CONTRACT REQUIREMENTS**

Contractor and Subcontractor have investigated the proposed substitution and hereby represent that:

A. They have personally investigated the proposed substitution and believe that it is equal to or superior in all respects to specified product, except as stated above;

B. The proposed substitution is in compliance with applicable codes and ordinances;

C. The proposed substitution will provide same warranty as specified for specified product;

D. They will coordinate the incorporation of the proposed substitution into the Work, and will include modifications to the Work as required to fully integrate the substitution;

E. They have included complete cost data and implications of the substitution (attached);

F. They will pay any redesign fees incurred by the Architect or any of the Architect's consultants, and any special inspection costs incurred by the Owner, caused by the use of this product;

G. They waive all future claims for added cost or time to the Contract related to the substitution, or that become known after substitution is accepted.

H. The Architect's approval, if granted, will be based upon reliance upon data submitted and the opinion, knowledge, information, and belief of the Architect at the time decision is rendered and Addendum is issued; and that Architect's approval therefore is interim in nature and subject to reevaluation and reconsideration as additional data, materials, workmanship, and coordination with other work are observed and reviewed.

Contractor:_____
*(Name of Contractor)*

Date:_____ By: _____

Subcontractor:_____
*(Name of Subcontractor)*

Date:_____ By: _____

***Note: Unresponsive or incomplete requests will be rejected and returned without review.***

**8. ARCHITECT'S REVIEW AND ACTION**

☐ Substitution is accepted.

☐ Substitution is accepted, with the following comments:_____

_____

_____

☐ Resubmit Substitution Request:

☐ Provide more information in the following areas: _____

_____

_____

- ☐ Provide proposal indicating amount of savings / credit to Owner
- ☐ Bidding Contractor shall sign Bidder's Statement of Conformance
- ☐ Bidding Subcontractor shall sign Bidder's Statement of Conformance

☐ Substitution is not accepted:

- ☐ Substitution Request received too late.
- ☐ Substitution Request received directly from subcontractor or supplier.
- ☐ Substitution Request not submitted in accordance with requirements.
- ☐ Substitution Request Form is not properly executed.
- ☐ Substitution Request does not indicate what item is being proposed.
- ☐ Insufficient information submitted to facilitate proper evaluation.
- ☐ Proposed product does not appear to comply with specified requirements.
- ☐ Proposed product will require substantial revisions to Contract Documents.

By: _____

Date:_____

Architect has relied upon the information provided by the Contractor, and makes no claim as to the accuracy, completeness, or validity of such information. If an accepted substitution is later found to be not in compliance with the Contract Documents, Contractor shall provide the specified product.

**9. OWNER'S REVIEW AND ACTION**

- ☐ Substitution is accepted; Architect to prepare Change Order.
- ☐ Substitution is not accepted.
- ☐ Owner will pay Architect directly for redesign fees.
- ☐ Include Architect's Additional Service fee for implementing the substitution in the Change Order.

By: _____
*(Owner/Owner's Representative)*

Date:_____

**END OF FORM**

**END OF SECTION**

**SECTION 016000**

**PRODUCT REQUIREMENTS**

## PART 1 - GENERAL

1.1 SECTION INCLUDES

A. General product requirements.
B. Transportation, handling, storage and protection.
C. Product option requirements.
D. Substitution limitations and procedures.
E. Maintenance materials, including extra materials, spare parts, tools, and software.

1.2 SUBMITTALS

A. Proposed Products List: Submit list, in table format, 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. Identify minimum required service and installation clearances for the installation and maintenance of all components.
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.
E. Provide a written explanation for omissions of data and for known variations form contract requirements.

## PART 2 - PRODUCTS

2.1 NEW PRODUCTS

A. Provide new products unless specifically required or permitted by the Contract Documents.
B. Where all other criteria are met, Contractor shall give preference to products that:
   1. Are extracted, harvested, and/or manufactured closer to the location of the project.
   2. Have longer documented life span under normal use.
   3. Result in less construction waste.
   4. Are made of vegetable materials that are rapidly renewable.
   5. Are manufactured in the country where the project is constructed.
C. Provide interchangeable components of the same manufacture for components being replaced.
D. 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.
E. Cord and Plug: Provide minimum 6 foot cord and plug including grounding connector for connection to electric wiring system. Cord of longer length is specified in individual specification sections.

2.2 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 other options or substitutions allowed.
C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Prior to the bid procedure, submit a request for substitution for any manufacturer not named, using the “Substitution Request Form”, CSI 13.1A, included at the end of this section.

2.3 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 and store in location as directed by Owner; obtain receipt prior to final payment.

**PART 3 - EXECUTION**

3.1 SUBSTITUTION PROCEDURES

A. Comply with requirements specified in this section. Substitutions shall be considered for comparable product(s) which have the indicated qualities or basis-of-design characteristics related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of the specified product(s).

B. Architect will consider requests for substitutions only within 15 days after date of Agreement.

C. Substitutions will be considered when a product becomes unavailable through no fault of the Contractor.

D. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents.

E. 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. Will provide the same warranty for the substitution as for the specified product.
3. Will 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.

F. Substitutions will not be considered at any time, when they are indicated or implied on shop drawing or product data submittals, without separate written request on form hereto attached, or when acceptance will require revision to the Contract Documents.

G. Substitution Submittal Procedure:

1. Submit one PDF of request for substitution for consideration. Limit each request to one proposed substitution. Submit on form at the end of this Section.
2. Submit shop drawings, product data, and certified test results attesting to the proposed product equivalence. Burden of proof is on proposer.
3. The Architect will notify Contractor in writing of decision to accept or reject request.
4. If substitution is not acceptable, Contractor will provide specified product (s).

3.2 TRANSPORTATION AND HANDLING

A. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to stored materials.

B. Transport and handle products in accordance with manufacturer's instructions.

C. Transport materials in covered trucks to prevent contamination of product and littering of surrounding areas.

D. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.

E. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.

F. Arrange for the return of packing materials, such as wood pallets, where economically feasible.

3.3 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 materials in a manner which will not endanger Project structure or installed Work.

C. Store and protect products in accordance with manufacturers' instructions.

D. Store with seals and labels intact and legible.

E. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product.

F. For exterior storage of fabricated products, place on sloped supports above ground.

G. Provide bonded off-site storage and protection when site does not permit on-site storage or protection.

H. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.

I. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.

J. Prevent contact with material that may cause corrosion, discoloration, or staining.

K. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.

L. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

**SUBSTITUTION REQUEST FORM**

PROJECT: _____ **(After Contract Award)**

TO: _____

_____

NO. _____ DATE: _____

Contractor hereby requests acceptance of the following product or system as a substitution in accordance with provisions of Division 01 Section "Substitution Procedures:"

**1. SPECIFIED PRODUCT OR SYSTEM**

Substitution request for: _____

Specification Section No.: _____ Article/ Paragraph: _____

**2. REASON FOR SUBSTITUTION REQUEST**

SPECIFIED PRODUCT . . .

- ☐ Is no longer available.
- ☐ Is unable to meet project schedule.
- ☐ Is unsuitable for the designated application.
- ☐ Cannot interface with adjacent materials.
- ☐ Is not compatible with adjacent materials.
- ☐ Cannot provide the specified warranty.
- ☐ Cannot be constructed as indicated
- ☐ Cannot be obtained due to one or more of the following:
  - ☐ Strike
  - ☐ Lockout
  - ☐ Bankruptcy of manufacturer or supplier
  - ☐ Similar occurrence (explain below)

PROPOSED PRODUCT . . .

- ☐ Will reduce construction time
- ☐ Will result in cost savings of $ _____ to Project
- ☐ Is for supplier's convenience
- ☐ Is for subcontractor's convenience
- ☐ Other: _____

_____

**3. SUPPORTING DATA**

- ☐ Drawings, specifications, product data, performance data, test data, and any other necessary information to facilitate review of the Substitution Request are attached.
- ☐ Sample is attached.
- ☐ Sample will be sent if requested.

**4. QUALITY COMPARISON**

Provide all necessary side-by-side comparative data as required to facilitate review of Substitution Request:

| | SPECIFIED PRODUCT | PROPOSED PRODUCT |
|---|---|---|
| Manufacturer: | | |
| Name / Brand: | | |
| Catalog No.: | | |
| Vendor: | | |
| Variations: | | |

(Add Additional Sheets If Necessary)

Local Distributor or Supplier: _____

Maintenance Service Available: ☐ Yes ☐ No

Spare Parts Source: _____

Warranty: ☐ Yes ☐ No _____ Years

**5. PREVIOUS INSTALLATIONS**

Identification of at least three similar projects on which proposed substitution was used:

PROJECT #1:

Project: _____

Address: _____

_____

Architect: _____

Owner: _____

Contractor: _____

Date Installed: _____

PROJECT #2:

Project: _____

Address: _____

_____

Architect: _____

Owner: _____

Contractor: _____

Date Installed: _____

PROJECT #3:

Project: _____

Address: _____

_____

Architect: _____

Owner: _____

Contractor: _____

Date Installed: _____

**6. EFFECT OF SUBSTITUTION**

Proposed substitution affects other work or trades: ☐ No ☐ Yes (if Yes, explain)

_____

_____

Proposed substitution requires dimensional revisions or redesign of architectural, structural, M-E-P, life safety, or other work:

☐ No ☐ Yes (if Yes, attach data explaining revisions)

**7. STATEMENT OF CONFORMANCE OF REQUEST TO CONTRACT REQUIREMENTS**

Contractor and Subcontractor have investigated the proposed substitution and hereby represent that:

A. They have personally investigated the proposed substitution and believe that it is equal to or superior in all respects to specified product, except as stated above;

B. The proposed substitution is in compliance with applicable codes and ordinances;

C. The proposed substitution will provide same warranty as specified for specified product;

D. They will coordinate the incorporation of the proposed substitution into the Work, and will include modifications to the Work as required to fully integrate the substitution;

E. They have included complete cost data and implications of the substitution (attached);

F. They will pay any redesign fees incurred by the Architect or any of the Architect's consultants, and any special inspection costs incurred by the Owner, caused by the use of this product;

G. They waive all future claims for added cost or time to the Contract related to the substitution, or that become known after substitution is accepted.

H. The Architect's approval, if granted, will be based upon reliance upon data submitted and the opinion, knowledge, information, and belief of the Architect at the time decision is rendered and Addendum is issued; and that Architect's approval therefore is interim in nature and subject to reevaluation and reconsideration as additional data, materials, workmanship, and coordination with other work are observed and reviewed.

Contractor:_____
*(Name of Contractor)*

Date:_____ By: _____

Subcontractor:_____
*(Name of Subcontractor)*

Date:_____ By: _____

***Note: Unresponsive or incomplete requests will be rejected and returned without review.***

**8. ARCHITECT'S REVIEW AND ACTION**

☐ Substitution is accepted.

☐ Substitution is accepted, with the following comments:_____

_____

_____

☐ Resubmit Substitution Request:

☐ Provide more information in the following areas: _____

_____

_____

- ☐ Provide proposal indicating amount of savings / credit to Owner
- ☐ Bidding Contractor shall sign Bidder's Statement of Conformance
- ☐ Bidding Subcontractor shall sign Bidder's Statement of Conformance

☐ Substitution is not accepted:

- ☐ Substitution Request received too late.
- ☐ Substitution Request received directly from subcontractor or supplier.
- ☐ Substitution Request not submitted in accordance with requirements.
- ☐ Substitution Request Form is not properly executed.
- ☐ Substitution Request does not indicate what item is being proposed.
- ☐ Insufficient information submitted to facilitate proper evaluation.
- ☐ Proposed product does not appear to comply with specified requirements.
- ☐ Proposed product will require substantial revisions to Contract Documents.

By: _____

Date:_____

Architect has relied upon the information provided by the Contractor, and makes no claim as to the accuracy, completeness, or validity of such information. If an accepted substitution is later found to be not in compliance with the Contract Documents, Contractor shall provide the specified product.

**9. OWNER'S REVIEW AND ACTION**

- ☐ Substitution is accepted; Architect to prepare Change Order.
- ☐ Substitution is not accepted.
- ☐ Owner will pay Architect directly for redesign fees.
- ☐ Include Architect's Additional Service fee for implementing the substitution in the Change Order.

By: _____
*(Owner/Owner's Representative)*

Date:_____

**END OF FORM**

**END OF SECTION**

**SECTION 017000**

**EXECUTION AND CLOSEOUT REQUIREMENTS**

## PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Examination, preparation, and general installation procedures.
B. Pre-installation meetings.
C. Cutting and patching.
D. Surveying for laying out the work.
E. Cleaning and protection.
F. Starting of systems and equipment.
G. Demonstration and instruction of Owner personnel.
H. Closeout procedures, except payment procedures.
I. General requirements for maintenance service.

1.2 SUBMITTALS

A. See Section 013000 - 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. 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. Effect on work of Owner or separate Contractor.
        f. Written permission of affected separate Contractor.
        g. Date and time work will be executed.
D. Project Record Documents: Accurately record actual locations of capped and active utilities.

1.3 QUALIFICATIONS

A. For survey work, employ a land surveyor registered in the State in which the Project is located and acceptable to Architect. Submit evidence of Surveyor's Errors and Omissions insurance coverage in the form of an Insurance Certificate.
B. 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.
C. 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.

1.4 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.
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.

H. Pest and Rodent Control: Provide methods, means, and facilities to prevent pests and insects from damaging the work.

I. 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.

1.5 COORDINATION

A. 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.

B. Notify affected utility companies and comply with their requirements.

C. 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.

D. 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.

E. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.

F. Coordinate completion and clean-up of work of separate sections.

G. 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**

2.1 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 016000.

**PART 3 - EXECUTION**

3.1 EXAMINATION

A. Existing Conditions: The existence and location of site improvements, soil, utilities, and other construction indicated as existing are not guaranteed. Start of Work means acceptance of existing conditions. Before beginning work, investigate and verify the following:
1. Verify the existence and location of mechanical and electrical systems and other construction affecting the Work.
2. Verify the location and points of connection of utility services and that they are of the correct characteristics, and in the correct locations.
3. Verify that existing site conditions and substrate surfaces are acceptable for subsequent work.
4. Verify that existing substrate is capable of structural support or attachment of new work being applied or attached.

B. Examine and verify specific conditions described in individual specification sections.

C. Take field measurements before confirming product orders or beginning fabrication, to minimize waste due to over-ordering or misfabrication.

D. 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.

3.2 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.

3.3 PREINSTALLATION MEETINGS

A. When required in individual specification sections of if Contractor determined a need, 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 Architect four work 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 Architect, Owner, participants, and those affected by decisions made.

3.4 TRAFFIC INTERRUPTION

A. Provide a detailed plan of the construction traffic routes and temporary roads to be used to the Owner's representative for approval prior to starting any work. Notify Owner's representative one week in advance of any anticipated work affecting traffic flow. Provide all necessary traffic control devices and temporary signs to insure the safety of motorists and pedestrians. Coordinate with municipal traffic department requirements.

3.5 LAYING OUT THE WORK

A. Portions of Work Indicated to Fit Other Construction: Verify dimension of other construction by filed measurements before fabrication,. Coordinate fabrication schedule with construction progress to avoid delaying the work.
    1. Space Requirements: Verify space requirements and dimension of items shown diagrammatically on Drawings.
    2. Review of Contract Documents and Field Conditions: Immediately upon discovery of then need for clarification of the contract Documents, submit a request for information to Architect. Include a detailed description of problem encountered together with recommendations for changing the Contract Documents.
B. Verify locations of survey control points prior to starting work.
C. Promptly notify Architect of any discrepancies discovered.
D. Contractor shall locate and protect survey control and reference points.
E. Control datum for survey is that established by Owner provided survey.
F. Protect survey control points prior to starting site work; preserve permanent reference points during construction.
G. Promptly report to Architect the loss or destruction of any reference point or relocation required because of changes in grades or other reasons.
H. Replace dislocated survey control points based on original survey control. Make no changes without prior written notice to Architect.
I. Utilize recognized engineering survey practices.
J. 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.
K. 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, invert elevations, and items requested by Owner.
    2. Grid or axis for structures.
    3. Building foundation, column locations, and ground floor elevations.
L. Periodically verify layouts by same means.
M. Maintain a complete and accurate log of control and survey work as it progresses.
    1. Record deviation form required lines and levels. Include:
        a. Beginning and ending dates and times.
        b. Weather conditions.
        c. Name and duty of each survey party member.
        d. Type of instruments and tapes used.
    2. Create log and make available for reference by Architect.
N. On completion of foundation walls and major site improvements, prepare a certified survey illustrating dimensions, locations, angles, and elevations of construction and site work.

3.6 GENERAL INSTALLATION REQUIREMENTS

A. 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.
B. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
C. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.
D. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.
E. Make neat transitions between different surfaces, maintaining texture and appearance.

3.7 CUTTING AND PATCHING

A. Repair or remove and replace defective construction. Restore damaged substrates and finishes.
    1. Repairing includes:
        a. Replacing defective parts
        b. Refinishing damaged surfaces
        c. Touching up with matching materials
        d. Properly adjusting operating equipment.
B. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.
C. Whenever possible, execute the work by methods that avoid cutting or patching.
D. 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. Repair components that do not operate properly.
    8. Remove samples of installed work for testing when requested.
    9. Remove and replace operating components that cannot be repaired.
    10. Remove and replace chipped, scratched, and broken glass and any other defective and non-conforming work.
E. 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.
F. Employ original installer to perform cutting for weather exposed and moisture resistant elements, and sight exposed surfaces.
G. Cut rigid materials using masonry saw, core drill or manufacturer’s recommended cutting tool. Pneumatic tools not allowed without prior approval.
H. Restore work with new products in accordance with requirements of Contract Documents.
I. Fit work air tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
J. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material in accordance with Section 078400, to full thickness of the penetrated element.
K. 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.

3.8 PROGRESS CLEANING

A. Dispose of materials lawfully.
    1. Containerize hazardous and sanitary waste materials separately from other waste.
    2. Mark containers appropriately and dispose of legally, according to regulations.
B. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
C. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.
D. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
E. Collect and remove waste materials, debris, and trash/rubbish from site periodically and dispose off-site. Burning or burying waste materials on-site is not permitted. Washing waste materials down sewers or into waterways is not permitted.
F. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.

3.9 PROTECTION OF INSTALLED WORK

A. Protect installed work from damage by construction operations.
B. Provide special protection where specified in individual specification sections.
C. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
D. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
E. Keep installed work clean. Clean installed surfaces according to written instruction of manufacturer or fabricator of product installed. If specific cleanings materials are not recommended, use cleaning materials that are not hazardous to health or property, and that will not damage exposed surfaces.
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. 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.
H. Remove protective coverings when no longer needed; reuse or recycle plastic coverings if possible.
I. Comply with all manufacturers' written instruction for temperature and relative humidity. Refer to Division 01, Section 015300.

3.10 SYSTEM STARTUP

A. Coordinate schedule for start-up of various equipment and systems.
B. 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.
C. Verify tests, meter readings, and specified electrical characteristics agree with those required by the equipment or system manufacturer.
D. Verify that wiring and support components for equipment are complete and tested.
E. Execute start-up under supervision of applicable Contractor personnel and manufacturer's representative in accordance with manufacturers' instructions.
F. Start equipment and operating components to confirm proper operation. Remove malfunctioning units and replace with new units. Test new units.
G. 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.
H. Submit a written report that equipment or system has been properly installed and is functioning correctly.

3.11 DEMONSTRATION AND INSTRUCTION

A. See Section 017900 - Demonstration and Training.

3.12 ADJUSTING

A. Adjust operating products and equipment to ensure smooth and unhindered operation.

3.13 FINAL CLEANING

A. Execute final cleaning prior to final project assessment.
    1. Clean areas to be occupied by Owner prior to final completion before Owner occupancy.
B. Use cleaning materials that are nonhazardous.
C. 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.
D. Remove all labels that are not permanent. Do not paint or otherwise cover fire test labels or nameplates on mechanical and electrical equipment, including fire rated doors and frames.
E. Clean equipment and fixtures to a sanitary condition with cleaning materials appropriate to the surface and material being cleaned.
F. Clean filters of operating equipment.
G. Clean debris from roofs, gutters, downspouts, and drainage systems.
H. Clean site; sweep paved areas, rake clean landscaped surfaces.
I. Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of in legal manner; do not burn or bury on site.
J. Engage an experienced, licensed exterminator to make a final inspection and rid Project of rodents, insects, and other pests. Prepare a report and provide to Owner with a copy of warranty.

3.14 SUBSTANTIAL COMPLETION

A. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete in request.
    1. Prepare a list of items to be completed and corrected (punch list), identify the value of items on the list, and reasons why the Work is not complete. Include an expected date of completion.
    2. Advise Owner of pending insurance changeover requirements.

3. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents
4. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
5. Prepare and submit Project Record Documents, operation and maintenance manuals, Final Completion construction photographs and photographic negatives, damage or settlement surveys, property surveys, and similar final record information.
6. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
7. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
8. Complete startup testing of systems.
9. Submit test/adjust/balance records, if any.
10. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
11. Advise Owner of changeover in heat and other utilities.
12. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
13. Complete final cleaning requirements, including touchup painting.
14. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

3.15 CLOSEOUT PROCEDURES

A. Make submittals that are required by governing or other authorities.
   1. Provide copies to Architect and Owner.
B. Accompany Architect on preliminary inspection to determine items to be listed for completion or correction in Contractor's Notice of Substantial Completion.
C. Notify Architect when work is considered ready for Substantial Completion and Architect’s review.
D. Submit written certification that Contract Documents have been reviewed, work has been inspected, and that work is complete in accordance with Contract Documents and ready for Architect's review.
E. Correct items of work listed in executed Certificates of Substantial Completion and comply with requirements for access to Owner-occupied areas.
F. Notify Architect when work is considered finally complete.
G. Complete items of work determined by Architect's final inspection.

3.16 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 017419**

**CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL**

## 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 the following:

1. Special requirements for waste management during demolition, renovation and construction operations.
    a. Protect the environment, both on-site and off-site, during demolition, renovation, and construction operations.
    b. Prevent environmental pollution and damage.
    c. Maximize source reduction, reuse and recycling of solid waste.
2. Monitoring requirements.

B. Related Sections include but are not limited to, the following:
1. Section 013000 Administrative Requirements
2. Section 07000 Execution and Closeout requirements

1.3 DEFINITIONS

A. Definitions pertaining to sustainable development. As defined in ASTM E2114.

B. Environmental pollution and damage: The presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances; or degrade the utility of the environment for aesthetic, cultural, or historical purposes.

C. Solid Waste: Garbage, debris, sludge, or other discharged material (except hazardous waste) including solid, liquid, semisolid, or contained gaseous materials resulting from domestic, industrial, commercial, mining, or agricultural operations. Material not regulated as solid waste are: nuclear source or byproduct materials regulated under the Federal Atomic Energy Act of 1954 as amended; suspended or dissolved materials and domestic sewage effluent or irrigation return flows, or other regulated point source discharges; regulated air emissions; and fluids or wastes associated with natural gas or crude oil exploration or production.

D. Debris: Non-hazardous solid material generated during the construction, demolition, or renovation of a structure and which exceeds 60 mm (2.5 inch) particle size that is: a manufactured object; plant or animal matter; or natural geological material (e.g. cobbles and boulders). A mixture of debris and other material such as soil or sludge is also subject to regulation as debris if the mixture is comprised primarily of debris by volume, based on visual inspection.

E. Garbage: Refuse and scraps resulting from preparation, cooking, dispensing, and consumption of food.

F. Hazardous Waste: Hazardous waste as defined in 40 CFR 261 or as defined by applicable State and local regulation.

G. Hazardous Materials: Any material that is regulated as a hazardous material in accordance with 49 CFR 173, requires a Material Safety Data Sheet (MSDS) in accordance with 29 CFR 1910.1200, or which during end use, treatment, handling, storage, transportation or disposal meets or has components which meet or have the potential to meet the definition of a Hazardous Waste in accordance with 40 CFR 261. Throughout this specification, hazardous material includes hazardous chemicals.

1.4 QUALITY ASSURANCE

A. Maximize use of source reduction and recycling procedures outlined in ASTMD5834.

B. Diversion Goals: A minimum 50 percent by weight of total project solid waste to be diverted from landfill.

1.5 PRECONSTRUCTION MEETING

A. After award of Contract and prior to the commencement of the Work, schedule and conduct meeting with Owner and Architect to discuss the proposed Waste Management Plan and to develop mutual understanding relative to details of environmental protection.

1.6 ACTION SUBMITTALS

A. Solid Waste Management Plan: Not less than 10 days before the Pre-construction meeting, prepare and submit a Solid Waste Management Plan including, but not limited to, the following:

1. List of the recycling facilities, reuse facilities, municipal solid waste landfills and other disposal area(s) to be used. Include:

a. Name, location, and phone number
b. Copy of permit or license for each facility.

2. Identify materials that cannot be recycled or reused. Provide explanation or justification.

3. Revise and resubmit Plan as required by Owner.

a. Approval of Contractor's Plan will not relieve the Contractor of responsibility for compliance with applicable environmental regulation.

1.7 INFORMATIONAL SUBMITTALS

A. Progress Documentation: Document solid waste disposal and diversion. Include the quantity by weight of waste generated; waste diverted through sale, reuse, or recycling; and waste disposed by landfill or incineration. Identify landfills, recycling centers, waste processors, and other organizations that process or receive the solid waste.

1. Document on form in Appendix A of this Section, or similar form as approved by Owner

2. With each Application for Payment, submit updated Documentation for solid waste disposal and diversion.

3. With each Application for Payment, submit manifests, weight tickets, receipts, and invoices specifically identifying the Project and waste material.
a. Submit copies to Owner's designated representative.

B. Record Submittals: With Record Submittals as specified in Section 017839, submit the following:

1. Summary of solid waste disposal and diversion. Submit on form in Appendix A of this Section, or similar form as approved by Owner

**PART 2 – PRODUCTS – Not Used**

**PART 3 – EXECUTION**

3.1 SOLID WASTE MANAGEMENT

A. Develop and implement a waste management program in accordance with ASTME1609 and as specified herein.

B. Collection: Implement a recycling/reuse program that includes separate collection of waste materials of the following types as appropriate to the project waste and to the available recycling and reuse programs in the project are:

1. Land clearing debris.
    a. Asphalt
    b. Concrete
2. Metal.
    a. Ferrous.
    b. Non-ferrous.
3. Wood, nails and staples allowed.
4. Debris.
5. Glass, colored glass allowed.
6. Paper.
    a. Bond
    b. Newsprint.
    c. Cardboard and paper packaging materials.
7. Plastic
    a. Type 1: Polyethylene Terephthalate (PET, PETE).
    b. Type 2: High Density Polyethylene (HDPE).
    c. Type 3: Vinyl (Polyvinyl Chloride or PVC).
    d. Type 4: Low Density Polyethylene (LDPE).
    e. Type 5: Polypropylene (PP).
    f. Type 6: Polystyrene (PS).
    g. Type 7: Other. Use of this code indicates that the package in question is made with a resin other than the six listed above, or is made of more than one resin listed above, and used in a multi-layer combination.
8. Gypsum.
9. Paint and paint cans.
10. Carpet.

11. Insulation

12. Others as appropriate.

1. Recycling/Reuse: Maximize recycling and reuse of materials.

    1. Recycling/Reuse off project site: The following is a partial list for Contractor's information only.

        a. Habitat for Humanity, a non-profit housing organization that rehabilitates and builds housing for low-income families. Sites requiring donated materials vary. Contact the national hotline (800) HABITAT.
        b. California Materials Exchange (CAL-MAX) Program sponsored by the California Integrated Waste Management Board; (916) 255-2369

2. Handling:

    1. Clean materials that are contaminated prior to placing in collection containers. Deliver materials free of dirt, adhesives, solvents, petroleum contamination and other substances deleterious to recycling process.

    2. Arrange for collection by or delivery to the appropriate recycling or reuse facility.

    3. Hazardous Waste and Hazardous Materials: Handle in accordance with applicable regulations.

3. Composting: In accordance with State Extension Service recommendations and as follows:

    1. Moisture content: Maintain between 35 percent and 60 percent.

    2. Carbon to nitrogen (C/N) ratio: Maintain at approximately 30 to 1 by weight.

    3. Do not compost meat or dairy products on site.

    4. Where the proposed Waste Management Plan incorporates composting of plastics, assess the potential effect of each type of plastic to be included on the composting process in accordance with ASTM D5509 or ASTMD5512.

**END OF SECTION**

**SECTION 017800**

**CLOSEOUT SUBMITTALS**

## PART 1 - GENERAL

1.1 SECTION INCLUDES
- A. Project Record Documents.
- B. Operation and Maintenance Data.
- C. Warranties and bonds.

1.2 SUBMITTALS
- A. Project Record Documents: Submit documents to Architect and Owner 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. Architect 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 Architect 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.
- D. In addition to hard copies indicated herein, consolidate all closeout submittals in pdf form on CDR, one for Owner and one for Architect.

## PART 2 - PRODUCTS - NOT USED

## PART 3 - EXECUTION

3.1 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.

3.2 OPERATION AND MAINTENANCE DATA

A. 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.

3.3 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.

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. Provide a listing in Table of Contents for design data, with tabbed fly sheet and space for insertion of data.

3.4 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. 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.

C. Maintenance Requirements: Include routine procedures and guide for preventative maintenance and troubleshooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.

D. Provide servicing and lubrication schedule, and list of lubricants required.

E. Include manufacturer's printed operation and maintenance instructions.

F. Include sequence of operation by controls manufacturer.

G. Provide original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.

H. Additional Requirements: As specified in individual product specification sections.

3.5 OPERATION AND MAINTENANCE MANUALS

A. Prepare instructions and data by personnel experienced in maintenance and operation of described products.

B. Prepare data in the form of an instructional manual.

C. Binders: Commercial quality, 8-1/2 by 11 inch three D side ring binders with durable plastic covers; 2 inch 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. Provide tabbed dividers for each separate product and system, with typed description of product and major component parts of equipment.

F. Text: Manufacturer's printed data, or typewritten data on 24 pound paper.

G. Drawings: Provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.

H. Arrange content by systems under section numbers and sequence of Table of Contents of this Project Manual.

I. Contents: Prepare a Table of Contents for each volume, with each product or system description identified, in three parts as follows:
   1. Part 1: Directory, listing names, addresses, and telephone numbers of Architect, Contractor, Subcontractors, and major equipment suppliers.
   2. Part 2: Operation and maintenance instructions, arranged by system and subdivided by specification section. For each category, identify names, addresses, and telephone numbers of Subcontractors and suppliers. Identify the following:

a. Significant design criteria.
b. List of equipment.
c. Parts list for each component.
d. Operating instructions.
e. Maintenance instructions for equipment and systems.
f. Maintenance instructions for special finishes, including recommended cleaning methods and materials, and special precautions identifying detrimental agents.

3. Part 3: Project documents and certificates, including the following:
   a. Shop drawings and product data.

J. Provide a listing in Table of Contents for design data, with tabbed dividers and space for insertion of data.

K. Table of Contents: Provide title of Project; names, addresses, and telephone numbers of Architect , Consultants, and Contractor with name of responsible parties; schedule of products and systems, indexed to content of the volume.

3.6 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 the 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. Manual: Bind in commercial quality 8-1/2 by 11 inch three side D-ring binders with durable plastic covers.

F. 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.

G. 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.

H. 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 4100
## DEMOLITION

### PART 1 GENERAL

### 1.01 SECTION INCLUDES

A. Selective demolition of built site elements.

B. Selective demolition of building elements for alteration purposes.

### 1.02 REFERENCE STANDARDS

A. 29 CFR 1926 - U.S. Occupational Safety and Health Standards; current edition.

B. NFPA 241 - Standard for Safeguarding Construction, Alteration, and Demolition Operations; 2013.

### 1.03 SUBMITTALS

A. Site Plan: Showing:
   1. Areas for temporary construction and field offices.

B. Project Record Documents: Accurately record actual locations of capped and active utilities and subsurface construction.

### PART 3 EXECUTION

### 2.01 SCOPE

A. Remove portions of existing elements as indicated on drawings:
   1. Kitchen.
   2. Field Dugouts.
   3. Lighting.

B. Remove other items indicated, for salvage, relocation, and recycling.

### 2.02 GENERAL PROCEDURES AND PROJECT CONDITIONS

A. Comply with applicable codes and regulations for demolition operations and safety of adjacent structures and the public.
   1. Obtain required permits.
   2. Take precautions to prevent catastrophic or uncontrolled collapse of structures to be removed; do not allow worker or public access within range of potential collapse of unstable structures.
   3. Provide, erect, and maintain temporary barriers and security devices.
   4. Conduct operations to minimize effects on and interference with adjacent structures and occupants.
   5. Do not close or obstruct roadways or sidewalks without permit.
   6. Conduct operations to minimize obstruction of public and private entrances and exits; do not obstruct required exits at any time; protect persons using entrances and exits from removal operations.
   7. Obtain written permission from owners of adjacent properties when demolition equipment will traverse, infringe upon or limit access to their property.

B. Do not begin removal until receipt of notification to proceed from Owner.

C. Protect existing structures and other elements that are not to be removed.
   1. Provide bracing and shoring.
   2. Prevent movement or settlement of adjacent structures.
   3. Stop work immediately if adjacent structures appear to be in danger.

D. Minimize production of dust due to demolition operations; do not use water if that will result in ice, flooding, sedimentation of public waterways or storm sewers, or other pollution.

E. If hazardous materials are discovered during removal operations, stop work and notify Engineer and Owner; hazardous materials include regulated asbestos containing materials, lead, PCB's, and mercury.

F. Perform demolition in a manner that maximizes salvage and recycling of materials.
   1. Dismantle existing construction and separate materials.
   2. Set aside reusable, recyclable, and salvageable materials; store and deliver to collection point or point of reuse.

### 2.03 EXISTING UTILITIES

A. Coordinate work with utility companies; notify before starting work and comply with their requirements; obtain required permits.

B. Protect existing utilities to remain from damage.

C. Do not disrupt public utilities without permit from authority having jurisdiction.

D. Do not close, shut off, or disrupt existing life safety systems that are in use without at least 7 days prior written notification to Owner.

E. Do not close, shut off, or disrupt existing utility branches or take-offs that are in use without at least 3 days prior written notification to Owner.

F. Locate and mark utilities to remain; mark using highly visible tags or flags, with identification of utility type; protect from damage due to subsequent construction, using substantial barricades if necessary.

G. Remove exposed piping, valves, meters, equipment, supports, and foundations of disconnected and abandoned utilities.

H. Prepare building demolition areas by disconnecting and capping utilities outside the demolition zone; identify and mark utilities to be subsequently reconnected, in same manner as other utilities to remain.

**2.04 SELECTIVE DEMOLITION FOR 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 demolition work constitutes acceptance of existing conditions that would be apparent upon examination prior to starting demolition.

B. Separate areas in which demolition is being conducted from other areas that are still occupied.
   1. Provide, erect, and maintain temporary dustproof partitions of construction as directed by owner. .

C. Maintain weatherproof exterior building enclosure except for interruptions required for replacement or modifications; take care to prevent water and humidity damage.

D. Remove existing work as indicated and as required to accomplish new work.
   1. Remove items indicated on drawings.

E. Services (Including but not limited to HVAC, Plumbing, Fire Protection, Electrical, and Telecommunications): Remove existing systems and equipment as indicated.
   1. Maintain existing active systems that are to remain in operation; maintain access to equipment and operational components.
   2. 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.
   3. Verify that abandoned services serve only abandoned facilities before removal.
   4. 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.

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.
   4. Patch as specified for patching new work.

**2.05 DEBRIS AND WASTE REMOVAL**

A. Remove debris, junk, and trash from site.

B. Leave site in clean condition, ready for subsequent work.

C. Clean up spillage and wind-blown debris from public and private lands.

**END OF SECTION**

## SECTION 05 5213

## PIPE AND TUBE RAILINGS

### PART 1 GENERAL

### 1.01 SECTION INCLUDES

A. Free-standing railings at steps.

### 1.02 RELATED REQUIREMENTS

A. Section 09 9113 - Exterior Painting: Paint finish.

### 1.03 REFERENCE STANDARDS

A. ASTM A53/A53M - Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless; 2012.

B. ASTM A123/A123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products; 2015.

C. ASTM E935 - Standard Test Methods for Performance of Permanent Metal Railing Systems and Rails for Buildings; 2013.

D. ASTM E985 - Standard Specification for Permanent Metal Railing Systems and Rails for Buildings; 2000 (Reapproved 2006).

E. SSPC-Paint 15 - Steel Joist Shop Primer/Metal Building Primer; 1999 (Ed. 2004).

F. SSPC-Paint 20 - Zinc-Rich Primers (Type I, "Inorganic," and Type II, "Organic"); 2002 (Ed. 2004).

### 1.04 SUBMITTALS

A. Shop Drawings: Indicate profiles, sizes, connection attachments, anchorage, size and type of fasteners, and accessories.

### PART 2 PRODUCTS

### 2.01 MANUFACTURERS

A. Handrails and Railings:
   1. C.R. Laurence Co., Inc; CRL Welded Post Railing Systems (WRS): www.crl-arch.com.
   2. Kee Safety, Inc; Kee Klamp (steel): www.keesafety.com.

### 2.02 RAILINGS - GENERAL REQUIREMENTS

A. Design, fabricate, and test railing assemblies in accordance with the most stringent requirements of ASTM E985 and applicable local code.

B. Concentrated Loads: Design railing assembly, wall rails, and attachments to resist a concentrated force of 200 pounds (890 N) applied at any point on the top of the assembly and in any direction, without damage or permanent set. Test in accordance with ASTM E935.

C. Allow for expansion and contraction of members and building movement without damage to connections or members.

D. Dimensions: See drawings for configurations and heights.

E. Provide anchors and other components as required to attach to structure, made of same materials as railing components unless otherwise indicated; where exposed fasteners are unavoidable provide flush countersunk fasteners.

F. Provide welding fittings to join lengths, seal open ends, and conceal exposed mounting bolts and nuts, including but not limited to elbows, T-shapes, splice connectors, flanges, escutcheons, and wall brackets.

### 2.03 STEEL RAILING SYSTEM

A. Steel Pipe: ASTM A53/A53M, Grade B Schedule 80, galvanized finish.

B. Welding Fittings: Factory- or shop-welded from matching pipe or tube; seams continuously welded; joints and seams ground smooth.

C. Galvanizing: In accordance with requirements of ASTM A123/A123M.
   1. Touch-Up Primer for Galvanized Surfaces: SSPC-Paint 20, Type I - Inorganic.

D. Shop and Touch-Up Primer: SSPC-Paint 15, complying with VOC limitations of authorities having jurisdiction.

**2.04 FABRICATION**

A. Accurately form components to suit specific project conditions and for proper connection to building structure.

B. Fit and shop assemble components in largest practical sizes for delivery to site.

C. Fabricate components with joints tightly fitted and secured. Provide spigots and sleeves to accommodate site assembly and installation.

D. Welded Joints:

1. Exterior Components: Continuously seal joined pieces by intermittent welds and plastic filler. Drill condensate drainage holes at bottom of members at locations that will not encourage water intrusion.
2. 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.

**PART 3 EXECUTION**

**3.01 EXAMINATION**

A. Verify that field conditions are acceptable and are ready to receive work.

**3.02 PREPARATION**

A. Clean and strip primed steel items to bare metal where site welding is required.

B. Supply items required to be cast into concrete or embedded in masonry with setting templates, for installation as work of other sections.

**3.03 INSTALLATION**

A. Install in accordance with manufacturer's instructions.

B. Install components plumb and level, accurately fitted, free from distortion or defects, with tight joints.

C. Anchor railings securely to structure.

**3.04 TOLERANCES**

A. Maximum Variation From Plumb: 1/4 inch (6 mm) per floor level, non-cumulative.

B. Maximum Offset From True Alignment: 1/4 inch (6 mm).

C. Maximum Out-of-Position: 1/4 inch (6 mm).

**END OF SECTION**

## SECTION 06 1000

## ROUGH CARPENTRY

### PART 1 GENERAL

### 1.01 SECTION INCLUDES

A. Rough opening framing for doors, windows, and roof openings.

B. Concealed wood blocking, nailers, and supports.

C. Miscellaneous wood nailers, furring, and grounds.

### 1.02 REFERENCE STANDARDS

A. ANSI A208.1 - American National Standard for Particleboard; 2009.

B. ASTM A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware; 2009.

C. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2015.

D. ASTM C208 - Standard Specification for Cellulosic Fiber Insulating Board; 2012.

E. ASTM C578 - Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation; 2015a.

F. ASTM C1177/C1177M - Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing; 2013.

G. ASTM C1396/C1396M - Standard Specification for Gypsum Board; 2014.

H. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2015a.

I. PS 20 - American Softwood Lumber Standard; 2010.

### 1.03 SUBMITTALS

A. Product Data: Provide technical data on insulated sheathing, wood preservative materials, and application instructions.

### 1.04 DELIVERY, STORAGE, AND HANDLING

A. General: Cover wood products to protect against moisture. Support stacked products to prevent deformation and to allow air circulation.

### PART 2 PRODUCTS

### 2.01 GENERAL REQUIREMENTS

A. Dimension Lumber: Comply with 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.

B. Lumber fabricated from old growth timber is not permitted.

### 2.02 DIMENSION LUMBER FOR CONCEALED APPLICATIONS

A. Sizes: Nominal sizes as indicated on drawings, S4S.

B. Moisture Content: S-dry or MC19.

C. Miscellaneous Framing, Blocking, Nailers, Grounds, and Furring:
   1. Lumber: S4S, No. 2 or Standard Grade.
   2. Boards: Standard or No. 3.

### 2.03 CONSTRUCTION PANELS

A. Wall Sheathing: Glass mat faced gypsum with integral water-resistive and air barrier, ASTM C1177/C1177M, 5/8 inch (15.9 mm) thick.
   1. Edges: Square.
   2. Glass Mat Faced Products:

### 2.04 ACCESSORIES

A. Fasteners and Anchors:
   1. Metal and Finish: Hot-dipped galvanized steel complying with ASTM A153/A153M for high humidity and preservative-treated wood locations, unfinished steel elsewhere.

2. Drywall Screws: Bugle head, hardened steel, power driven type, length three times thickness of sheathing.

## PART 3 EXECUTION

### 3.01 INSTALLATION - GENERAL

A. Select material sizes to minimize waste.

B. Reuse scrap to the greatest extent possible; clearly separate scrap for use on site as accessory components, including: shims, bracing, and blocking.

### 3.02 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 framed assemblies that have concealed spaces, provide solid wood fireblocking as required by applicable local code, to close concealed draft openings between floors and between top story and roof/attic space; other material acceptable to code authorities may be used in lieu of solid wood blocking.

C. In metal stud walls, provide continuous blocking around door and window openings for anchorage of frames, securely attached to stud framing.

D. 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.

E. Where ceiling-mounting is indicated, provide blocking and supplementary supports above ceiling, unless other method of support is explicitly indicated.

F. Provide the following specific non-structural framing and blocking:
1. Cabinets and shelf supports.
2. Wall brackets.
3. Wall-mounted door stops.

### 3.03 INSTALLATION OF CONSTRUCTION PANELS

### 3.04 CLEANING

A. Waste Disposal: Comply with the requirements of Section 01 7419 - Construction Waste Management and 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 06 4100

## ARCHITECTURAL WOOD CASEWORK

### PART 1 GENERAL

#### 1.01 SECTION INCLUDES

A. Specially fabricated cabinet units.

B. Cabinet hardware.

C. Preparation for installing utilities.

#### 1.02 RELATED REQUIREMENTS

A. Section 06 1000 - Rough Carpentry: Support framing, grounds, and concealed blocking.

B. Section 12 3600 - Countertops.

C. Section 09 9123 - Interior Painting: Site finishing of cabinet exterior.

#### 1.03 REFERENCE STANDARDS

A. AWI/AWMAC/WI (AWS) - Architectural Woodwork Standards; 2014.

B. AWI (QCP) - Quality Certification Program; current edition at www.awiqcp.org.

C. BHMA A156.9 - American National Standard for Cabinet Hardware; 2010.

D. GSA CID A-A-1936 - Adhesive, Contact, Neoprene Rubber; Revision A, 1996.

E. HPVA HP-1 - American National Standard for Hardwood and Decorative Plywood; 2009.

F. NEMA LD 3 - High-Pressure Decorative Laminates; 2005.

G. WI (CCP) - Certified Compliance Program (CCP); current edition at www.woodworkinstitute.com.

H. WI (MCP) - Monitored Compliance Program (MCP); current edition at www.woodworkinstitute.com.

#### 1.04 SUBMITTALS

A. Shop Drawings: Indicate materials, component profiles, fastening methods, jointing details, and accessories.

B. Product Data: Provide data for hardware accessories.

C. Samples: Submit actual samples of architectural cabinet construction, minimum 12 inches (300 mm) square, illustrating proposed cabinet and countertop substrate and finish.

D. Samples: Submit actual sample items of proposed pulls, hinges, shelf standards, and locksets, demonstrating hardware design, quality, and finish.

#### 1.05 QUALITY ASSURANCE

A. Fabricator Qualifications: Company specializing in fabricating the products specified in this section with minimum five years of documented experience.
   1. Accredited participant in the specified certification program prior to the commencement of fabrication and throughout the duration of the project.

B. Quality Certification: Provide AWI (QCP) inspection report and quality certification of completed work.
   1. Provide labels or certificates indicating that the work complies with requirements of AWI/AWMAC/WI (AWS) Grade or Grades specified.
   2. Prior to delivery to the site provide shop drawings with certification labels.
   3. Provide labels on each product when required by certification program.
   4. Upon completion of installation provide certificate certifying that the installation and products meet the specified requirements.
   5. Arrange and pay for inspections required for certification.
   6. Replace, repair, or rework all work for which certification is refused.

#### 1.06 DELIVERY, STORAGE, AND HANDLING

A. Protect units from moisture damage.

#### 1.07 FIELD CONDITIONS

A. During and after installation of custom cabinets, maintain temperature and humidity conditions in building spaces at same levels planned for occupancy.

## PART 2 PRODUCTS

### 2.01 MANUFACTURERS

A. Single Source Responsibility: Provide and install this work from single fabricator.

### 2.02 CABINETS

A. Quality Grade: Unless otherwise indicated provide products of quality specified by AWI/AWMAC/WI (AWS) for Custom Grade.

B. Wood Veneer Faced Cabinet:
   1. Exposed Surfaces: HPVA HP-1 Grade A, plain sliced, random-matched.

C. Cabinets:
   1. Finish - Exposed Exterior Surfaces: Decorative laminate.
   2. Finish - Exposed Interior Surfaces: Wood.
   3. Finish - Concealed Surfaces: Wood.
   4. Door and Drawer Front Edge Profiles: Square edge with thin applied band.
   5. Casework Construction Type: Type A - Frameless.
   6. Drawer Side Construction: Multiple-dovetailed.
   7. Drawer Construction Technique: Dovetail joints.

### 2.03 WOOD-BASED COMPONENTS

A. Wood fabricated from old growth timber is not permitted.

B. Provide sustainably harvested wood, certified or labeled as specified in Section 01 6000.

### 2.04 LAMINATE MATERIALS

A. Manufacturers:
   1. Wilsonart; Brazilwood 7946: www.wilsonart.com.

### 2.05 ACCESSORIES

A. Adhesive: Type recommended by fabricator to suit application.

B. Fasteners: Size and type to suit application.

C. Bolts, Nuts, Washers, Lags, Pins, and Screws: Of size and type to suit application; galvanized or chrome-plated finish in concealed locations and stainless steel or chrome-plated finish in exposed locations.

D. Concealed Joint Fasteners: Threaded steel.

### 2.06 HARDWARE

A. Hardware: BHMA A156.9, types as recommended by fabricator for quality grade specified.

B. Drawer and Door Pulls: "U" shaped wire pull, steel with chrome finish, 4 inch centers ("U" shaped wire pull, steel with chrome finish, 100 mm centers).

C. Cabinet Locks: Keyed cylinder, two keys per lock, master keyed, steel with chrome finish.

D. Drawer Slides:
   1. Static Load Capacity: Commercial grade.
   2. Mounting: Side mounted.
   3. Stops: Integral type.
   4. Features: Provide self-closing/stay closed type.
   5. Manufacturers:
      a. Accuride International, Inc; www.accuride.com.
      b. Grass America Inc; www.grassusa.com.
      c. Hettich America, LP; www.hettich.com/sle.
      d. Knape & Vogt Manufacturing Company; www.knapeandvogt.com.

E. Hinges: European style concealed self-closing type, steel with polished finish.
   1. Manufacturers:
      a. Grass America Inc; www.grassusa.com.
      b. Hardware Resources; www.hardwareresources.com.
      c. Hettich America, LP; www.hettich.com/sle.
      d. Julius Blum, Inc; www.blum.com.

### 2.07 SHOP TREATMENT OF WOOD MATERIALS

A. Provide UL approved identification on fire retardant treated material.

**2.08 SITE FINISHING MATERIALS**

A. Stain, Shellac, Varnish, and Finishing Materials: As required by AWI/AWMAC/WI (AWS).

**2.09 FABRICATION**

A. Assembly: Shop assemble cabinets for delivery to site in units easily handled and to permit passage through building openings.

B. Edging: Fit shelves, doors, and exposed edges with specified edging. Do not use more than one piece for any single length.

C. Fitting: When necessary to cut and fit on site, provide materials with ample allowance for cutting. Provide matching trim for scribing and site cutting.

D. Provide cutouts for plumbing fixtures. Verify locations of cutouts from on-site dimensions. Prime paint cut edges.

**2.10 SHOP FINISHING**

A. Sand work smooth and set exposed nails and screws.

B. For opaque finishes, apply wood filler in exposed nail and screw indentations and sand smooth.

C. On items to receive transparent finishes, use wood filler matching or blending with surrounding surfaces and of types recommended for applied finishes.

D. Finish work in accordance with AWI/AWMAC/WI (AWS), Section 5 - Finishing for grade specified and as follows:
   1. Opaque:
      a. System - 1, Lacquer, Nitrocellulose.
      b. Color: As selected by Engineer.
      c. Sheen: Flat.

**PART 3 EXECUTION**

**3.01 EXAMINATION**

A. Verify adequacy of backing and support framing.

B. Verify location and sizes of utility rough-in associated with work of this section.

**3.02 INSTALLATION**

A. Set and secure custom cabinets in place, assuring that they are rigid, plumb, and level.

B. Use fixture attachments in concealed locations for wall mounted components.

C. Use concealed joint fasteners to align and secure adjoining cabinet units.

D. Carefully scribe casework abutting other components, with maximum gaps of 1/32 inch (0.79 mm). Do not use additional overlay trim for this purpose.

E. Secure cabinets to floor using appropriate angles and anchorages.

F. Countersink anchorage devices at exposed locations. Conceal with solid wood plugs of species to match surrounding wood; finish flush with surrounding surfaces.

**3.03 ADJUSTING**

A. Adjust installed work.

B. Adjust moving or operating parts to function smoothly and correctly.

**3.04 CLEANING**

A. Clean casework, counters, shelves, hardware, fittings, and fixtures.

**END OF SECTION**

## SECTION 09 6519

## RESILIENT TILE FLOORING

### PART 1 GENERAL

### 1.01 SECTION INCLUDES

A. Resilient tile flooring.

B. Installation accessories:
   1. Adhesives and adhesive encapsulators.
   2. Finishes and cleaners.

### 1.02 REFERENCE STANDARDS

A. ASTM C109/C109M - Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in. or (50-mm) Cube Specimens); 2016a.

B. ASTM D2047 - Standard Test Method for Static Coefficient of Friction of Polish-Coated Floor Surfaces as Measured by the James Machine; 2011.

C. ASTM D4060 - Standard Test Method for Abrasion Resistance of Organic Coatings by the Taber Abraser; 2014.

D. ASTM D6329 - Standard Guide for Developing Methodology for Evaluating the Ability of Indoor Materials to Support Microbial Growth Using Static Environmental Chambers; 1998 (Reapproved 2015).

E. ASTM E648 - Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source; 2014c.

F. ASTM E662 - Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials; 2015a.

G. ASTM F137 - Standard Test Method for Flexibility of Resilient Flooring Materials with Cylindrical Mandrel Apparatus; 2008 (Reapproved 2013).

H. ASTM F386 - Standard Test Method for Thickness of Resilient Flooring Materials Having Flat Surfaces; 2011.

I. ASTM F410 - Standard Test Method for Wear Layer Thickness of Resilient Floor Coverings by Optical Measurement; 2008 (Reapproved 2013).

J. ASTM F710 - Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring; 2011.

K. ASTM F925 - Standard Test Method for Resistance to Chemicals of Resilient Flooring; 2013.

L. ASTM F963 - Standard Consumer Safety Specification for Toy Safety; 2011.

M. ASTM F970 - Standard Test Method for Static Load Limit; 2007 (Reapproved 2011).

N. ASTM F1514 - Standard Test Method for Measuring Heat Stability of Resilient Flooring by Color Change; 2003 (Reapproved 2013).

O. ASTM F1515 - Standard Test Method for Measuring Light Stability of Resilient Flooring by Color Change; 2003 (Reapproved 2008).

P. ASTM F1700 - Standard Specification for Solid Vinyl Tile; 2013a.

Q. ASTM F1869 - Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride; 2011.

R. ASTM F1914 - Standard Test Method for Short-Term Indentation and Residual Indentation of Resilient Floor Covering; 2007 (Reapproved 2011).

S. ASTM F2055 - Standard Test Method for Size and Squareness of Resilient Floor Tile by Dial Gage Method; 2010.

T. ASTM F2170 - Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes; 2011.

U. ASTM F2199 - Standard Test Method for Determining Dimensional Stability of Resilient Floor Tile after Exposure to Heat; 2009 (Reapproved 2014).

V. ASTM F2421 - Standard Test Method for Measurement of Resilient Floor Plank by Dial Gage; 2005 (Reapproved 2011).

W. NFPA 253 - Standard Method of Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source; 2015.

X. NSF 332 - Sustainability Assessment for Resilient Floor Coverings; 2012.

Y. UL 2824 - GREENGUARD Certification Program Method for Measuring Microbial Resistance From Various Sources Using Static Environmental Chambers; Current Edition, Including All Revisions.

**1.03 SUBMITTALS**

A. Shop Drawings.

B. Manufacturer's documentation for flooring and accessories:
   1. Technical Data.
   2. Installation and Maintenance.
   3. Warranty.
   4. Material Safety Data Sheets (MSDS) for accessories.

C. Selection Samples: Submit manufacturer's complete set of color samples for Engineer's initial selection.

**1.04 DELIVERY, STORAGE, AND HANDLING**

A. Upon receipt, immediately remove any shrink-wrap and check materials for damage and the correct style, color, quantity and run numbers.

B. Store all materials flat off of the floor in an acclimatized, weather-tight space between 65 to 85 degrees F (18 to 29 degrees C).

C. Do not double stack pallets.

**1.05 FIELD CONDITIONS**

A. Acclimate material at jobsite between 65 to 85 degrees F (18 to 29 degrees C) and 35 percent to 85 percent relative humidity for 48 hours prior to installation. Temperature and relative humidity should also be maintained at the same levels during installation, and after installation.

B. Spread unopened cartons no more than 6 cartons high and at least 4 inches (101 mm) apart.

C. Keep away from heating and cooling ducts and direct sunlight.

D. If permanent HVAC is not operational, temporary means should be used to maintain the recommended temperature and relative humidity levels.

E. Close areas to traffic during installation of flooring and accessories.

**1.06 WARRANTY**

A. 5 year Commercial warranty.

**PART 2 PRODUCTS**

**2.01 MANUFACTURERS**

A. Other Acceptable Manufacturers:
   1. Armstrong Flooring, www.armstrongflooring.com.

**2.02 RESILIENT TILE FLOORING**

A. Safety Zone Tile, 12" x 12".
   1. Color: Stone Beige, #57005.

**2.03 ACCESSORIES**

A. Moldings, Bases, Transition and Edge Strips:
   1. Product: 6" rubber cove, color Shadow Gray, R6112. manufactured by Armstrong Flooring..

B. Adhesive and Adhesive Encapsulators:
   1. Products:
      a. Armstrong Flooring - use recommended products..

**PART 3 EXECUTION**

**3.01 EXAMINATION .**

A. Install flooring and accessories after other operations (including painting) have been completed.

B. Acceptance of Conditions: Carefully examine all installation areas with installer/applicator present, for compliance with requirements affecting work performance.
   1. Verify that field measurements, product, adhesives, substrates, surfaces, structural support, tolerances, levelness, temperature, humidity, moisture content level, pH, cleanliness and other conditions are as required by the manufacturer, and ready to receive work.

C. Verify that substrate is contaminant-free, including old adhesives and abatement chemicals.

D. Test substrates as required by manufacturer to verify proper conditions exist.
   1. Concrete:
      a. Check for concrete additives such as fly ash, curing compounds, hardeners, or other surface treatments that may prevent proper bonding of floor coverings.
      b. Moisture testing: Perform either the In-Situ Relative Humidity (RH) test (ASTM F2170) or Moisture Vapor Emission Rate (MVER) test (ASTM F1869). Refer to the Manufacturer's Installation Guide/Manual for the maximum allowable substrate moisture content. Substrates above the maximum allowable moisture content will require a moisture mitigation system.
      c. Perform alkalinity testing to verify pH level is between 7 to 10 per ASTM F710.
      d. Check substrate for absorbency per manufacturer's recommendations.
      e. Perform bond testing per ASTM F710 to determine compatibility of adhesive to concrete substrate.

E. Verify that required floor-mounted utilities are in correct location.

**3.02 PREPARATION**

A. Flooring installation should not begin until all site conditions have been assessed, testing has been completed and subfloor conditions are approved.

B. Prepare per manufacturer's written instructions, Section 01 7000, and as follows:
   1. Prepare substrates to ensure proper adhesion of Luxury Vinyl Plank & Tile.
   2. Concrete Substrates: Prepare substrate per ASTM F710.
      a. Verify that subfloor is clean, flat, smooth, free of dirt, rust, paint, oil, wax or any contaminant that will interfere with adhesive bonding.
      b. Mechanically remove substrate coatings that are not compatible with adhesives, such as sealers, curing, hardening or parting compounds, soap, wax, oil, etc.
         1) Do not use solvents or adhesive removers.
      c. Expansion joints, isolation joints, or other moving joints must be honored and not be filled with underlayment products or other materials, and floor coverings must not be laid over them. Expansion joint covering systems should be detailed by the architect or engineer based upon intended usage and aesthetic considerations.
      d. Surface cracks, grooves, depressions, control joints or other non-moving joints, and other irregularities shall be filled or smoothed with high quality Portland cement or calcium aluminate based patching or underlayment compound for filling or smoothing, or both.
         1) Do not skim-coat large areas with patching compound, especially slick power-troweled surfaces.
         2) Sand smooth per manufacturer's instructions.
      e. Slick surfaces such as power troweled concrete shall be profiled as needed to allow for a mechanical bond between the adhesive and subfloor.
      f. Do not use gypsum-based underlayment products and do not skim coat concrete subfloors.
      g. Self-Leveling Underlayments: Provide a dry and smoothly-sanded underlayment substrate ready for installation of Luxury Vinyl Plank & Tile. Underlayment compound shall be moisture-resistant, mildew-resistant, and alkali-resistant and must have a minimum of 3,000 psi compressive strength per ASTM C109/C109M.

**3.03 INSTALLATION**

A. Installation per manufacturer's written instructions and as follows:
   1. Layout shall be specified by Architect, Designer or End User.
   2. Follow layout and ensure installation reference lines are square.
   3. Field tiles shall be installed with directional arrows on back aligned in the same direction, or may be installed in quarter-turned fashion.
   4. Check cartons for and do not mix dye lots.
   5. Adhesives: Adhere flooring to substrate using the full spread method resulting in a completed installation without gaps, voids, raised edges, bubbles or any other surface imperfections.
      a. Select appropriate adhesive, trowel and follow manufacturer's instructions.
      b. Periodically spot-check transfer of adhesive to back of tile during installation.
      c. Roll floor with a 100 pound roller to ensure proper transfer of adhesive and bonding.
      d. Protect floor from traffic per manufacturer's instructions.
      e. Do not wet mop floor until the adhesive has properly set per written instructions.

**3.04 FIELD QUALTITY CONTROL**

A. Site tests and inspections:
   1. Inspect flooring installation for non-conforming work including, but not limited to, the following:

a. Lack of adhesion.
b. Bubbles, loose tiles or raised edges.
c. Dirt and debris underneath flooring.
d. Excessive gaps.
e. Improper substrate preparation as indicated by telegraphing.
f. Damage to tiles, including: dents/indentations, cuts, cracks, burns or punctures.

B. Non-conforming work per General Conditions and as follows:
1. Repair or replace damaged material if not acceptable to the Engineer.

**3.05 CLEANING**

A. Waste Management per Division 01 00 00, and as follows:
1. Coordinate material reclamation program with manufacturer, if applicable.
a. Store and return cartons and pallets to manufacturer or recycler for reuse or recycling.

B. Provide progress cleaning per manufacturer's written instructions and as follows:
1. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the work.
a. Clean and protect completed construction until Date of Substantial Completion.
b. During installation, remove wet adhesive from surface of flooring per manufacturer's instructions.
2. Site: Maintain project site free of waste materials and debris.

C. Provide final cleaning immediately prior to Date of Substantial Completion inspection per manufacturer's written instructions.
1. Protection: Remove manufacturer's and other installed protection immediately prior to Date of Substantial Completion inspection, unless required otherwise.
2. Clean floor with a neutral 6-8 pH cleaner.

**3.06 MAINTENANCE**

A. Initial maintenance per flooring manufacturer’s written instructions and as follows:
1. Allow the adhesive to cure for at least 48 hours prior to wet cleaning the floor.
2. Sweep, dust mop or vacuum the floor thoroughly to remove all loose dirt, dust, grit and debris.
3. Remove any dried adhesive residue from the surface with Black Scuff and Adhesive Remover or mineral spirits applied to a clean, lint-free cloth.
4. Damp mop the floor using a cleaner recommended by the flooring manufacturer.
5. If necessary, scrub the floor using an auto scrubber or rotary machine (300 rpm or less) with a cleaner recommended by the flooring manufacturer. Maintain the proper dilution ratio and use the appropriate scrubbing brush or pad.
6. Thoroughly rinse the entire floor with fresh, clean water. Remove the dirty residue with a wet-vacuum or clean mop and allow the floor to dry completely.

**3.07 PROTECTION**

A. Protect materials from construction operations until Date of Substantial Completion or Owner occupancy, whichever occurs first.
1. Protect finished floor from abuse and damage by using heavy non-staining kraft paper, drop cloths or equivalent. Use additional, non-damaging protective materials as needed.
2. Light foot traffic on a newly installed floor can be permitted after 24 hours.
3. Keep heavy traffic and rolling loads off the newly installed LVT flooring for 48 hours.
4. Protect the floor from rolling traffic by covering with protective boards.

**END OF SECTION**

## SECTION 09 9113
## EXTERIOR PAINTING

### PART 1 GENERAL

### 1.01 SECTION INCLUDES

A. Surface preparation.

B. Field application of paints.

C. Scope: Finish exterior surfaces exposed to view, unless fully factory-finished and unless otherwise indicated.

D. Do Not Paint or Finish the Following Items:
   1. Items factory-finished unless otherwise indicated; materials and products having factory-applied primers are not considered factory finished.
   2. Items indicated to receive other finishes.
   3. Items indicated to remain unfinished.
   4. Fire rating labels, equipment serial number and capacity labels, and operating parts of equipment.
   5. Floors, unless specifically indicated.
   6. Glass.
   7. Concealed pipes, ducts, and conduits.

### 1.02 RELATED REQUIREMENTS

A. Section 09 9123 - Interior Painting.

### 1.03 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 D16 - Standard Terminology for Paint, Related Coatings, Materials, and Applications; 2014.

C. ASTM D4258 - Standard Practice for Surface Cleaning Concrete for Coating; 2005 (Reapproved 2012).

D. ASTM D4259 - Standard Practice for Abrading Concrete; 1988 (Reapproved 2012).

E. ASTM D4260 - Standard Practice for Liquid and Gelled Acid Etching of Concrete; 2005 (Reapproved 2012).

F. ASTM D4442 - Standard Test Methods for Direct Moisture Content Measurement of Wood and Wood-Base Materials; 2007.

G. CARB (SCM) - Suggested Control Measure for Architectural Coatings; California Air Resources Board; 2007.

H. MPI (APL) - Master Painters Institute Approved Products List; Master Painters and Decorators Association; current edition, www.paintinfo.com.

I. SCAQMD 1113 - South Coast Air Quality Management District Rule No.1113; current edition.

J. SSPC V1 (PM1) - Good Painting Practice: Painting Manual, Volume 1; Fourth Edition.

K. SSPC V2 (PM2) - Systems and Specifications: Steel Structures Painting Manual, Volume 2; Fourth Edition.

L. SSPC-SP 1 - Solvent Cleaning; 2015.

M. SSPC-SP 2 - Hand Tool Cleaning; 1982 (Ed. 2004).

N. SSPC-SP 3 - Power Tool Cleaning; 1982 (Ed. 2004).

O. SSPC-SP 6 - Commercial Blast Cleaning; 2007.

P. SSPC-SP 13 - Surface Preparation of Concrete; (Reaffirmed 2015); 2003.

### 1.04 SUBMITTALS

A. Product Data: Provide complete list of products to be used, with the following information for each:
   1. Manufacturer's name, product name and/or catalog number, and general product category (e.g. "alkyd enamel").
   2. MPI product number (e.g. MPI #47).
   3. Cross-reference to specified paint system(s) product is to be used in; include description of each system.

B. Samples: Submit three paper "draw down" samples, 8-1/2 by 11 inches (216 by 279 mm) in size, illustrating range of colors available for each finishing product specified.
   1. Where sheen is specified, submit samples in only that sheen.
   2. Where sheen is not specified, submit each color in each sheen available.
   3. Where sheen is not specified, discuss sheen options with Engineer before preparing samples, to eliminate sheens definitely not required.
   4. Allow 30 days for approval process, after receipt of complete samples by Engineer.
   5. Paint color submittals will not be considered until color submittals for major materials not to be painted, such as masonry, have been approved.

**1.05 MOCK-UP**

A. Locate where directed by Architect.

B. Mock-up may remain as part of the work.

**1.06 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 (7 degrees C) and a maximum of 90 degrees F (32 degrees C), in ventilated area, and as required by manufacturer's instructions.

**1.07 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. Do not apply exterior paint and finishes during rain or snow, or when relative humidity is outside the humidity ranges required by the paint product manufacturer.

D. Provide lighting level of 80 ft candles (860 lx) measured mid-height at substrate surface.

**PART 2 PRODUCTS**

**2.01 MANUFACTURERS**

A. Provide paints and finishes used in any individual system from the same manufacturer; no exceptions.

B. Provide paints and finishes from the same manufacturer to the greatest extent possible.
   1. In the event that a single manufacturer cannot provide specified products, minor exceptions will be permitted provided approval by Engineer is obtained using the specified procedures for substitutions.
   2. Substitution of MPI-approved products by a different manufacturer is preferred over substitution of unapproved products by the same manufacturer.
   3. Substitution of other products by the same manufacturer is preferred over substitution of products by a different manufacturer.
   4. Substitution of a different paint system using MPI-approved products by the same manufacturer will be considered.

C. Paints:
   1. Dunn Edwards: www.dunnedwards.com.

**2.02 PAINTS AND FINISHES - GENERAL**

A. Paints and Finishes: Ready mixed, unless required to be a field-catalyzed paint.
   1. Provide paints and finishes 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. For opaque finishes, tint each coat including primer coat and intermediate coats, one-half shade lighter than succeeding coat, with final finish coat as base color.
   3. Supply each paint material in quantity required to complete entire project's work from a single production run.
   4. Do not reduce, thin, or dilute paint or finishes or add materials unless such procedure is specifically described in manufacturer's product instructions.

B. Volatile Organic Compound (VOC) Content:

1. Provide paints and finishes 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.
    b. SCAQMD 1113 Rule.
    c. CARB (SCM).
    d. Ozone Transport Commission (OTC) Model Rule, Architectural, Industrial, and Maintenance Coatings; www.otcair.org; specifically:
        1) Opaque, Flat: 50 g/L, maximum.
        2) Opaque, Nonflat: 150 g/L, maximum.
        3) Opaque, High Gloss: 250 g/L, maximum.
        4) Varnishes: 350 g/L, maximum.
    e. Architectural coatings VOC limits of State in which the project is located.
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.

C. Sheens: Provide the sheens specified; where sheen is not specified, sheen will be selected later by Engineer from the manufacturer's full line.

**2.03 PAINT SYSTEMS - EXTERIOR**

A. Exterior Surfaces to be Painted, Unless Otherwise Indicated: Including concrete, primed wood, and primed metal.
1. Two top coats and one coat primer.
2. Top Coat(s): Exterior Latex.

B. Galvanized Metals, Latex, 3 Coat:
1. One coat galvanize primer.
2. Semi-gloss: Two coats of latex enamel;

**2.04 PRIMERS**

A. Primers: Provide the following unless other primer is required or recommended by manufacturer of top coats.
1. Alkali Resistant Water Based Primer.
2. Rust-Inhibitive Water Based Primer.
    a. Products:
        1) Dunn Edwards Bloc-Rust Primer.

**2.05 ACCESSORY MATERIALS**

A. Accessory Materials: Provide primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials as required for final completion of painted surfaces.

B. Patching Material: Latex filler.

C. Fastener Head Cover Material: Latex filler.

**PART 3 EXECUTION**

**3.01 EXAMINATION**

A. Verify that surfaces are ready to receive work as instructed by the product manufacturer.

B. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially effect proper application.

C. Test shop-applied primer for compatibility with subsequent cover materials.

D. 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. Masonry, Concrete, and Concrete Masonry Units: 12 percent.
2. Exterior Wood: 15 percent, measured in accordance with ASTM D4442.

**3.02 PREPARATION**

A. Clean surfaces thoroughly and correct defects prior to application.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

C. Remove or mask surface appurtenances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces for finishing.

D. Seal surfaces that might cause bleed through or staining of topcoat.

E. Remove mildew from impervious surfaces by scrubbing with solution of tetra-sodium phosphate and bleach. Rinse with clean water and allow surface to dry.

F. Concrete:
   1. Remove release agents, curing compounds, efflorescence, and chalk. Do not coat surfaces if moisture content or alkalinity of surfaces to be coated exceeds that permitted in manufacturer's written instructions.
   2. Clean surfaces with pressurized water. Use pressure range of 1500 to 4000 psi (10,350 to 27,580 kPa) at 6 to 12 inches (150 to 300 mm). Allow to dry.
   3. Clean concrete according to ASTM D4258. Allow to dry.
   4. Prepare surface as recommended by top coat manufacturer and according to SSPC-SP 13.

G. Galvanized Surfaces:
   1. Remove surface contamination and oils and wash with solvent according to SSPC-SP 1.
   2. Prepare surface according to SSPC-SP 2.

H. Exterior Wood Surfaces to Receive Opaque Finish: Remove dust, grit, and foreign matter. Seal knots, pitch streaks, and sappy sections. Fill nail holes with tinted exterior calking compound after prime coat has been applied. Back prime concealed surfaces before installation.

**3.03 APPLICATION**

A. Apply products in accordance with manufacturer's written instructions.

B. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.

C. Apply each coat to uniform appearance.

D. Sand wood and metal surfaces lightly between coats to achieve required finish.

E. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.

F. Reinstall electrical cover plates, hardware, light fixture trim, escutcheons, and fittings removed prior to finishing.

**3.04 FIELD QUALITY CONTROL**

A. Owner will provide field inspection.

**3.05 CLEANING**

A. Collect waste material that could constitute a fire hazard, place in closed metal containers, and remove daily from site.

**3.06 PROTECTION**

A. Protect finishes until completion of project.

B. Touch-up damaged finishes after Substantial Completion.

**3.07 COLOR SCHEDULE**

**END OF SECTION**

## SECTION 09 9123
## INTERIOR PAINTING

### PART 1 GENERAL

### 1.01 SECTION INCLUDES

A. Surface preparation.

B. Field application of paints.

C. Scope: Finish interior surfaces exposed to view, unless fully factory-finished and unless otherwise indicated.

D. Do Not Paint or Finish the Following Items:
   1. Items factory-finished unless otherwise indicated; materials and products having factory-applied primers are not considered factory finished.
   2. Items indicated to receive other finishes.
   3. Items indicated to remain unfinished.
   4. Fire rating labels, equipment serial number and capacity labels, bar code labels, and operating parts of equipment.
   5. Marble, granite, slate, and other natural stones.
   6. Floors, unless specifically indicated.
   7. Glass.
   8. Concealed pipes, ducts, and conduits.

### 1.02 RELATED REQUIREMENTS

A. Section 09 9113 - Exterior Painting.

### 1.03 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 D16 - Standard Terminology for Paint, Related Coatings, Materials, and Applications; 2014.

C. ASTM D4258 - Standard Practice for Surface Cleaning Concrete for Coating; 2005 (Reapproved 2012).

D. ASTM D4259 - Standard Practice for Abrading Concrete; 1988 (Reapproved 2012).

E. ASTM D4260 - Standard Practice for Liquid and Gelled Acid Etching of Concrete; 2005 (Reapproved 2012).

F. ASTM D4442 - Standard Test Methods for Direct Moisture Content Measurement of Wood and Wood-Base Materials; 2007.

G. CARB (SCM) - Suggested Control Measure for Architectural Coatings; California Air Resources Board; 2007.

H. MPI (APL) - Master Painters Institute Approved Products List; Master Painters and Decorators Association; current edition, www.paintinfo.com.

I. SCAQMD 1113 - South Coast Air Quality Management District Rule No.1113; current edition.

J. SSPC V1 (PM1) - Good Painting Practice: Painting Manual, Volume 1; Fourth Edition.

K. SSPC-SP 1 - Solvent Cleaning; 2015.

L. SSPC-SP 2 - Hand Tool Cleaning; 1982 (Ed. 2004).

M. SSPC-SP 3 - Power Tool Cleaning; 1982 (Ed. 2004).

N. SSPC-SP 6 - Commercial Blast Cleaning; 2007.

### 1.04 SUBMITTALS

A. Product Data: Provide complete list of products to be used, with the following information for each:
   1. Manufacturer's name, product name and/or catalog number, and general product category (e.g. "alkyd enamel").
   2. Cross-reference to specified paint system(s) product is to be used in; include description of each system.

B. Samples: Submit three paper "draw down" samples, 8-1/2 by 11 inches (216 by 279 mm) in size, illustrating range of colors available for each finishing product specified.
   1. Where sheen is specified, submit samples in only that sheen.
   2. Where sheen is not specified, submit each color in each sheen available.

3. Where sheen is not specified, discuss sheen options with Engineer before preparing samples, to eliminate sheens definitely not required.
4. Allow 30 days for approval process, after receipt of complete samples by Engineer.
5. Paint color submittals will not be considered until color submittals for major materials not to be painted, such as masonry, have been approved.

**1.05 MOCK-UP**

A. Locate where directed by Architect.

B. Mock-up may remain as part of the work.

**1.06 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 (7 degrees C) and a maximum of 90 degrees F (32 degrees C), in ventilated area, and as required by manufacturer's instructions.

**1.07 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. Provide lighting level of 80 ft candles (860 lx) measured mid-height at substrate surface.

**PART 2 PRODUCTS**

**2.01 MANUFACTURERS**

A. Provide paints and finishes used in any individual system from the same manufacturer; no exceptions.

B. Provide paints and finishes from the same manufacturer to the greatest extent possible.
1. In the event that a single manufacturer cannot provide specified products, minor exceptions will be permitted provided approval by Engineer is obtained using the specified procedures for substitutions.
2. Substitution of MPI-approved products by a different manufacturer is preferred over substitution of unapproved products by the same manufacturer.
3. Substitution of other products by the same manufacturer is preferred over substitution of products by a different manufacturer.
4. Substitution of a different paint system using MPI-approved products by the same manufacturer will be considered.

C. Paints:
1. Dunn Edwards: www.dunnedwards.com.

D. Primer Sealers: Same manufacturer as top coats.

**2.02 PAINTS AND FINISHES - GENERAL**

A. Paints and Finishes: Ready mixed, unless intended to be a field-catalyzed paint.
1. Provide paints and finishes 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 paint material in quantity required to complete entire project's work from a single production run.
3. Do not reduce, thin, or dilute paint or finishes or add materials unless such procedure is specifically described in manufacturer's product instructions.

B. Volatile Organic Compound (VOC) Content:
1. Provide paints and finishes 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.
b. SCAQMD 1113 Rule.
c. CARB (SCM).

d. Ozone Transport Commission (OTC) Model Rule, Architectural, Industrial, and Maintenance Coatings; www.otcair.org; specifically:
   1) Opaque, Flat: 50 g/L, maximum.
   2) Opaque, Nonflat: 150 g/L, maximum.
   3) Opaque, High Gloss: 250 g/L, maximum.
   4) Varnishes: 350 g/L, maximum.
e. Architectural coatings VOC limits of the State in which the Project is located.

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.

C. Flammability: Comply with applicable code for surface burning characteristics.

D. Sheens: Provide the sheens specified; where sheen is not specified, sheen will be selected later by Engineer from the manufacturer's full line.

E. Colors: As indicated on drawings.
1. Selection to be made by Engineer after award of contract.
2. Extend colors to surface edges; colors may change at any edge as directed by Engineer.
3. In utility areas, finish equipment, piping, conduit, and exposed duct work in colors according to the color coding scheme indicated.

**2.03 PAINT SYSTEMS - INTERIOR**

A. Interior Surfaces to be Painted, Unless Otherwise Indicated: Including gypsum board, wood, and plaster.
1. Two top coats and one coat primer.

B. Medium Duty Door/Trim: For surfaces subject to frequent contact by occupants, including wood:
1. Two top coats and one coat primer.

**2.04 PRIMERS**

A. Primers: Provide the following unless other primer is required or recommended by manufacturer of top coats.
1. Interior Institutional Low Odor/VOC Primer Sealer.
2. Interior Drywall Primer Sealer.

**2.05 ACCESSORY MATERIALS**

A. Accessory Materials: Provide primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials as required for final completion of painted surfaces.

B. Patching Material: Latex filler.

C. Fastener Head Cover Material: Latex filler.

**PART 3 EXECUTION**

**3.01 EXAMINATION**

A. Verify that surfaces are ready to receive work as instructed by the product manufacturer.

B. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially effect proper application.

C. Test shop-applied primer for compatibility with subsequent cover materials.

D. 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. Plaster and Stucco: 12 percent.
3. Interior Wood: 15 percent, measured in accordance with ASTM D4442.

**3.02 PREPARATION**

A. Clean surfaces thoroughly and correct defects prior to application.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

C. Remove or mask surface appurtenances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces or finishing.

D. Seal surfaces that might cause bleed through or staining of topcoat.

E. Gypsum Board: Fill minor defects with filler compound. Spot prime defects after repair.

F. Plaster: Fill hairline cracks, small holes, and imperfections with latex patching plaster. Make smooth and flush with adjacent surfaces. Wash and neutralize high alkali surfaces.

G. Wood Surfaces to Receive Opaque Finish: Wipe off dust and grit prior to priming. Seal knots, pitch streaks, and sappy sections with sealer. Fill nail holes and cracks after primer has dried; sand between coats. Back prime concealed surfaces before installation.

**3.03 APPLICATION**

A. Apply products in accordance with manufacturer's written instructions.

B. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.

C. Apply each coat to uniform appearance in thicknesses specified by manufacturer.

D. Sand wood surfaces lightly between coats to achieve required finish.

E. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.

F. Reinstall electrical cover plates, hardware, light fixture trim, escutcheons, and fittings removed prior to finishing.

**3.04 FIELD QUALITY CONTROL**

A. Owner will provide field inspection.

**3.05 CLEANING**

A. Collect waste material that could constitute a fire hazard, place in closed metal containers, and remove daily from site.

**3.06 PROTECTION**

A. Protect finishes until completion of project.

B. Touch-up damaged finishes after Substantial Completion.

**END OF SECTION**

## SECTION 11 4001

## CUSTOM FABRICATED FOODSERVICE EQUIPMENT

### PART 1 GENERAL

### 1.01 SECTION INCLUDES

A. Custom fabricated stainless steel units, including:
   1. Food preparation tables, sinks, and shelving.

### 1.02 REFERENCE STANDARDS

A. ASTM A240/A240M - Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications; 2016.

B. ASTM A666 - Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar; 2015.

C. NSF 2 - Food Equipment; 2014.

D. SMACNA (KVS) - Kitchen Ventilation Systems and Food Service Equipment Fabrication and Installation Guidelines; 2001.

E. SMACNA (SRM) - Seismic Restraint Manual Guidelines for Mechanical Systems; Sheet Metal and Air Conditioning Contractors' National Association; 2008.

### 1.03 SUBMITTALS

A. Product Data: Manufacturer's data sheets on each manufactured product to be used, including:
   1. Preparation instructions and recommendations.
   2. Storage and handling requirements and recommendations.
   3. Installation methods.
   4. Configuration, sizes, materials, finishes, locations, utility connections and locations.

### 1.04 DELIVERY, STORAGE, AND HANDLING

A. Do not deliver fixed equipment that is not to be integrated into structure until after completion of finished ceilings, floor and walls, painting, and lighting.

B. Store products in manufacturer's unopened packaging until ready for installation.

C. Tape fiberboard or plywood to surfaces as required by equipment shape and installation access requirements.

D. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

### 1.05 FIELD CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

### 1.06 WARRANTY

A. Correct defective Work within a one year period after Date of Substantial Completion.

### PART 2 PRODUCTS

### 2.01 MATERIALS

A. Stainless Steel: 18-8 percent chromium-nickel composition, minimum; Type 302, 304, or 316; No. 4 - Brushed finish on exposed surfaces.
   1. Sheets: ASTM A240/A240M or ASTM A666.

B. Bolts, Screws, and Rivets: Stainless steel; do not use on exposed surfaces unless specifically indicated or otherwise unavoidable.
   1. Bolt and Screw Caps: Provide lock washer and chromium-plated brass/bronze acorn nut to cap visible or exposed threads on inside of fixtures.

C. Anchoring Devices: Stainless steel, of type appropriate for use; provide seismic anchorage as specified in SMACNA (KVS).

### 2.02 CUSTOM FABRICATED UNITS - GENERAL REQUIREMENTS

A. See drawings for dimensions and configurations; ensure proper fit by taking field measurements prior to fabrication.

B. Provide fully shop assembled units complying with SMACNA (KVS) and NSF 2, unless indicated otherwise; stainless steel components unless indicated otherwise.
   1. Where details are referenced as "SMACNA" details, refer to SMACNA (KVS).
   2. Stainless Steel Sheet: For surfaces up to 12 feet (3.7 m) in length provide one continuous sheet without joints or welds, including back and end splashes.
   3. Joints: All joints welded unless specifically indicated or impossible; do not solder or braze stainless steel; do not use bolts, screws, or other fasteners on work surfaces, food contact surfaces, or wet surfaces.
   4. Drainage of Surfaces: Provide distinct pitch of all tops toward waste or drain outlets while maintaining level tops of rolled and marine edges and back and end splashes.
   5. Drainage of Equipment: Provide drain piping as indicated; where compartments or pans are intended to hold liquids or catch drips and no drain piping is indicated, provide drain fitting and gravity draining piping terminating over nearest floor drain.
   6. Shop prepare openings for plumbing fixtures, fittings, and other service components.
   7. Sound Deadening: Apply sound deadening material to accessible internal surfaces of metal work and underside of metal counters and sinks.

C. Counter and Table Tops: Stainless steel, 14 gage, 0.0747 inch (1.9 mm) thick, minimum; with underbracing as recommended by SMACNA (KVS), and bullnose edges and 45-degree back and end splashes, unless otherwise indicated.

D. Counter, Table, and Sink Edges: Provide finished edge on all open sides; close open ends down to bottom edge of turn down; if not otherwise indicated provide bullnose edges.
   1. Dish Tables and Counters: Make watertight joint into dishwashing machine.

**2.03 FABRICATION**

A. Joints, Bends, and Edges: Make all joints close fitting, especially butt and contact joints.
   1. Make brake bends free of open-texture or orange peel appearance.
   2. Make sheared edges free of burrs, projections, and fins.
   3. Neatly finish mitered and bullnosed corners with under edge of material ground to uniform condition, without overlapping materials or cracks.

B. Welding: Make all welded joints smooth, ductile, and watertight, without gaps, holes, or discoloration or marring of surface adjacent to welds.
   1. Use welding processes and filler metal compatible with material being welded. Do not use carbon arc welding on surfaces that will be exposed to view in finished work.
   2. Grind exposed welds flush with adjacent material; finish and polish to match adjacent surface. Avoid excessive heating of metal and metal discoloration. In grinding, use iron-free abrasives, wheels, and belts that have not been used on carbon-steel. Remove pits, runs, sputter, cracks, low spots, voids, buckles, and all other imperfections. Remove grain of rough grinding by several successively finer polishing until specified finish is attained.
   3. When welding sheet, penetrate entire thickness for entire length of joint; make joints flat, continuous and homogeneous with sheet metal without reliance on straps under seams, filling with solder, or spot welding.
   4. When stainless steel is joined to dissimilar materials, use stainless steel for fastening devices and welding material.
   5. Protection Against Corrosion: Eliminate possibility of corrosion wherever welding occurs on stainless steel. Minimize possibility of carbide precipitation in welding bolts and screws.
   6. When welding galvanized steel, thoroughly clean and repair damaged galvanizing and coat welds with polyurethane coating.
   7. Where bolts or screws are welded to underside of tops or trim, finish and undepress the exposed side of welds.
   8. Coat welds and discolorations that are not exposed to view in finished work with metallic-based paint to prevent the possibility of progressive corrosion of joints, unless welds are ground and polished smooth.

C. Brazing of Copper Tubing to Brass and Bronze Fittings: Use silver solder. Do not braze stainless steel.

**PART 3 EXECUTION**

**3.01 EXAMINATION**

A. Do not begin installation until substrates have been properly prepared.

B. Verify correct locations of utility connections, floor drains, ventilation connections, and supports.

C. If substrate preparation is the responsibility of another installer, notify Engineer of unsatisfactory preparation before proceeding.

**3.02 PREPARATION**

A. Clean surfaces thoroughly prior to installation.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

**3.03 INSTALLATION**

A. Install in accordance with fabricator's instructions and recommendations, plumb and level and in proper locations, ready for utility connections.

B. Lay out work in advance to prevent damage to building, piping, wiring, or equipment; cut, fit, and patch where necessary; coordinate work with others.

C. Do not cut or fit units in the field; if adjustments are necessary due to inadequate field measurement prior to fabrication, take unit back to shop and perform modifications there.

D. Do not field weld unless absolutely necessary; weld and grind field joints in accordance with specified fabrication procedures.

E. Securely anchor and attach non-mobile or adjustable-leg equipment to walls, floors, or bases with stainless steel bolts.

F. Follow SMACNA (SRM) seismic restraint recommendations for project location.

**3.04 ADJUSTING**

A. Adjust new and existing equipment to ensure proper operation.

**3.05 CLEANING**

A. Remove masking or protective covering from stainless steel and other finished surfaces.

**3.06 PROTECTION**

A. Protect installed products until completion of project.

B. Touch-up, repair or replace damaged products before Date of Substantial Completion.

**END OF SECTION**

## SECTION 12 3600
## COUNTERTOPS

### PART 1 GENERAL

#### 1.01 SECTION INCLUDES

A. Countertops for architectural cabinet work.

#### 1.02 RELATED REQUIREMENTS

A. Section 06 4100 - Architectural Wood Casework.

#### 1.03 REFERENCE STANDARDS

A. ANSI A208.1 - American National Standard for Particleboard; 2009.

B. ANSI A208.2 - American National Standard for Medium Density Fiberboard for Interior Use; 2009.

C. ASTM A666 - Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar; 2015.

D. ASTM D635 - Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position; 2014.

E. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2015a.

F. AWI (QCP) - Quality Certification Program; current edition at www.awiqcp.org.

G. AWI/AWMAC/WI (AWS) - Architectural Woodwork Standards; 2014.

H. AWMAC (GIS) - Guarantee and Inspection Services Program; current edition at www.awmac.com/gis.php.

I. IAPMO Z124 - Plastic Plumbing Fixtures; 2012.

J. ISFA 2-01 - Classification and Standards for Solid Surfacing Material; 2013.

K. ISFA 3-01 - Classification and Standards for Quartz Surfacing Material; 2013.

L. MIA (DSDM) - Dimensional Stone Design Manual; VII, 2007.

M. NEMA LD 3 - High-Pressure Decorative Laminates; 2005.

N. PS 1 - Structural Plywood; 2009.

O. WI (CCP) - Certified Compliance Program (CCP); current edition at www.woodworkinstitute.com.

P. WI (MCP) - Monitored Compliance Program (MCP); current edition at www.woodworkinstitute.com.

#### 1.04 SUBMITTALS

A. Product Data: Manufacturer's data sheets on each product to be used, including:
   1. Preparation instructions and recommendations.
   2. Storage and handling requirements and recommendations.
   3. Specimen warranty.

B. Selection Samples: For each finish product specified, color chips representing manufacturer's full range of available colors and patterns.

C. Test Reports: Chemical resistance testing, showing compliance with specified requirements.

#### 1.05 QUALITY ASSURANCE

A. Quality Certification: Provide AWI (QCP) inspection report and quality certification of completed work.
   1. Provide labels or certificates indicating that the work complies with requirements of AWI/AWMAC/WI (AWS) grade or grades specified.
   2. This project has been registered as AWI (QCP) project.
   3. Prior to delivery to the site provide shop drawings with certification labels.
   4. Provide labels on each product when required by certification program.
   5. Upon completion of installation provide certificate certifying that the installation and products meet the specified requirements.
   6. Arrange and pay for inspections required for certification.
   7. Replace, repair, or rework all work for which certification is refused.

#### 1.06 DELIVERY, STORAGE, AND HANDLING

A. Store products in manufacturer's unopened packaging until ready for installation.

B. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

**1.07 FIELD CONDITIONS**

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

**PART 2 PRODUCTS**

**2.01 COUNTERTOPS**

A. Quality Standard: Custom Grade, in accordance with AWI/AWMAC/WI (AWS).

B. Solid Surfacing Countertops: Solid surfacing sheet or plastic resin casting over continuous substrate.
   1. Flat Sheet Thickness: 1/2 inch (12 mm), minimum.
   2. Solid Surfacing Sheet and Plastic Resin Castings: Complying with ISFA 2-01 and NEMA LD 3; acrylic or polyester resin, mineral filler, and pigments; homogenous, non-porous and capable of being worked and repaired using standard woodworking tools; no surface coating; color and pattern consistent throughout thickness.
      a. Manufacturers:
         1) Dupont; Corian: www.corian.com.
      b. Surface Burning Characteristics: Flame spread index of 25, maximum; smoke developed index of 450, maximum; when tested in accordance with ASTM E84.
      c. NSF approved for food contact.
      d. Finish on Exposed Surfaces: Matte, gloss rating of 5 to 20.
      e. Color and Pattern: As selected by Engineer from manufacturer's full line.
   3. Other Components Thickness: 1/2 inch (12 mm), minimum.
   4. Exposed Edge Treatment: Built up to minimum 1-1/4 inch (32 mm) thick; bullnosed edge; use marine edge at sinks.
   5. Back and End Splashes: Same sheet material, square top; minimum 6 inches (150 mm) high.
   6. Fabricate in accordance with AWI/AWMAC/WI (AWS), Section 11 - Countertops, Custom Grade.

**2.02 ACCESSORY MATERIALS**

A. Plywood for Supporting Substrate: PS 1 Exterior Grade, A-C veneer grade, minimum 5-ply; minimum 3/4 inch (19 mm) thick; join lengths using metal splines.

B. Adhesives: Chemical resistant waterproof adhesive as recommended by manufacturer of materials being joined.

C. Joint Sealant: Mildew-resistant silicone sealant, white.

**2.03 FABRICATION**

A. Fabricate tops and splashes in the largest sections practicable, with top surface of joints flush.
   1. Join lengths of tops using best method recommended by manufacturer.
   2. Fabricate to overhang fronts and ends of cabinets 1 inch (25 mm) except where top butts against cabinet or wall.
   3. Prepare all cutouts accurately to size; replace tops having improperly dimensioned or unnecessary cutouts or fixture holes.

B. Provide back/end splash wherever counter edge abuts vertical surface unless otherwise indicated.
   1. Secure to countertop with concealed fasteners and with contact surfaces set in waterproof glue.
   2. Height: 6 inches (150 mm), unless otherwise indicated.

C. Solid Surfacing: Fabricate tops up to 144 inches (3657 mm) long in one piece; join pieces with adhesive sealant in accordance with manufacturer's recommendations and instructions.

**PART 3 EXECUTION**

**3.01 EXAMINATION**

A. Do not begin installation until substrates have been properly prepared.

B. If substrate preparation is the responsibility of another installer, notify Engineer of unsatisfactory preparation before proceeding.

C. Verify that wall surfaces have been finished and mechanical and electrical services and outlets are installed in proper locations.

**3.02 PREPARATION**

A. Clean surfaces thoroughly prior to installation.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

**3.03 INSTALLATION**

A. Securely attach countertops to cabinets using concealed fasteners. Make flat surfaces level; shim where required.

B. Seal joint between back/end splashes and vertical surfaces.

**3.04 TOLERANCES**

A. Variation From Horizontal: 1/8 inch in 10 feet (3 mm in 3 m), maximum.

B. Offset From Wall, Countertops: 1/8 inch (3 mm) maximum; 1/16 inch (1.5 mm) minimum.

C. Field Joints: 1/8 inch (3 mm) wide, maximum.

**3.05 CLEANING**

A. Clean countertops surfaces thoroughly.

**3.06 PROTECTION**

A. Protect installed products until completion of project.

B. Touch-up, repair or replace damaged products before Date of Substantial Completion.

**END OF SECTION**

## SECTION 26 0128

## EQUIPMENT ACCEPTANCE TESTING

### PART 1.00 - GENERAL

### 1.01 SECTION INCLUDES

A. Equipment Acceptance Testing and reports for all new electrical equipment unless specifically identified otherwise.

### 1.02 SUBMITTALS

A. All test values.

### 1.03 QUALIFICATIONS OF TESTING ORGANIZATION AND PERSONNEL

A. Testing Organization
   1. The testing organization, employed by the General Contractor, shall be an independent, third party entity which can function as an unbiased testing authority, professionally independent of the manufacturers, suppliers, and installers of equipment or systems being evaluated.
   2. The testing organization shall be regularly engaged in the testing of electrical equipment devices, installations, and systems.
   3. The testing organization shall use technicians who are regularly employed for testing services.
   4. An organization having a designation of NETA Accredited Company issued by the InterNational Electrical Testing Association meets the above criteria.
   5. The testing organization shall submit appropriate documentation to demonstrate that it satisfactorily complies with these requirements.

B. Testing Personnel
   1. Technicians performing these electrical tests and inspections shall be trained and experienced concerning the apparatus and systems being evaluated. These individuals shall be capable of conducting the tests in a safe manner and with complete knowledge of the hazards involved. They must evaluate the test data and make a judgment on the serviceability of the specific equipment.
   2. Technicians shall be certified in accordance with ANSI/NETA ETT-2000, Standard for Certification of Electrical Testing Personnel. Each on-site crew leader shall hold a current certification, Level III or higher, in electrical testing.

C. Testing and adjustments of equipment shall be made by Owner-approved independent testing firm.

### 1.04 DIVISION OF RESPONSIBILITY

A. The electrical contractor shall provide the testing organization with the following:
   1. A complete set of electrical plans and specifications, including all change orders.
   2. Drawings and instruction manuals applicable to the scope of work.
   3. An itemized description of equipment to be inspected and tested.
   4. A determination of who shall provide a suitable and stable source of electrical power to each test site.
   5. A determination of who shall perform certain preliminary low-voltage insulation-resistance, continuity, and low-voltage motor rotation tests prior to and in addition to tests specified herein.
   6. Notification of when equipment becomes available for acceptance tests. Work shall be coordinated to expedite project scheduling.
   7. Site-specific hazard notification and safety training.

B. The testing organization shall provide the following:
   1. All field technical services, tooling, equipment, instrumentation, and technical supervision to perform such tests and inspections.
   2. Specific power requirements for test equipment.
   3. Notification to the owner's representative prior to commencement of any testing.
   4. A timely notification of any system, material, or workmanship that is found deficient based on the results of the acceptance tests.
   5. A written record of all tests and a final report.

### 1.05 GENERAL REQUIREMENTS

A. Test Instrument Calibration
   1. The testing organization shall have a calibration program which assures that all applicable test instruments are maintained within rated accuracy for each test instrument calibrated.
   2. The firm providing calibration service shall maintain up-to-date instrument calibration Instructions and procedures for each test instrument calibrated.

3. The accuracy shall be directly traceable to the National Institute of Standards and Technology (NIST).
4. Instruments shall be calibrated in accordance with the following frequency schedule:
    a. Field instruments: Analog and Digital, 12 months maximum.
    b. Laboratory instruments: 12 months maximum.
    c. Leased specialty equipment: 12 months maximum.
5. Dated calibration labels shall be visible on all test equipment.
6. Records which show date and results of instruments calibrated or tested must be kept up to date.
7. Calibrating standard shall be of better accuracy than that of the instrument tested.

B. Test Report
1. 1. The test report shall include the following:
    a. Summary of project.
    b. Description of equipment tested.
    c. Description of tests.
    d. Test data.
    e. Analysis and recommendations.

C. Test data records shall include the following minimum requirements:
1. Identification of the testing organization.
2. Equipment identification.
3. Humidity, temperature, and other conditions that may affect the results of the tests and/or calibrations.
4. Date of inspections, tests, maintenance, and/or calibrations.
5. Identification of the testing technician.
6. Indication of inspections, tests, maintenance, and/or calibrations to be performed and recorded.
7. Indication of expected results when calibrations are to be performed.
8. Indication of as-found and as-left results, as applicable.
9. Sufficient spaces to allow all results and comments to be indicated.

D. The testing organization shall furnish 4 copies of the complete report to the owner for review and approval.

**1.06 TESTS AND ADJUSTMENTS**

A. Prior to energizing, test all systems. Test to ensure systems are:
1. Free from short circuits and grounds.
2. Free from mechanical and electrical defects.

B. Circuit breakers within distribution or panel boards rated at 200A and above.
1. Visual and mechanical inspection:
    a. Compare nameplate data with Drawings and Specifications.
    b. Inspect circuit breaker for correct mounting.
    c. Operate circuit breakers to ensure smooth operation.
    d. Inspect case for cracks or other defects.
    e. Verify tightness of accessible bolted connections and/or cable connections by calibrated torque-wrench method in accord with manufacturer's published data.
    f. Inspect mechanism contacts and arc chutes in unsealed units.
2. Electrical tests:
    a. Perform a contact-resistance test.
    b. Perform an insulation-resistance test at 1000 VDC from pole-to-pole and from each pole-to-ground with breaker closed and across open contacts of each phase.
    c. Perform long-time delay time-current characteristic tests by passing 300% rated current through each pole separately with ground fault functions defeated.
    d. Determine short-time pickup and delay by primary current injection.
    e. Determine ground-fault pickup and time delay by primary current injection. This test shall be done after short-time and instantaneous testing are complete.
    f. Determine instantaneous pickup current by primary injection using run-up or pulse method.
    g. Verify correct operation of auxiliary features such as shunt trip function.
3. Test values:
    a. Record all test values “as-found” and “as-left” conditions, date of test, description of equipment used, last calibration date of equipment, and manufacture's published time-current characteristics, and provide certified copies to Owner.

b. Compare microhm or millivolt drop values to adjacent poles and similar breakers. Investigate deviations of more than 25%. Investigate all values exceeding manufacturer's recommendations.
c. Insulation resistance shall not be less than 100 megohms.
d. Trip characteristic of breakers shall fall within manufacturer's published time-current characteristic tolerance band, including adjustment factors. Circuit breakers not within tolerance band shall be tagged defective.

C. Motor Controller and Motor Starters
1. Visual and Mechanical Inspection
a. Compare equipment nameplate data with drawings and specifications.
b. Inspect physical and mechanical condition.
c. Inspect contactors.
1) Verify mechanical operation.
2) Verify contact gap, wipe, alignment, and pressure are in accordance with manufacturer's published data.
d. Motor-Running Protection
1) Verify overload element rating is correct for its application.
2) If motor-running protection is provided by solid state relay, verify correct settings to motor nameplate full load rating and service factor per manufacturer's recommendations.
3) Test motor protection devices in accordance with manufacturer's published data.
4) Perform operational tests by initiating control devices.
2. Electrical Tests
a. Perform insulation-resistance tests on each pole, phase-to-phase and phase-to-ground with starter closed, and across each open pole for one minute. Test voltage shall be in accordance with manufacturer's published data.
3. Test Values
a. Insulation-resistance values shall be in accordance with manufacturer's published data. In the absence of manufacturer's published data, use Table 100.5. Values of insulation resistance less than this table or manufacturer's recommendations should be investigated.
b. Insulation-resistance values of control wiring shall not be less than two megohms.
c. Motor protection parameters shall be in accordance with manufacturer's published data.
d. Control and pilot light devices shall perform in accordance with control diagram as shown on the construction drawings.

D. Distribution boards and Panelboards Feeders (600V conductors)
1. Visual and Mechanical Inspections
a. Compare cable data with drawings and specifications.
b. Inspect exposed sections of cable for physical damage and correct connection in accordance with the single-line diagram.
c. Inspect bolted electrical connections for high resistance using one of the following methods:
1) Verify tightness of accessible bolted electrical connections by calibrated torque-wrench method in accordance with manufacturer's published data
2) Proper cable identification tags are installed.
2. Electrical Tests
a. Perform insulation-resistance test on each conductor with respect to ground and adjacent conductors. Applied potential shall be 1000 volts dc for 600-volt rated cable. Test duration shall be one minute. Test values of less than 100 megaohms shall be recorded and furnished to contractor for corrections.

**1.07 CORRECTION OF DEFICIENCIES**

A. Any deficiencies found shall be rectified, and work affected by such deficiencies shall be completely re-tested at the Contractor's expense. Final acceptance of equipment is contingent upon satisfactory completion of the acceptance tests.

**END OF SECTION**

## SECTION 26 0501

## MINOR ELECTRICAL DEMOLITION

### PART 1 GENERAL

### 1.01 SECTION INCLUDES

A. Electrical demolition.

### PART 2 PRODUCTS

### 2.01 MATERIALS AND EQUIPMENT

A. Materials and equipment for patching and extending work: As specified in individual sections.

### PART 3 EXECUTION

### 3.01 EXAMINATION

A. Verify field measurements and circuiting arrangements are as shown on Drawings.

B. Verify that abandoned wiring and equipment serve only abandoned facilities.

C. Demolition drawings are based on casual field observation and existing record documents.

D. Report discrepancies to Engineer before disturbing existing installation.

E. Beginning of demolition means installer accepts existing conditions.

### 3.02 PREPARATION

A. Disconnect electrical systems in walls, floors, and ceilings to be removed.

B. Coordinate utility service outages with utility company.

C. Provide temporary wiring and connections to maintain existing systems in service during construction. When work must be performed on energized equipment or circuits, use personnel experienced in such operations.

D. Existing Electrical Service: Maintain existing system in service until new system is complete and ready for service. Disable system only to make switchovers and connections. Minimize outage duration.

### 3.03 DEMOLITION AND EXTENSION OF EXISTING ELECTRICAL WORK

A. Remove, relocate, and extend existing installations to accommodate new construction.

B. Remove abandoned wiring to source of supply.

C. Remove exposed abandoned conduit, including abandoned conduit above accessible ceiling finishes. Cut conduit flush with walls and floors, and patch surfaces.

D. Disconnect abandoned outlets and remove devices. Remove abandoned outlets if conduit servicing them is abandoned and removed. Provide blank cover for abandoned outlets that are not removed.

E. Repair adjacent construction and finishes damaged during demolition and extension work.

F. Maintain access to existing electrical installations that remain active. Modify installation or provide access panel as appropriate.

### 3.04 CLEANING AND REPAIR

A. Clean and repair existing materials and equipment that remain or that are to be reused.

**END OF SECTION**

## SECTION 26 0519

## LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

### PART 1 GENERAL

### 1.01 SECTION INCLUDES

A. Single conductor building wire.

B. Nonmetallic-sheathed cable.

C. Armored cable.

D. Metal-clad cable.

E. Manufactured wiring systems.

F. Wiring connectors.

G. Electrical tape.

H. Heat shrink tubing.

I. Oxide inhibiting compound.

J. Wire pulling lubricant.

K. Cable ties.

### 1.02 RELATED REQUIREMENTS

A. Section 26 0501 - Minor Electrical Demolition: Disconnection, removal, and/or extension of existing electrical conductors and cables.

B. Section 26 0526 - Grounding and Bonding for Electrical Systems: Additional requirements for grounding conductors and grounding connectors.

C. Section 26 0553 - Identification for Electrical Systems: Identification products and requirements.

### 1.03 REFERENCE STANDARDS

A. ASTM B3 - Standard Specification for Soft or Annealed Copper Wire; 2013.

B. ASTM B8 - Standard Specification for Concentric-Lay-Stranded Copper Conductors, Hard, Medium-Hard, or Soft; 2011.

C. ASTM B33 - Standard Specification for Tin-Coated Soft or Annealed Copper Wire for Electrical Purposes; 2010 (Reapproved 2014).

D. ASTM B787/B787M - Standard Specification for 19 Wire Combination Unilay-Stranded Copper Conductors for Subsequent Insulation; 2004 (Reapproved 2014).

E. ASTM B800 - Standard Specification for 8000 Series Aluminum Alloy Wire for Electrical Purposes - Annealed and Intermediate Tempers; 2005 (Reapproved 2015).

F. ASTM B801 - Standard Specification for Concentric-Lay-Stranded Conductors of 8000 Series Aluminum Alloy Wire for Subsequent Covering of Insulation; 2016.

G. ASTM D3005 - Standard Specification for Low-Temperature Resistant Vinyl Chloride Plastic Pressure-Sensitive Electrical Insulating Tape; 2010.

H. NECA 1 - Standard for Good Workmanship in Electrical Construction; 2015.

I. NEMA WC 70 - Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy; 2009.

J. NETA ATS - Acceptance Testing Specifications for Electrical Power Equipment and Systems; 2013.

K. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

L. UL 44 - Thermoset-Insulated Wires and Cables; Current Edition, Including All Revisions.

M. UL 83 - Thermoplastic-Insulated Wires and Cables; Current Edition, Including All Revisions.

N. UL 183 - Manufactured Wiring Systems; Current Edition, Including All Revisions.

O. UL 486A-486B - Wire Connectors; Current Edition, Including All Revisions.

P. UL 486C - Splicing Wire Connectors; Current Edition, Including All Revisions.

Q. UL 486D - Sealed Wire Connector Systems; Current Edition, Including All Revisions.

R. UL 510 - Polyvinyl Chloride, Polyethylene, and Rubber Insulating Tape; Current Edition, Including All Revisions.

S. UL 719 - Nonmetallic-Sheathed Cables; Current Edition, Including All Revisions.

**1.04 ADMINISTRATIVE REQUIREMENTS**

A. Coordination:
   1. Coordinate sizes of raceways, boxes, and equipment enclosures installed under other sections with the actual conductors to be installed, including adjustments for conductor sizes increased for voltage drop.
   2. Coordinate with electrical equipment installed under other sections to provide terminations suitable for use with the conductors to be installed.
   3. Notify Engineer of any conflicts with or deviations from the contract documents. Obtain direction before proceeding with work.

**1.05 SUBMITTALS**

A. Product Data: Provide manufacturer's standard catalog pages and data sheets for conductors and cables, including detailed information on materials, construction, ratings, listings, and available sizes, configurations, and stranding.

B. Manufactured Wiring System Shop Drawings: Provide plan views indicating proposed system layout with components identified; indicate branch circuit connections.

C. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
   1. Extra Manufactured Wiring Systems Cable Assemblies: One of each configuration, 6 feet (2000 mm) length.

**1.06 QUALITY ASSURANCE**

A. Conform to requirements of NFPA 70.

**1.07 DELIVERY, STORAGE, AND HANDLING**

A. Receive, inspect, handle, and store conductors and cables in accordance with manufacturer's instructions.

**1.08 FIELD CONDITIONS**

A. Do not install or otherwise handle thermoplastic-insulated conductors at temperatures lower than 14 degrees F (-10 degrees C), unless otherwise permitted by manufacturer's instructions. When installation below this temperature is unavoidable, notify Engineer and obtain direction before proceeding with work.

**PART 2 PRODUCTS**

**2.01 CONDUCTOR AND CABLE APPLICATIONS**

A. Do not use conductors and cables for applications other than as permitted by NFPA 70 and product listing.

B. Provide single conductor building wire installed in suitable raceway unless otherwise indicated, permitted, or required.

C. Nonmetallic-sheathed cable is not permitted.

D. Underground feeder and branch-circuit cable is not permitted.
   1. Where not otherwise restricted, may be used:
      a. For damp, wet, or corrosive locations as a substitute for NFPA 70, Type NMC nonmetallic-sheathed cable, when nonmetallic-sheathed cable is permitted.

E. Service entrance cable is not permitted.

F. Armored cable is not permitted.

G. Metal-clad cable is not permitted.

H. Manufactured wiring systems are permitted only as follows:
   1. Where not otherwise restricted, may be used:
      a. For branch circuits where concealed under raised floors, where concealed above accessible ceilings for lighting, and in open ceiling areas for lighting.
         1) Exception: Provide single conductor building wire in raceway for circuit homerun from distribution box to panelboard.

**2.02 CONDUCTOR AND CABLE GENERAL REQUIREMENTS**

A. Provide products that comply with requirements of NFPA 70.

B. Provide products listed, classified, and labeled as suitable for the purpose intended.

C. Provide new conductors and cables manufactured not more than one year prior to installation.

D. Unless specifically indicated to be excluded, provide all required conduit, boxes, wiring, connectors, etc. as required for a complete operating system.

E. Comply with NEMA WC 70.

F. Thermoplastic-Insulated Conductors and Cables: Listed and labeled as complying with UL 83.

G. Thermoset-Insulated Conductors and Cables: Listed and labeled as complying with UL 44.

H. Conductor Material:
   1. Provide copper conductors only. Aluminum conductors are not acceptable for this project. Conductor sizes indicated are based on copper.
   2. Provide copper conductors except where aluminum conductors are specifically indicated. Substitution of aluminum conductors for copper is not permitted. Conductor sizes indicated are based on copper unless specifically indicated as aluminum. Conductors designated with the abbreviation "AL" indicate aluminum.
   3. Provide copper conductors except where aluminum conductors are specifically indicated or permitted for substitution. Conductor sizes indicated are based on copper unless specifically indicated as aluminum. Conductors designated with the abbreviation "AL" indicate aluminum.
      a. Substitution of aluminum conductors for copper is permitted, when approved by Owner and authority having jurisdiction, only for the following:
         1) Services: Copper conductors size 1/0 AWG and larger.
         2) Feeders: Copper conductors size 1/0 AWG and larger.
      b. Where aluminum conductors are substituted for copper, comply with the following:
         1) Size aluminum conductors to provide, when compared to copper sizes indicated, equivalent or greater ampacity and equivalent or less voltage drop.
         2) Increase size of raceways, boxes, wiring gutters, enclosures, etc. as required to accommodate aluminum conductors.
         3) Provide aluminum equipment grounding conductor sized according to NFPA 70.
         4) Equip electrical distribution equipment with compression lugs for terminating aluminum conductors.
   4. Copper Conductors: Soft drawn annealed, 98 percent conductivity, uncoated copper conductors complying with ASTM B3, ASTM B8, or ASTM B787/B787M unless otherwise indicated.
   5. Tinned Copper Conductors: Comply with ASTM B33.
   6. Aluminum Conductors (only where specifically indicated or permitted for substitution): AA-8000 series aluminum alloy conductors recognized by ASTM B800 and compact stranded in accordance with ASTM B801 unless otherwise indicated.

I. Minimum Conductor Size:
   1. Branch Circuits: 12 AWG.
      a. Exceptions:
         1) 20 A, 120 V circuits longer than 75 feet (23 m): 10 AWG, for voltage drop.
         2) 20 A, 120 V circuits longer than 150 feet (46 m): 8 AWG, for voltage drop.
         3) 20 A, 277 V circuits longer than 150 feet (46 m): 10 AWG, for voltage drop.
   2. Control Circuits: 14 AWG.

J. Where conductor size is not indicated, size to comply with NFPA 70 but not less than applicable minimum size requirements specified.

K. Conductor Color Coding:
   1. Color code conductors as indicated unless otherwise required by the authority having jurisdiction. Maintain consistent color coding throughout project.
   2. Color Coding Method: Integrally colored insulation.
      a. Conductors size 4 AWG and larger may have black insulation color coded using vinyl color coding electrical tape.
   3. Color Code:
      a. 208Y/120 V, 3 Phase, 4 Wire System:
         1) Phase A: Black.
         2) Phase B: Red.
         3) Phase C: Blue.
         4) Neutral/Grounded: White.
      b. 240/120 V High-Leg Delta, 3 Phase, 4 Wire System:
         1) Phase A: Black.

2) Phase B (High-Leg): Orange.
3) Phase C: Blue.
4) Neutral/Grounded: White.

c. 240/120 V, 1 Phase, 3 Wire System:
1) Phase A: Black.
2) Phase B: Red.
3) Neutral/Grounded: White.

d. Equipment Ground, All Systems: Green.

e. Isolated Ground, All Systems: Green with yellow stripe.

f. For modifications or additions to existing wiring systems, comply with existing color code when existing code complies with NFPA 70 and is approved by the authority having jurisdiction.

g. For control circuits, comply with manufacturer's recommended color code.

**2.03 SINGLE CONDUCTOR BUILDING WIRE**

A. Manufacturers:
1. Copper Building Wire:
a. Cerro Wire LLC: www.cerrowire.com.
b. Encore Wire Corporation: www.encorewire.com.
c. Southwire Company: www.southwire.com.
d. Substitutions: See Section 01 6000 - Product Requirements.

B. Description: Single conductor insulated wire.

C. Conductor Stranding:
1. Feeders and Branch Circuits:
a. Size 10 AWG and Smaller: Solid.
b. Size 8 AWG and Larger: Stranded.

D. Insulation Voltage Rating: 600 V.

E. Insulation:
1. Copper Building Wire: Type THHN/THWN or THHN/THWN-2, except as indicated below.
a. Size 4 AWG and Larger: Type XHHW-2.
b. Installed Underground: Type XHHW-2.
c. Fixture Wiring Within Luminaires: Type TFFN/TFN for luminaires with labeled maximum temperature of 90 degrees C; Approved suitable type for luminaires with labeled maximum temperature greater than 90 degrees C.

**2.04 NONMETALLIC-SHEATHED CABLE**

A. Manufacturers:
1. Cerro Wire LLC: www.cerrowire.com.
2. Encore Wire Corporation: www.encorewire.com.
3. Substitutions: See Section 01 6000 - Product Requirements.

B. Description: NFPA 70, Type NM multiple-conductor cable listed and labeled as complying with UL 719, Type NM-B.

C. Conductor Stranding:
1. Size 10 AWG and Smaller: Solid.
2. Size 8 AWG and Larger: Stranded.

D. Insulation Voltage Rating: 600 V.

**2.05 MANUFACTURED WIRING SYSTEMS**

A. Description: Manufactured wiring assemblies complying with NFPA 70 Article 604, and listed and labeled as complying with UL 183.

B. Provide components necessary to transition between manufactured wiring system and other wiring methods.

C. Branch Circuit Cables:
1. Conductor Stranding (Size 10 AWG and Smaller): Solid.
2. Insulation Voltage Rating: 600 V.
3. Insulation: Type THHN.
4. Grounding: Full-size integral equipment grounding conductor.
5. Armor: Steel, interlocked tape.

D. Connectors: Keyed and color-coded to prevent interconnection of different voltages.

E. Fixture Leads: Type TFN insulation.

**2.06 WIRING CONNECTORS**

A. Description: Wiring connectors appropriate for the application, suitable for use with the conductors to be connected, and listed as complying with UL 486A-486B or UL 486C as applicable.

B. Wiring Connectors for Splices and Taps:
   1. Copper Conductors Size 8 AWG and Smaller: Use twist-on insulated spring connectors.
   2. Copper Conductors Size 6 AWG and Larger: Use mechanical connectors or compression connectors.

C. Wiring Connectors for Terminations:
   1. Provide terminal lugs for connecting conductors to equipment furnished with terminations designed for terminal lugs.
   2. Provide compression adapters for connecting conductors to equipment furnished with mechanical lugs when only compression connectors are specified.
   3. Where over-sized conductors are larger than the equipment terminations can accommodate, provide connectors suitable for reducing to appropriate size, but not less than required for the rating of the overcurrent protective device.
   4. Provide motor pigtail connectors for connecting motor leads in order to facilitate disconnection.
   5. Copper Conductors Size 8 AWG and Larger: Use mechanical connectors or compression connectors where connectors are required.
   6. Stranded Conductors Size 10 AWG and Smaller: Use crimped terminals for connections to terminal screws.
   7. Conductors for Control Circuits: Use crimped terminals for all connections.

D. Do not use insulation-piercing or insulation-displacement connectors designed for use with conductors without stripping insulation.

E. Do not use push-in wire connectors as a substitute for twist-on insulated spring connectors.

F. Twist-on Insulated Spring Connectors: Rated 600 V, 221 degrees F (105 degrees C) for standard applications and 302 degrees F (150 degrees C) for high temperature applications; pre-filled with sealant and listed as complying with UL 486D for damp and wet locations.
   1. Manufacturers:
      a. 3M: www.3m.com.
      b. Ideal Industries, Inc: www.idealindustries.com.
      c. NSI Industries LLC: www.nsiindustries.com.

G. Push-in Wire Connectors: Rated 600 V, 221 degrees F (105 degrees C).
   1. Manufacturers:
      a. Substitutions: See Section 01 6000 - Product Requirements.

H. Mechanical Connectors: Provide bolted type or set-screw type.
   1. Manufacturers:
      a. Burndy LLC; www.burndy.com.
      b. Ilsco: www.ilsco.com.

I. Compression Connectors: Provide circumferential type or hex type crimp configuration.
   1. Manufacturers:
      a. Burndy LLC; www.burndy.com.
      b. Ilsco: www.ilsco.com.

J. Crimped Terminals: Nylon-insulated, with insulation grip and terminal configuration suitable for connection to be made.

**2.07 WIRING ACCESSORIES**

A. Electrical Tape:
   1. Vinyl Color Coding Electrical Tape: Integrally colored to match color code indicated; listed as complying with UL 510; minimum thickness of 7 mil (0.18 mm); resistant to abrasion, corrosion, and sunlight; suitable for continuous temperature environment up to 221 degrees F (105 degrees C).
   2. Vinyl Insulating Electrical Tape: Complying with ASTM D3005 and listed as complying with UL 510; minimum thickness of 7 mil (0.18 mm); resistant to abrasion, corrosion, and sunlight; conformable for application down to 0 degrees F (-18 degrees C) and suitable for continuous temperature environment up to 221 degrees F (105 degrees C).

3. Moisture Sealing Electrical Tape: Insulating mastic compound laminated to flexible, all-weather vinyl backing; minimum thickness of 90 mil (2.3 mm).

B. Heat Shrink Tubing: Heavy-wall, split-resistant, with factory-applied adhesive; rated 600 V; suitable for direct burial applications; listed as complying with UL 486D.

C. Oxide Inhibiting Compound: Listed; suitable for use with the conductors or cables to be installed.

D. Wire Pulling Lubricant: Listed; suitable for use with the conductors or cables to be installed and suitable for use at the installation temperature.

E. Cable Ties: Material and tensile strength rating suitable for application.

**PART 3 EXECUTION**

**3.01 EXAMINATION**

A. Verify that interior of building has been protected from weather.

B. Verify that work likely to damage wire and cable has been completed.

C. Verify that raceways, boxes, and equipment enclosures are installed and are properly sized to accommodate conductors and cables in accordance with NFPA 70.

D. Verify that field measurements are as shown on the drawings.

E. Verify that conditions are satisfactory for installation prior to starting work.

**3.02 PREPARATION**

A. Clean raceways thoroughly to remove foreign materials before installing conductors and cables.

**3.03 INSTALLATION**

A. Circuiting Requirements:
1. Unless dimensioned, circuit routing indicated is diagrammatic.
2. When circuit destination is indicated and routing is not shown, determine exact routing required.
3. Arrange circuiting to minimize splices.
4. Include circuit lengths required to install connected devices within 10 ft (3.0 m) of location shown.
5. Maintain separation of Class 1, Class 2, and Class 3 remote-control, signaling, and power-limited circuits in accordance with NFPA 70.
6. Maintain separation of wiring for emergency systems in accordance with NFPA 70.
7. Circuiting Adjustments: Unless otherwise indicated, when branch circuits are shown as separate, combining them together in a single raceway is not permitted.

B. Install products in accordance with manufacturer's instructions.

C. Install conductors and cable in a neat and workmanlike manner in accordance with NECA 1.

D. Installation in Raceway:
1. Tape ends of conductors and cables to prevent infiltration of moisture and other contaminants.
2. Pull all conductors and cables together into raceway at same time.
3. Do not damage conductors and cables or exceed manufacturer's recommended maximum pulling tension and sidewall pressure.
4. Use suitable wire pulling lubricant where necessary, except when lubricant is not recommended by the manufacturer.

E. Paralleled Conductors: Install conductors of the same length and terminate in the same manner.

F. Secure and support conductors and cables in accordance with NFPA 70 using suitable supports and methods approved by the authority having jurisdiction. Provide independent support from building structure. Do not provide support from raceways, piping, ductwork, or other systems.

G. Terminate cables using suitable fittings.

H. Install conductors with a minimum of 12 inches (300 mm) of slack at each outlet.

I. Neatly train and bundle conductors inside boxes, wireways, panelboards and other equipment enclosures.

J. Group or otherwise identify neutral/grounded conductors with associated ungrounded conductors inside enclosures in accordance with NFPA 70.

K. Make wiring connections using specified wiring connectors.
1. Make splices and taps only in accessible boxes. Do not pull splices into raceways or make splices in conduit bodies or wiring gutters.
2. Remove appropriate amount of conductor insulation for making connections without cutting, nicking or damaging conductors.

3. Do not remove conductor strands to facilitate insertion into connector.
4. Clean contact surfaces on conductors and connectors to suitable remove corrosion, oxides, and other contaminates. Do not use wire brush on plated connector surfaces.
5. Mechanical Connectors: Secure connections according to manufacturer's recommended torque settings.
6. Compression Connectors: Secure connections using manufacturer's recommended tools and dies.

L. Insulate splices and taps that are made with uninsulated connectors using methods suitable for the application, with insulation and mechanical strength at least equivalent to unspliced conductors.
1. Damp Locations: Use insulating covers specifically designed for the connectors, electrical tape, or heat shrink tubing.
a. For connections with insulating covers, apply outer covering of moisture sealing electrical tape.
b. For taped connections, follow same procedure as for dry locations but apply outer covering of moisture sealing electrical tape.
2. Wet Locations: Use heat shrink tubing.

M. Insulate ends of spare conductors using vinyl insulating electrical tape.

N. Field-Applied Color Coding: Where vinyl color coding electrical tape is used in lieu of integrally colored insulation as permitted in Part 2 under "Color Coding", apply half overlapping turns of tape at each termination and at each location conductors are accessible.

O. Unless specifically indicated to be excluded, provide final connections to all equipment and devices, including those furnished by others, as required for a complete operating system.

**3.04 FIELD QUALITY CONTROL**

A. Inspect and test in accordance with NETA ATS, except Section 4.

B. Perform inspections and tests listed in NETA ATS, Section 7.3.2. The insulation resistance test is required for all conductors. The resistance test for parallel conductors listed as optional is not required.
1. Disconnect surge protective devices (SPDs) prior to performing any high potential testing. Replace SPDs damaged by performing high potential testing with SPDs connected.

C. Correct deficiencies and replace damaged or defective conductors and cables.

**END OF SECTION**

## SECTION 26 0526

## GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

### PART 1 GENERAL

### 1.01 SECTION INCLUDES

A. Grounding and bonding requirements.

B. Conductors for grounding and bonding.

C. Connectors for grounding and bonding.

### 1.02 RELATED REQUIREMENTS

A. Section 26 0519 - Low-Voltage Electrical Power Conductors and Cables: Additional requirements for conductors for grounding and bonding, including conductor color coding.

B. Section 26 0553 - Identification for Electrical Systems: Identification products and requirements.

### 1.03 REFERENCE STANDARDS

A. IEEE 81 - IEEE Guide for Measuring Earth Resistivity, Ground Impedance, and Earth Surface Potentials of a Grounding System; 2012.

B. NECA 1 - Standard for Good Workmanship in Electrical Construction; 2015.

C. NETA ATS - Acceptance Testing Specifications for Electrical Power Equipment and Systems; 2013.

D. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

E. UL 467 - Grounding and Bonding Equipment; Current Edition, Including All Revisions.

### 1.04 ADMINISTRATIVE REQUIREMENTS

A. Coordination:

1. Notify Engineer of any conflicts with or deviations from the contract documents. Obtain direction before proceeding with work.

### 1.05 SUBMITTALS

A. Product Data: Provide manufacturer's standard catalog pages and data sheets for grounding and bonding system components.

### 1.06 QUALITY ASSURANCE

A. Conform to requirements of NFPA 70.

### PART 2 PRODUCTS

### 2.01 GROUNDING AND BONDING REQUIREMENTS

A. Existing Work: Where existing grounding and bonding system components are indicated to be reused, they may be reused only where they are free from corrosion, integrity and continuity are verified, and where acceptable to the authority having jurisdiction.

B. Do not use products for applications other than as permitted by NFPA 70 and product listing.

C. Unless specifically indicated to be excluded, provide all required components, conductors, connectors, conduit, boxes, fittings, supports, accessories, etc. as necessary for a complete grounding and bonding system.

D. Where conductor size is not indicated, size to comply with NFPA 70 but not less than applicable minimum size requirements specified.

E. Grounding System Resistance:

1. Achieve specified grounding system resistance under normally dry conditions unless otherwise approved by Engineer. Precipitation within the previous 48 hours does not constitute normally dry conditions.
2. Grounding Electrode System: Not greater than 5 ohms to ground, when tested according to IEEE 81 using "fall-of-potential" method.
3. Between Grounding Electrode System and Major Electrical Equipment Frames, System Neutral, and Derived Neutral Points: Not greater than 0.5 ohms, when tested using "point-to-point" methods.

### 2.02 GROUNDING AND BONDING COMPONENTS

A. General Requirements:

1. Provide products listed, classified, and labeled as suitable for the purpose intended.

2. Provide products listed and labeled as complying with UL 467 where applicable.

B. Conductors for Grounding and Bonding, in Addition to Requirements of Section 26 0526:
   1. Use insulated copper conductors unless otherwise indicated.
      a. Exceptions:
         1) Use bare copper conductors where installed underground in direct contact with earth.
         2) Use bare copper conductors where directly encased in concrete (not in raceway).

C. Connectors for Grounding and Bonding:
   1. Description: Connectors appropriate for the application and suitable for the conductors and items to be connected; listed and labeled as complying with UL 467.
   2. Unless otherwise indicated, use exothermic welded connections for underground, concealed and other inaccessible connections.
   3. Unless otherwise indicated, use mechanical connectors, compression connectors, or exothermic welded connections for accessible connections.

D. Ground Bars:
   1. Description: Copper rectangular ground bars with mounting brackets and insulators.
   2. Size: As indicated.
   3. Holes for Connections: As indicated or as required for connections to be made.

**PART 3 EXECUTION**

**3.01 EXAMINATION**

A. Verify that work likely to damage grounding and bonding system components has been completed.

B. Verify that field measurements are as shown on the drawings.

C. Verify that conditions are satisfactory for installation prior to starting work.

**3.02 INSTALLATION**

A. Install products in accordance with manufacturer's instructions.

B. Install grounding and bonding system components in a neat and workmanlike manner in accordance with NECA 1.

C. Make grounding and bonding connections using specified connectors.
   1. Remove appropriate amount of conductor insulation for making connections without cutting, nicking or damaging conductors. Do not remove conductor strands to facilitate insertion into connector.
   2. Remove nonconductive paint, enamel, or similar coating at threads, contact points, and contact surfaces.
   3. Exothermic Welds: Make connections using molds and weld material suitable for the items to be connected in accordance with manufacturer's recommendations.
   4. Mechanical Connectors: Secure connections according to manufacturer's recommended torque settings.
   5. Compression Connectors: Secure connections using manufacturer's recommended tools and dies.

D. Identify grounding and bonding system components in accordance with Section 26 0553.

**3.03 FIELD QUALITY CONTROL**

A. Inspect and test in accordance with NETA ATS except Section 4.

B. Perform inspections and tests listed in NETA ATS, Section 7.13.

C. Perform ground electrode resistance tests under normally dry conditions. Precipitation within the previous 48 hours does not constitute normally dry conditions.

D. Investigate and correct deficiencies where measured ground resistances do not comply with specified requirements.

**END OF SECTION**

## SECTION 26 0534
## CONDUIT

### PART 1 GENERAL

### 1.01 SECTION INCLUDES

A. Galvanized steel rigid metal conduit (RMC).
B. Aluminum rigid metal conduit (RMC).
C. Intermediate metal conduit (IMC).
D. PVC-coated galvanized steel rigid metal conduit (RMC).
E. Flexible metal conduit (FMC).
F. Liquidtight flexible metal conduit (LFMC).
G. Electrical metallic tubing (EMT).
H. Rigid polyvinyl chloride (PVC) conduit.
I. Electrical nonmetallic tubing (ENT).
J. Liquidtight flexible nonmetallic conduit (LFNC).
K. Conduit fittings.
L. Accessories.

### 1.02 RELATED REQUIREMENTS

A. Section 26 0526 - Grounding and Bonding for Electrical Systems.
B. Section 26 0537 - Boxes.
C. Section 26 0553 - Identification for Electrical Systems: Identification products and requirements.

### 1.03 REFERENCE STANDARDS

A. ANSI C80.1 - American National Standard for Electrical Rigid Steel Conduit (ERSC); 2015.
B. ANSI C80.3 - American National Standard for Electrical Metallic Tubing -- Steel (EMT-S); 2015.
C. ANSI C80.5 - American National Standard for Electrical Rigid Metal Conduit -- Aluminum (ERMC-A); 2015.
D. ANSI C80.6 - American National Standard for Electrical Intermediate Metal Conduit (EIMC); 2005.
E. NECA 1 - Standard for Good Workmanship in Electrical Construction; 2015.
F. NECA 101 - Standard for Installing Steel Conduits (Rigid, IMC, EMT); 2013.
G. NECA 102 - Standard for Installing Aluminum Rigid Metal Conduit; 2004.
H. NECA 111 - Standard for Installing Nonmetallic Raceways (RNC, ENT, LFNC); 2003.
I. NEMA FB 1 - Fittings, Cast Metal Boxes, and Conduit Bodies for Conduit, Electrical Metallic Tubing, and Cable; 2012.
J. NEMA RN 1 - Polyvinyl-Chloride (PVC) Externally Coated Galvanized Rigid Steel Conduit and Intermediate Metal Conduit; 2005 (R2013).
K. NEMA TC 2 - Electrical Polyvinyl Chloride (PVC) Conduit; 2013.
L. NEMA TC 3 - Polyvinyl Chloride (PVC) Fittings for Use with Rigid PVC Conduit and Tubing; 2015.
M. NEMA TC 13 - Electrical Nonmetallic Tubing (ENT); 2014.
N. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
O. UL 1 - Flexible Metal Conduit; Current Edition, Including All Revisions.
P. UL 6 - Electrical Rigid Metal Conduit-Steel; Current Edition, Including All Revisions.
Q. UL 6A - Electrical Rigid Metal Conduit-Aluminum, Red Brass, and Stainless Steel; Current Edition, Including All Revisions.
R. UL 360 - Liquid-Tight Flexible Steel Conduit; Current Edition, Including All Revisions.
S. UL 514B - Conduit, Tubing, and Cable Fittings; Current Edition, Including All Revisions.

T. UL 651 - Schedule 40, 80, Type EB and A Rigid PVC Conduit and Fittings; Current Edition, Including All Revisions.

U. UL 797 - Electrical Metallic Tubing-Steel; Current Edition, Including All Revisions.

V. UL 1242 - Electrical Intermediate Metal Conduit-Steel; Current Edition, Including All Revisions.

W. UL 1653 - Electrical Nonmetallic Tubing; Current Edition, Including All Revisions.

X. UL 1660 - Liquid-Tight Flexible Nonmetallic Conduit; Current Edition, Including All Revisions.

**1.04 ADMINISTRATIVE REQUIREMENTS**

A. Coordination:
   1. Coordinate minimum sizes of conduits with the actual conductors to be installed, including adjustments for conductor sizes increased for voltage drop.
   2. Coordinate the arrangement of conduits with structural members, ductwork, piping, equipment and other potential conflicts installed under other sections or by others.
   3. Verify exact conduit termination locations required for boxes, enclosures, and equipment installed under other sections or by others.
   4. Coordinate the work with other trades to provide roof penetrations that preserve the integrity of the roofing system and do not void the roof warranty.
   5. Notify Engineer of any conflicts with or deviations from the contract documents. Obtain direction before proceeding with work.

B. Sequencing:
   1. Do not begin installation of conductors and cables until installation of conduit is complete between outlet, junction and splicing points.

**1.05 SUBMITTALS**

A. Product Data: Provide manufacturer's standard catalog pages and data sheets for conduits and fittings.

**1.06 QUALITY ASSURANCE**

A. Conform to requirements of NFPA 70.

**PART 2 PRODUCTS**

**2.01 CONDUIT APPLICATIONS**

A. Do not use conduit and associated fittings for applications other than as permitted by NFPA 70 and product listing.

B. Unless otherwise indicated and where not otherwise restricted, use the conduit types indicated for the specified applications. Where more than one listed application applies, comply with the most restrictive requirements. Where conduit type for a particular application is not specified, use galvanized steel rigid metal conduit.

**2.02 CONDUIT REQUIREMENTS**

A. Existing Work: Where existing conduits are indicated to be reused, they may be reused only where they comply with specified requirements, are free from corrosion, and integrity is verified by pulling a mandrel through them.

B. Provide all conduit, fittings, supports, and accessories required for a complete raceway system.

C. Provide products listed, classified, and labeled as suitable for the purpose intended.

D. Minimum Conduit Size, Unless Otherwise Indicated:
   1. Branch Circuits: 1/2 inch (16 mm) trade size.
   2. Branch Circuit Homeruns: 3/4 inch (21 mm) trade size.
   3. Control Circuits: 1/2 inch (16 mm) trade size.
   4. Flexible Connections to Luminaires: 3/8 inch (12 mm) trade size.
   5. Underground, Interior: 3/4 inch (21 mm) trade size.
   6. Underground, Exterior: 1 inch (27 mm) trade size.

E. Where conduit size is not indicated, size to comply with NFPA 70 but not less than applicable minimum size requirements specified.

**2.03 GALVANIZED STEEL RIGID METAL CONDUIT (RMC)**

A. Description: NFPA 70, Type RMC galvanized steel rigid metal conduit complying with ANSI C80.1 and listed and labeled as complying with UL 6.

B. Fittings:

1. Manufacturers:
    a. Bridgeport Fittings Inc: www.bptfittings.com.
    b. O-Z/Gedney, a brand of Emerson Industrial Automation: www.emersonindustrial.com.
2. Non-Hazardous Locations: Use fittings complying with NEMA FB 1 and listed and labeled as complying with UL 514B.
3. Material: Use steel or malleable iron.
4. Connectors and Couplings: Use threaded type fittings only. Threadless set screw and compression (gland) type fittings are not permitted.

**2.04 ALUMINUM RIGID METAL CONDUIT (RMC)**

A. Manufacturers:
1. Allied Tube & Conduit: www.alliedeg.com.
2. Republic Conduit: www.republic-conduit.com.

B. Description: NFPA 70, Type RMC aluminum rigid metal conduit complying with ANSI C80.5 and listed and labeled as complying with UL 6A.

C. Fittings:
1. Non-Hazardous Locations: Use fittings complying with NEMA FB 1 and listed and labeled as complying with UL 514B.
2. Material: Use aluminum.
3. Connectors and Couplings: Use threaded type fittings only. Threadless set screw and compression (gland) type fittings are not permitted.

**2.05 INTERMEDIATE METAL CONDUIT (IMC)**

A. Manufacturers:
1. Allied Tube & Conduit: www.alliedeg.com.
2. Republic Conduit: www.republic-conduit.com.

B. Description: NFPA 70, Type IMC galvanized steel intermediate metal conduit complying with ANSI C80.6 and listed and labeled as complying with UL 1242.

C. Fittings:
1. Non-Hazardous Locations: Use fittings complying with NEMA FB 1 and listed and labeled as complying with UL 514B.
2. Material: Use steel or malleable iron.
3. Connectors and Couplings: Use threaded type fittings only. Threadless set screw and compression (gland) type fittings are not permitted.

**2.06 PVC-COATED GALVANIZED STEEL RIGID METAL CONDUIT (RMC)**

A. Manufacturers:
1. Thomas & Betts Corporation; www.tnb.com.
2. Robroy Industries; www.robroy.com.

B. Description: NFPA 70, Type RMC galvanized steel rigid metal conduit with external polyvinyl chloride (PVC) coating complying with NEMA RN 1 and listed and labeled as complying with UL 6.

C. Exterior Coating: Polyvinyl chloride (PVC), nominal thickness of 40 mil (1.02 mm).

D. PVC-Coated Fittings:
1. Manufacturer: Same as manufacturer of PVC-coated conduit to be installed.
2. Non-Hazardous Locations: Use fittings listed and labeled as complying with UL 514B.
3. Material: Use steel or malleable iron.
4. Exterior Coating: Polyvinyl chloride (PVC), minimum thickness of 40 mil (1.02 mm).

E. PVC-Coated Supports: Furnish with exterior coating of polyvinyl chloride (PVC), minimum thickness of 15 mil (0.38 mm).

**2.07 FLEXIBLE METAL CONDUIT (FMC)**

A. Manufacturers:
1. AFC Cable Systems, Inc; www.afcweb.com.
2. Electri-Flex Company; www.electriflex.com.

B. Description: NFPA 70, Type FMC standard wall steel flexible metal conduit listed and labeled as complying with UL 1, and listed for use in classified firestop systems to be used.

C. Fittings:
1. Manufacturers:

a. Bridgeport Fittings Inc: www.bptfittings.com.
b. O-Z/Gedney, a brand of Emerson Industrial Automation: www.emersonindustrial.com.
2. Description: Fittings complying with NEMA FB 1 and listed and labeled as complying with UL 514B.
3. Material: Use steel or malleable iron.

**2.08 LIQUIDTIGHT FLEXIBLE METAL CONDUIT (LFMC)**

A. Manufacturers:
1. AFC Cable Systems, Inc; www.afcweb.com.
2. Electri-Flex Company; www.electriflex.com.

B. Description: NFPA 70, Type LFMC polyvinyl chloride (PVC) jacketed steel flexible metal conduit listed and labeled as complying with UL 360.

C. Fittings:
1. Manufacturers:
a. Bridgeport Fittings Inc: www.bptfittings.com.
b. O-Z/Gedney, a brand of Emerson Industrial Automation: www.emersonindustrial.com.
2. Description: Fittings complying with NEMA FB 1 and listed and labeled as complying with UL 514B.
3. Material: Use steel or malleable iron.

**2.09 ELECTRICAL METALLIC TUBING (EMT)**

A. Manufacturers:
1. Allied Tube & Conduit; www.alliedeg.com.
2. Republic Conduit: www.republic-conduit.com.

B. Description: NFPA 70, Type EMT steel electrical metallic tubing complying with ANSI C80.3 and listed and labeled as complying with UL 797.

C. Fittings:
1. Manufacturers:
a. Bridgeport Fittings Inc: www.bptfittings.com.
b. O-Z/Gedney, a brand of Emerson Industrial Automation: www.emersonindustrial.com.
2. Description: Fittings complying with NEMA FB 1 and listed and labeled as complying with UL 514B.
3. Material: Use steel or malleable iron.
4. Connectors and Couplings: Use compression (gland) or set-screw type.
a. Do not use indenter type connectors and couplings.
5. Damp or Wet Locations (where permitted): Use fittings listed for use in wet locations.

**2.10 RIGID POLYVINYL CHLORIDE (PVC) CONDUIT**

A. Manufacturers:
1. Cantex Inc: www.cantexinc.com.
2. Carlon, a brand of Thomas & Betts Corporation: www.carlon.com.

B. Description: NFPA 70, Type PVC rigid polyvinyl chloride conduit complying with NEMA TC 2 and listed and labeled as complying with UL 651; Schedule 40 unless otherwise indicated, Schedule 80 where subject to physical damage; rated for use with conductors rated 90 degrees C.

C. Fittings:
1. Manufacturer: Same as manufacturer of conduit to be connected.
2. Description: Fittings complying with NEMA TC 3 and listed and labeled as complying with UL 651; material to match conduit.

**2.11 ELECTRICAL NONMETALLIC TUBING (ENT)**

A. Manufacturers:
1. Cantex Inc; www.cantexinc.com.
2. Carlon, a brand of Thomas & Betts Corporation; www.carlon.com.

B. Description: NFPA 70, Type ENT electrical nonmetallic tubing complying with NEMA TC 13 and listed and labeled as complying with UL 1653.

C. Fittings:
1. Manufacturer: Same as manufacturer of ENT to be connected.
2. Use solvent-welded type fittings.
3. Solvent-Welded Fittings: Rigid PVC fittings complying with NEMA TC 3 and listed and labeled as complying with UL 651; suitable for use with ENT.

## 2.12 LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT (LFNC)

A. Manufacturers:
   1. AFC Cable Systems, Inc: www.afcweb.com.
   2. Electri-Flex Company: www.electriflex.com.

B. Description: NFPA 70, Type LFNC liquidtight flexible nonmetallic conduit listed and labeled as complying with UL 1660.

C. Fittings:
   1. Manufacturer: Same as manufacturer of conduit to be connected.
   2. Description: Fittings complying with NEMA FB 1 and listed and labeled as complying with UL 514B; suitable for the type of conduit to be connected.

## 2.13 ACCESSORIES

A. Conduit Joint Compound: Corrosion-resistant, electrically conductive; suitable for use with the conduit to be installed.

B. Solvent Cement for PVC Conduit and Fittings: As recommended by manufacturer of conduit and fittings to be installed.

# PART 3 EXECUTION

## 3.01 EXAMINATION

A. Verify that field measurements are as shown on drawings.

B. Verify that mounting surfaces are ready to receive conduits.

C. Verify that conditions are satisfactory for installation prior to starting work.

## 3.02 INSTALLATION

A. Install products in accordance with manufacturer's instructions.

B. Install conduit in a neat and workmanlike manner in accordance with NECA 1.

C. Install galvanized steel rigid metal conduit (RMC) in accordance with NECA 101.

D. Install aluminum rigid metal conduit (RMC) in accordance with NECA 102.

E. Install intermediate metal conduit (IMC) in accordance with NECA 101.

F. Install PVC-coated galvanized steel rigid metal conduit (RMC) using only tools approved by the manufacturer.

G. Install rigid polyvinyl chloride (PVC) conduit in accordance with NECA 111.

H. Install electrical nonmetallic tubing (ENT) in accordance with NECA 111.

I. Install liquidtight flexible nonmetallic conduit (LFNC) in accordance with NECA 111.

J. Conduit Routing:
   1. Unless dimensioned, conduit routing indicated is diagrammatic.
   2. When conduit destination is indicated and routing is not shown, determine exact routing required.
   3. Conceal all conduits unless specifically indicated to be exposed.
   4. Conduits installed underground or embedded in concrete may be routed in the shortest possible manner unless otherwise indicated. Route all other conduits parallel or perpendicular to building structure and surfaces, following surface contours where practical.
   5. Arrange conduit to provide no more than the equivalent of four 90 degree bends between pull points.
   6. Arrange conduit to provide no more than 150 feet (46 m) between pull points.
   7. Route conduits above water and drain piping where possible.
   8. Arrange conduit to prevent moisture traps. Provide drain fittings at low points and at sealing fittings where moisture may collect.
   9. Maintain minimum clearance of 6 inches (150 mm) between conduits and piping for other systems.

K. Conduit Support:
   1. Secure and support conduits in accordance with NFPA 70 and Section 26 0529 using suitable supports and methods approved by the authority having jurisdiction.
   2. Provide independent support from building structure. Do not provide support from piping, ductwork, or other systems.

L. Connections and Terminations:
   1. Use approved zinc-rich paint or conduit joint compound on field-cut threads of galvanized steel conduits prior to making connections.

2. Where two threaded conduits must be joined and neither can be rotated, use three-piece couplings or split couplings. Do not use running threads.
3. Use suitable adapters where required to transition from one type of conduit to another.
4. Provide drip loops for liquidtight flexible conduit connections to prevent drainage of liquid into connectors.
5. Terminate threaded conduits in boxes and enclosures using threaded hubs or double lock nuts for dry locations and raintight hubs for wet locations.
6. Provide insulating bushings or insulated throats at all conduit terminations to protect conductors.
7. Secure joints and connections to provide maximum mechanical strength and electrical continuity.

M. Penetrations:
1. Do not penetrate or otherwise notch or cut structural members, including footings and grade beams, without approval of Structural Engineer.
2. Make penetrations perpendicular to surfaces unless otherwise indicated.
3. Provide sleeves for penetrations as indicated or as required to facilitate installation. Set sleeves flush with exposed surfaces unless otherwise indicated or required.
4. Conceal bends for conduit risers emerging above ground.
5. Seal interior of conduits entering the building from underground at first accessible point to prevent entry of moisture and gases.
6. Where conduits penetrate waterproof membrane, seal as required to maintain integrity of membrane.
7. Make penetrations for roof-mounted equipment within associated equipment openings and curbs where possible to minimize roofing system penetrations. Where penetrations are necessary, seal as indicated or as required to preserve integrity of roofing system and maintain roof warranty. Include proposed locations of penetrations and methods for sealing with submittals.

N. Conduit Movement Provisions: Where conduits are subject to movement, provide expansion and expansion/deflection fittings to prevent damage to enclosed conductors or connected equipment. This includes, but is not limited to:
1. Where conduits cross structural joints intended for expansion, contraction, or deflection.
2. Where conduits are subject to earth movement by settlement or frost.

O. Condensation Prevention: Where conduits cross barriers between areas of potential substantial temperature differential, provide sealing fitting or approved sealing compound at an accessible point near the penetration to prevent condensation. This includes, but is not limited to:
1. Where conduits pass from outdoors into conditioned interior spaces.
2. Where conduits pass from unconditioned interior spaces into conditioned interior spaces.

P. Provide grounding and bonding in accordance with Section 26 0526.

**3.03 FIELD QUALITY CONTROL**

A. Repair cuts and abrasions in galvanized finishes using zinc-rich paint recommended by manufacturer. Replace components that exhibit signs of corrosion.

B. Where coating of PVC-coated galvanized steel rigid metal conduit (RMC) contains cuts or abrasions, repair in accordance with manufacturer's instructions.

C. Correct deficiencies and replace damaged or defective conduits.

**3.04 CLEANING**

A. Clean interior of conduits to remove moisture and foreign matter.

**3.05 PROTECTION**

A. Immediately after installation of conduit, use suitable manufactured plugs to provide protection from entry of moisture and foreign material and do not remove until ready for installation of conductors.

**END OF SECTION**

## SECTION 26 0537

## BOXES

### PART 1 GENERAL

#### 1.01 SECTION INCLUDES

A. Outlet and device boxes up to 100 cubic inches (1,650 cu cm), including those used as junction and pull boxes.

#### 1.02 RELATED REQUIREMENTS

A. Section 26 0526 - Grounding and Bonding for Electrical Systems.

B. Section 26 0534 - Conduit:
   1. Conduit bodies and other fittings.

C. Section 26 2726 - Wiring Devices:
   1. Wall plates.
   2. Additional requirements for locating boxes for wiring devices.

#### 1.03 REFERENCE STANDARDS

A. NECA 1 - Standard for Good Workmanship in Electrical Construction; 2015.

B. NECA 130 - Standard for Installing and Maintaining Wiring Devices; 2010.

C. NEMA FB 1 - Fittings, Cast Metal Boxes, and Conduit Bodies for Conduit, Electrical Metallic Tubing, and Cable; 2012.

D. NEMA OS 1 - Sheet-Steel Outlet Boxes, Device Boxes, Covers, and Box Supports; 2013.

E. NEMA 250 - Enclosures for Electrical Equipment (1000 Volts Maximum); 2014.

F. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

G. UL 50 - Enclosures for Electrical Equipment, Non-Environmental Considerations; Current Edition, Including All Revisions.

H. UL 50E - Enclosures for Electrical Equipment, Environmental Considerations; Current Edition, Including All Revisions.

I. UL 508A - Industrial Control Panels; Current Edition, Including All Revisions.

J. UL 514A - Metallic Outlet Boxes; Current Edition, Including All Revisions.

#### 1.04 ADMINISTRATIVE REQUIREMENTS

A. Coordination:
   1. Coordinate the work with other trades to avoid placement of ductwork, piping, equipment, or other potential obstructions within the dedicated equipment spaces and working clearances for electrical equipment required by NFPA 70.
   2. Coordinate arrangement of electrical equipment with the dimensions and clearance requirements of the actual equipment to be installed.
   3. Coordinate minimum sizes of boxes with the actual installed arrangement of conductors, clamps, support fittings, and devices, calculated according to NFPA 70.
   4. Coordinate minimum sizes of pull boxes with the actual installed arrangement of connected conduits, calculated according to NFPA 70.
   5. Coordinate the placement of boxes with millwork, furniture, devices, equipment, etc. installed under other sections or by others.
   6. Coordinate the work with other trades to preserve insulation integrity.
   7. Coordinate the work with other trades to provide walls suitable for installation of flush-mounted boxes where indicated.
   8. Notify Engineer of any conflicts with or deviations from the contract documents. Obtain direction before proceeding with work.

#### 1.05 SUBMITTALS

A. Product Data: Provide manufacturer's standard catalog pages and data sheets for outlet and device boxes and junction and pull boxes.

#### 1.06 QUALITY ASSURANCE

A. Conform to requirements of NFPA 70.

## PART 2 PRODUCTS

### 2.01 BOXES

A. General Requirements:
   1. Do not use boxes and associated accessories for applications other than as permitted by NFPA 70 and product listing.
   2. Provide all boxes, fittings, supports, and accessories required for a complete raceway system and to accommodate devices and equipment to be installed.
   3. Provide products listed, classified, and labeled as suitable for the purpose intended.
   4. Where box size is not indicated, size to comply with NFPA 70 but not less than applicable minimum size requirements specified.
   5. Provide grounding terminals within boxes where equipment grounding conductors terminate.

B. Outlet and Device Boxes Up to 100 cubic inches (1,650 cu cm), Including Those Used as Junction and Pull Boxes:
   1. Use sheet-steel boxes for dry locations unless otherwise indicated or required.
   2. Use cast iron boxes or cast aluminum boxes for damp or wet locations unless otherwise indicated or required; furnish with compatible weatherproof gasketed covers.
   3. Use suitable concrete type boxes where flush-mounted in concrete.
   4. Use suitable masonry type boxes where flush-mounted in masonry walls.
   5. Use raised covers suitable for the type of wall construction and device configuration where required.
   6. Use shallow boxes where required by the type of wall construction.
   7. Do not use "through-wall" boxes designed for access from both sides of wall.
   8. Sheet-Steel Boxes: Comply with NEMA OS 1, and list and label as complying with UL 514A.
   9. Cast Metal Boxes: Comply with NEMA FB 1, and list and label as complying with UL 514A; furnish with threaded hubs.
   10. Boxes for Supporting Luminaires and Ceiling Fans: Listed as suitable for the type and weight of load to be supported; furnished with fixture stud to accommodate mounting of luminaire where required.
   11. Boxes for Ganged Devices: Use multigang boxes of single-piece construction. Do not use field-connected gangable boxes.
   12. Wall Plates: Comply with Section 26 2726.

C. Cabinets and Enclosures, Including Junction and Pull Boxes Larger Than 100 cubic inches (1,650 cu cm):
   1. Comply with NEMA 250, and list and label as complying with UL 50 and UL 50E, or UL 508A.
   2. NEMA 250 Environment Type, Unless Otherwise Indicated:
   3. Junction and Pull Boxes Larger Than 100 cubic inches (1,650 cu cm):
      a. Provide screw-cover or hinged-cover enclosures unless otherwise indicated.

## PART 3 EXECUTION

### 3.01 EXAMINATION

A. Verify that field measurements are as shown on drawings.

B. Verify that mounting surfaces are ready to receive boxes.

C. Verify that conditions are satisfactory for installation prior to starting work.

### 3.02 INSTALLATION

A. Install products in accordance with manufacturer's instructions.

B. Perform work in a neat and workmanlike manner in accordance with NECA 1 and, where applicable, NECA 130, including mounting heights specified in those standards where mounting heights are not indicated.

C. Arrange equipment to provide minimum clearances in accordance with manufacturer's instructions and NFPA 70.

D. Box Locations:
   1. Locate boxes as required for devices installed under other sections or by others.
      a. Switches, Receptacles, and Other Wiring Devices: Comply with Section 26 2726.

E. Box Supports:
   1. Secure and support boxes in accordance with NFPA 70 and Section 26 0529 using suitable supports and methods approved by the authority having jurisdiction.

2. Provide independent support from building structure except for cast metal boxes (other than boxes used for fixture support) supported by threaded conduit connections in accordance with NFPA 70. Do not provide support from piping, ductwork, or other systems.

F. Install boxes plumb and level.

G. Flush-Mounted Boxes:
   1. Install boxes in noncombustible materials such as concrete, tile, gypsum, plaster, etc. so that front edge of box or associated raised cover is not set back from finished surface more than 1/4 inch (6 mm) or does not project beyond finished surface.
   2. Install boxes in combustible materials such as wood so that front edge of box or associated raised cover is flush with finished surface.
   3. Repair rough openings around boxes in noncombustible materials such as concrete, tile, gypsum, plaster, etc. so that there are no gaps or open spaces greater than 1/8 inch (3 mm) at the edge of the box.

H. Install boxes as required to preserve insulation integrity.

I. Install permanent barrier between ganged wiring devices when voltage between adjacent devices exceeds 300 V.

J. Close unused box openings.

K. Install blank wall plates on junction boxes and on outlet boxes with no devices or equipment installed or designated for future use.

L. Provide grounding and bonding in accordance with Section 26 0526.

**3.03 CLEANING**

A. Clean interior of boxes to remove dirt, debris, plaster and other foreign material.

**3.04 PROTECTION**

A. Immediately after installation, protect boxes from entry of moisture and foreign material until ready for installation of conductors.

**END OF SECTION**

## SECTION 26 0553

## IDENTIFICATION FOR ELECTRICAL SYSTEMS

### PART 1 GENERAL

### 1.01 SECTION INCLUDES

A. Electrical identification requirements.

B. Identification nameplates and labels.

C. Wire and cable markers.

D. Voltage markers.

E. Underground warning tape.

F. Warning signs and labels.

### 1.02 RELATED REQUIREMENTS

A. Section 26 0519 - Low-Voltage Electrical Power Conductors and Cables: Color coding for power conductors and cables 600 V and less; vinyl color coding electrical tape.

### 1.03 REFERENCE STANDARDS

A. ANSI Z535.2 - American National Standard for Environmental and Facility Safety Signs; 2011.

B. ANSI Z535.4 - American National Standard for Product Safety Signs and Labels; 2011.

C. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

D. UL 969 - Marking and Labeling Systems; Current Edition, Including All Revisions.

### 1.04 ADMINISTRATIVE REQUIREMENTS

A. Coordination:
   1. Verify final designations for equipment, systems, and components to be identified prior to fabrication of identification products.

B. Sequencing:
   1. Do not conceal items to be identified, in locations such as above suspended ceilings, until identification products have been installed.
   2. Do not install identification products until final surface finishes and painting are complete.

### 1.05 SUBMITTALS

A. Product Data: Provide manufacturer's standard catalog pages and data sheets for each product.

### 1.06 QUALITY ASSURANCE

A. Conform to requirements of NFPA 70.

### PART 2 PRODUCTS

### 2.01 IDENTIFICATION REQUIREMENTS

A. Existing Work: Unless specifically excluded, identify existing elements to remain that are not already identified in accordance with specified requirements.

B. Identification for Equipment:
   1. Use identification nameplate to identify each piece of electrical distribution and control equipment and associated sections, compartments, and components.
   2. Available Fault Current Documentation: Use identification label to identify the available fault current and date calculations were performed at locations requiring documentation by NFPA 70, including but not limited to the following.
      a. Service equipment.
      b. Industrial control panels.
      c. Motor control centers.
      d. Elevator control panels.
      e. Industrial machinery.

C. Identification for Conductors and Cables:
   1. Color Coding for Power Conductors 600 V and Less: Comply with Section 26 0519.
   2. Use identification nameplate or identification label to identify color code for ungrounded and grounded power conductors inside door or enclosure at each piece of feeder or branch-circuit

distribution equipment when premises has feeders or branch circuits served by more than one nominal voltage system.

**2.02 IDENTIFICATION NAMEPLATES AND LABELS**

A. Identification Nameplates:
   1. Manufacturers:
      a. Brimar Industries, Inc: www.brimar.com.
      b. Kolbi Pipe Marker Co; www.kolbipipemarkers.com.
   2. Materials:
      a. Outdoor Locations: Use plastic, stainless steel, or aluminum nameplates suitable for exterior use.
   3. Plastic Nameplates: Two-layer or three-layer laminated acrylic or electrically non-conductive phenolic with beveled edges; minimum thickness of 1/16 inch (1.6 mm); engraved text.
   4. Stainless Steel Nameplates: Minimum thickness of 1/32 inch (0.8 mm); engraved or laser-etched text.
   5. Aluminum Nameplates: Anodized; minimum thickness of 1/32 inch (0.8 mm); engraved or laser-etched text.
   6. Mounting Holes for Mechanical Fasteners: Two, centered on sides for sizes up to 1 inch (25 mm) high; Four, located at corners for larger sizes.

B. Identification Labels:
   1. Materials: Use self-adhesive laminated plastic labels; UV, chemical, water, heat, and abrasion resistant.
   2. Text: Use factory pre-printed or machine-printed text. Do not use handwritten text unless otherwise indicated.

**2.03 WIRE AND CABLE MARKERS**

A. Markers for Conductors and Cables: Use wrap-around self-adhesive vinyl cloth, wrap-around self-adhesive vinyl self-laminating, heat-shrink sleeve, plastic sleeve, plastic clip-on, or vinyl split sleeve type markers suitable for the conductor or cable to be identified.

B. Markers for Conductor and Cable Bundles: Use plastic marker tags secured by nylon cable ties.

C. Legend: Power source and circuit number or other designation indicated.

D. Text: Use factory pre-printed or machine-printed text, all capitalized unless otherwise indicated.

E. Minimum Text Height: 1/8 inch (3 mm).

F. Color: Black text on white background unless otherwise indicated.

**2.04 VOLTAGE MARKERS**

A. Minimum Size:
   1. Markers for Equipment: 1 1/8 by 4 1/2 inches (29 by 110 mm).
   2. Markers for Conduits: As recommended by manufacturer for conduit size to be identified.

B. Legend:
   1. Markers for Voltage Identification: Highest voltage present.
   2. Markers for System Identification:

C. Color: Black text on orange background unless otherwise indicated.

**2.05 UNDERGROUND WARNING TAPE**

A. Materials: Use non-detectable type polyethylene tape suitable for direct burial, unless otherwise indicated.

B. Non-detectable Type Tape: 6 inches (152 mm) wide, with minimum thickness of 4 mil (0.1 mm).

C. Legend: Type of service, continuously repeated over full length of tape.

D. Color:

**2.06 WARNING SIGNS AND LABELS**

A. Comply with ANSI Z535.2 or ANSI Z535.4 as applicable.

B. Warning Signs:
   1. Materials:
   2. Minimum Size: 7 by 10 inches (178 by 254 mm) unless otherwise indicated.

C. Warning Labels:

1. Materials: Use factory pre-printed or machine-printed self-adhesive polyester or self-adhesive vinyl labels; UV, chemical, water, heat, and abrasion resistant; produced using materials recognized to UL 969.
2. Machine-Printed Labels: Use thermal transfer process printing machines and accessories recommended by label manufacturer.
3. Minimum Size: 2 by 4 inches (51 mm by 102 mm) unless otherwise indicated.

**PART 3 EXECUTION**

**3.01 INSTALLATION**

A. Install products in accordance with manufacturer's instructions.

B. Install identification products to be plainly visible for examination, adjustment, servicing, and maintenance. Unless otherwise indicated, locate products as follows:
1. Surface-Mounted Equipment: Enclosure front.
2. Flush-Mounted Equipment: Inside of equipment door.
3. Free-Standing Equipment: Enclosure front; also enclosure rear for equipment with rear access.
4. Elevated Equipment: Legible from the floor or working platform.
5. Interior Components: Legible from the point of access.
6. Conductors and Cables: Legible from the point of access.

C. Install identification products centered, level, and parallel with lines of item being identified.

D. Secure nameplates to exterior surfaces of enclosures using stainless steel screws and to interior surfaces using self-adhesive backing or epoxy cement.

E. Install self-adhesive labels and markers to achieve maximum adhesion, with no bubbles or wrinkles and edges properly sealed.

F. Install underground warning tape above buried lines with one tape per trench at 3 inches (75 mm) below finished grade.

**3.02 FIELD QUALITY CONTROL**

A. Replace self-adhesive labels and markers that exhibit bubbles, wrinkles, curling or other signs of improper adhesion.

**END OF SECTION**

## SECTION 26 2726
## WIRING DEVICES

### PART 1 GENERAL

#### 1.01 SECTION INCLUDES

A. Wall switches.

B. Receptacles.

C. Wall plates.

#### 1.02 RELATED REQUIREMENTS

A. Section 26 0526 - Grounding and Bonding for Electrical Systems.

B. Section 26 0537 - Boxes.

C. Section 26 0553 - Identification for Electrical Systems: Identification products and requirements.

#### 1.03 REFERENCE STANDARDS

A. FS W-C-596 - Connector, Electrical, Power, General Specification for; Federal Specification; Revision G, 2001.

B. FS W-S-896 - Switches, Toggle (Toggle and Lock), Flush-mounted (General Specification); Federal Specification; Revision F, 1999.

C. NECA 1 - Standard for Good Workmanship in Electrical Construction; National Electrical Contractors Association; 2010.

D. NECA 130 - Standard for Installing and Maintaining Wiring Devices; National Electrical Contractors Association; 2010.

E. NEMA WD 1 - General Color Requirements for Wiring Devices; National Electrical Manufacturers Association; 1999 (R 2010).

F. NEMA WD 6 - Wiring Device -- Dimensional Specifications; National Electrical Manufacturers Association; 2012.

G. NFPA 70 - National Electrical Code; National Fire Protection Association; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

H. UL 20 - General-Use Snap Switches; Current Edition, Including All Revisions.

I. UL 498 - Attachment Plugs and Receptacles; Current Edition, Including All Revisions.

J. UL 514D - Cover Plates for Flush-Mounted Wiring Devices; Current Edition, Including All Revisions.

K. UL 943 - Ground-Fault Circuit-Interrupters; Current Edition, Including All Revisions.

#### 1.04 ADMINISTRATIVE REQUIREMENTS

A. Coordination:
   1. Coordinate the placement of outlet boxes with millwork, furniture, equipment, etc. installed under other sections or by others.
   2. Coordinate wiring device ratings and configurations with the electrical requirements of actual equipment to be installed.
   3. Coordinate the installation and preparation of uneven surfaces, such as split face block, to provide suitable surface for installation of wiring devices.
   4. Notify Engineer of any conflicts or deviations from the contract documents to obtain direction prior to proceeding with work.

#### 1.05 SUBMITTALS

A. Product Data: Provide manufacturer's catalog information showing dimensions, colors, and configurations.

B. Manufacturer's Installation Instructions: Indicate application conditions and limitations of use stipulated by product testing agency. Include instructions for storage, handling, protection, examination, preparation, and installation of product.

C. Project Record Documents: Record actual installed locations of wiring devices.

#### 1.06 QUALITY ASSURANCE

A. Conform to requirements of NFPA 70.

B. Products: Listed, classified, and labeled as suitable for the purpose intended.

### 1.07 DELIVERY, STORAGE, AND PROTECTION

A. Store in a clean, dry space in original manufacturer's packaging until ready for installation.

## PART 2 PRODUCTS

### 2.01 WIRING DEVICE APPLICATIONS

A. Provide wiring devices suitable for intended use and with ratings adequate for load served.

B. For single receptacles installed on an individual branch circuit, provide receptacle with ampere rating not less than that of the branch circuit.

C. Provide GFCI protection for receptacles installed within 6 feet (1.8 m) of sinks.

D. Provide GFCI protection for receptacles installed in kitchens.

E. Unless noted otherwise, do not use combination switch/receptacle devices.

### 2.02 WALL SWITCHES

A. Wall Switches - General Requirements: AC only, quiet operating, general-use snap switches with silver alloy contacts, complying with NEMA WD 1 and NEMA WD 6, and listed as complying with UL 20 and where applicable, FS W-S-896; types as indicated on the drawings.
   1. Wiring Provisions: Terminal screws for side wiring and screw actuated binding clamp for back wiring with separate ground terminal screw.

### 2.03 RECEPTACLES

A. Receptacles - General Requirements: Self-grounding, complying with NEMA WD 1 and NEMA WD 6, and listed as complying with UL 498, and where applicable, FS W-C-596; types as indicated on the drawings.
   1. Wiring Provisions: Terminal screws for side wiring or screw actuated binding clamp for back wiring with separate ground terminal screw.
   2. NEMA configurations specified are according to NEMA WD 6.

B. GFCI Receptacles:
   1. GFCI Receptacles - General Requirements: Self-testing, with feed-through protection and light to indicate ground fault tripped condition and loss of protection; listed as complying with UL 943, class A.

### 2.04 WALL PLATES

A. Wall Plates: Comply with UL 514D.
   1. Configuration: One piece cover as required for quantity and types of corresponding wiring devices.
   2. Size: Standard.
   3. Screws: Metal with slotted heads finished to match wall plate finish.

## PART 3 EXECUTION

### 3.01 EXAMINATION

A. Verify that field measurements are as shown on the drawings.

B. Verify that outlet boxes are installed in proper locations and at proper mounting heights and are properly sized to accommodate devices and conductors in accordance with NFPA 70.

C. Verify that wall openings are neatly cut and will be completely covered by wall plates.

D. Verify that final surface finishes are complete, including painting.

E. Verify that branch circuit wiring installation is completed, tested, and ready for connection to wiring devices.

F. Verify that conditions are satisfactory for installation prior to starting work.

### 3.02 INSTALLATION

A. Perform work in a neat and workmanlike manner in accordance with NECA 1 and, where applicable, NECA 130, including mounting heights specified in those standards unless otherwise indicated.

B. Coordinate locations of outlet boxes provided under Section 26 0537 as required for installation of wiring devices provided under this section.

C. Install wiring devices in accordance with manufacturer's instructions.

D. Install permanent barrier between ganged wiring devices when voltage between adjacent devices exceeds 300 V.

E. Where required, connect wiring devices using pigtails not less than 6 inches (150 mm) long. Do not connect more than one conductor to wiring device terminals.

F. Connect wiring devices by wrapping conductor clockwise 3/4 turn around screw terminal and tightening to proper torque specified by the manufacturer. Where present, do not use push-in pressure terminals that do not rely on screw-actuated binding.

G. Unless otherwise indicated, connect wiring device grounding terminal to branch circuit equipment grounding conductor and to outlet box with bonding jumper.

H. Provide GFCI receptacles with integral GFCI protection at each location indicated. Do not use feed-through wiring to protect downstream devices.

I. Install wiring devices plumb and level with mounting yoke held rigidly in place.

J. Install wall switches with OFF position down.

K. Install vertically mounted receptacles with grounding pole on top and horizontally mounted receptacles with grounding pole on left.

L. Install wall plates to fit completely flush to wall with no gaps and rough opening completely covered without strain on wall plate. Repair or reinstall improperly installed outlet boxes or improperly sized rough openings. Do not use oversized wall plates in lieu of meeting this requirement.

M. Install blank wall plates on junction boxes and on outlet boxes with no wiring devices installed or designated for future use.

**3.03 FIELD QUALITY CONTROL**

A. Inspect each wiring device for damage and defects.

B. Operate each wall switch, wall dimmer, and fan speed controller with circuit energized to verify proper operation.

C. Test each receptacle to verify operation and proper polarity.

D. Test each GFCI receptacle for proper tripping operation according to manufacturer's instructions.

E. Correct wiring deficiencies and replace damaged or defective wiring devices.

**3.04 ADJUSTING**

A. Adjust devices and wall plates to be flush and level.

**3.05 CLEANING**

A. Clean exposed surfaces to remove dirt, paint, or other foreign material and restore to match original factory finish.

**END OF SECTION**

## SECTION 32 3113

## CHAIN LINK FENCES AND GATES

### PART 1 GENERAL

### 1.01 SECTION INCLUDES

A. Fence framework, fabric, and accessories.

### 1.02 REFERENCE STANDARDS

A. ASTM A123/A123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products; 2015.

B. ASTM A392 - Standard Specification for Zinc-Coated Steel Chain-Link Fence Fabric; 2011a.

C. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2015.

D. ASTM F567 - Standard Practice for Installation of Chain-Link Fence; 2011.

E. ASTM F1043 - Standard Specification for Strength and Protective Coatings on Steel Industrial Fence Framework; 2014.

F. ASTM F1083 - Standard Specification for Pipe, Steel, Hot-Dipped Zinc-Coated (Galvanized) Welded, for Fence Structures; 2013.

G. ASTM F1665 - Standard Specification for Poly(Vinyl Chloride)(PVC) and Other Conforming Organic Polymer-Coated Steel Barbed Wire Used with Chain-Link Fence; 2008 (Reapproved 2013).

H. CLFMI CLF 2445 - Product Manual; 1997.

### 1.03 SUBMITTALS

A. Product Data: Provide data on fabric, posts, accessories, fittings and hardware.

B. Shop Drawings: Indicate plan layout, spacing of components, post foundation dimensions, hardware anchorage, and schedule of components.

### PART 2 PRODUCTS

### 2.01 MATERIALS AND COMPONENTS

A. Materials and Components: Conform to CLFMI CLF 2445.

### 2.02 MATERIALS

A. Wire Fabric: ASTM A392 zinc coated steel chain link fabric.

### 2.03 FINISHES

A. Components (Other than Fabric): Galvanized in accordance with ASTM A123/A123M, at 1.7 oz/sq ft (530 g/sq m).

### PART 3 EXECUTION

### 3.01 INSTALLATION

A. Install framework, fabric, accessories in accordance with ASTM F567.

**END OF SECTION**

# All Requirements Report
# Harvard Park Facility Improvements
# CIP No. 361702

Project Location: **Irvine**
Facility Type: **Recreation, Sports, Amusement**
Project Type: **Remodeling or Renovation**

Estimated Gross Floor Area: **4,000 Sq Ft**
Actual Gross Floor Area: **0 Sq Ft**
Budgeted Construction Cost: **$0**
Actual Construction Cost: **$0**

Budgeted Cost/Unit Area: **$0.00 / Sq Ft**

Number of Sections in Project: **18**
Specification Start Date: **10/1/2016**
Specification Issue Date:
Addenda: **0**

**SECTIONS CONTAINING INDEPENDENT AGENCY FIELD TESTING REQUIREMENTS**

**DIVISION 09 - FINISHES**

09 9113 - EXTERIOR PAINTING
09 9123 - INTERIOR PAINTING

## SECTIONS CONTAINING INSTALLATION INSTRUCTIONS REQUIREMENTS

**DIVISION 26 - ELECTRICAL**

26 2726 - WIRING DEVICES

## SECTIONS CONTAINING MAINTENANCE MATERIALS REQUIREMENTS

**DIVISION 26 - ELECTRICAL**

26 0519 - LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

**SECTIONS CONTAINING MANUFACTURER LISTING REQUIREMENTS**

**DIVISION 05 - METALS**
05 5213 - PIPE AND TUBE RAILINGS

**DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES**
06 4100 - ARCHITECTURAL WOOD CASEWORK

**DIVISION 09 - FINISHES**
09 6519 - RESILIENT TILE FLOORING
09 9113 - EXTERIOR PAINTING
09 9123 - INTERIOR PAINTING

**DIVISION 12 - FURNISHINGS**
12 3600 - COUNTERTOPS

**DIVISION 26 - ELECTRICAL**
26 0519 - LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES
26 0534 - CONDUIT
26 0553 - IDENTIFICATION FOR ELECTRICAL SYSTEMS

**SECTIONS CONTAINING MANUFACTURER QUALIFICATIONS REQUIREMENTS**

**DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES**

06 4100 - ARCHITECTURAL WOOD CASEWORK

## SECTIONS CONTAINING MOCK-UP REQUIREMENTS

**DIVISION 09 - FINISHES**

09 9113 - EXTERIOR PAINTING
09 9123 - INTERIOR PAINTING

**SECTIONS CONTAINING PRODUCT DATA SUBMITTAL REQUIREMENTS**

**DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES**
- 06 1000 - ROUGH CARPENTRY
- 06 4100 - ARCHITECTURAL WOOD CASEWORK

**DIVISION 09 - FINISHES**
- 09 6519 - RESILIENT TILE FLOORING
- 09 9113 - EXTERIOR PAINTING
- 09 9123 - INTERIOR PAINTING

**DIVISION 11 - EQUIPMENT**
- 11 4001 - CUSTOM FABRICATED FOODSERVICE EQUIPMENT

**DIVISION 12 - FURNISHINGS**
- 12 3600 - COUNTERTOPS

**DIVISION 26 - ELECTRICAL**
- 26 0519 - LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES
- 26 0526 - GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS
- 26 0534 - CONDUIT
- 26 0537 - BOXES
- 26 0553 - IDENTIFICATION FOR ELECTRICAL SYSTEMS
- 26 2726 - WIRING DEVICES

**DIVISION 32 - EXTERIOR IMPROVEMENTS**
- 32 3113 - CHAIN LINK FENCES AND GATES

**SECTIONS CONTAINING PROJECT RECORD DOCUMENTS REQUIREMENTS**

**DIVISION 02 - EXISTING CONDITIONS**
02 4100 - DEMOLITION

**DIVISION 26 - ELECTRICAL**
26 2726 - WIRING DEVICES

**SECTIONS CONTAINING SAMPLES REQUIREMENTS**

**DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES**
- 06 4100 - ARCHITECTURAL WOOD CASEWORK

**DIVISION 09 - FINISHES**
- 09 6519 - RESILIENT TILE FLOORING
- 09 9113 - EXTERIOR PAINTING
- 09 9123 - INTERIOR PAINTING

**DIVISION 12 - FURNISHINGS**
- 12 3600 - COUNTERTOPS

**SECTIONS CONTAINING SHOP DRAWINGS REQUIREMENTS**

**DIVISION 02 - EXISTING CONDITIONS**
02 4100 - DEMOLITION

**DIVISION 05 - METALS**
05 5213 - PIPE AND TUBE RAILINGS

**DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES**
06 4100 - ARCHITECTURAL WOOD CASEWORK

**DIVISION 09 - FINISHES**
09 6519 - RESILIENT TILE FLOORING

**DIVISION 26 - ELECTRICAL**
26 0519 - LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

**DIVISION 32 - EXTERIOR IMPROVEMENTS**
32 3113 - CHAIN LINK FENCES AND GATES

## SECTIONS CONTAINING TEST REPORT REQUIREMENTS

**DIVISION 12 - FURNISHINGS**

12 3600 - COUNTERTOPS

**SECTIONS CONTAINING WARRANTY, SPECIAL REQUIREMENTS**

**DIVISION 09 - FINISHES**
09 6519 - RESILIENT TILE FLOORING

**DIVISION 11 - EQUIPMENT**
11 4001 - CUSTOM FABRICATED FOODSERVICE EQUIPMENT

HARVARD PARK FACILITY IMPROVEMENTS
CIP NO. 361702

# SCHEDULE OF WORK AND BID PRICES

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.

| ITEM NO. | ITEM DESCRIPTION | UNIT | EST. QTY | UNIT PRICE | TOTAL |
|---|---|---|---|---|---|
| | | | | | |
| 1 | Mobilization, Conditions and Controls | LS | 1 | | |
| | | | | | |
| | **Community Center Interior Work** | | | | |
| 2 | Interior Demolition | LS | 1 | | |
| 3 | Kitchen appliances | LS | 1 | | |
| 4 | Pass-through doors | LS | 1 | | |
| 5 | Countertops/backsplash | LS | 1 | | |
| 6 | Flooring / Base | LS | 1 | | |
| 7 | Millwork & Hardware | LS | 1 | | |
| 8 | Sink/Faucet/ Disposal | LS | 1 | | |
| 9 | Plumbing / Fixtures | LS | 1 | | |
| 10 | Interior lighting upgrades | LS | 1 | | |
| 11 | Interior Prep/Painting | LS | 1 | | |
| 12 | Electrical | LS | 1 | | |
| | | | | | |
| | **Concession Stand** | | | | |
| 13 | Interior Demolition | LS | 1 | | |
| 14 | Repair countertop | LS | 1 | | |
| 15 | Prep & Paint interior cabinetry | LS | 1 | | |
| 16 | Patch/Prep/Paint Exterior | LS | 1 | | |
| | | | | | |
| | **Field Dugouts** | | | | |
| 17 | Remove/Replace chainlink fencing | LS | 1 | | |
| 18 | Remove/Replace handrails | LS | 1 | | |
| 19 | Prep/Paint existing fence rails | LS | 1 | | |
| 20 | Prep/Paint dugout tops | LS | 1 | | |
| 21 | Prep/Paint stair contract stripe | LS | 1 | | |
| | | | | | |

Bidder's name_____

TOTAL BASE BID PRICE _____

_____

_____

(Amount written in words)

Total Base Bid Price (in figures) $_____

**ADDITIVE BID ITEM**

| ITEM NO. | ITEM DESCRIPTION | UNIT | EST. QTY | UNIT PRICE | TOTAL |
|---|---|---|---|---|---|
| 1A | Design-Build services to furnish and install new fire alarm system in the Harvard Community Center and Concession Stand Building.<br><br>(Deferred Submittal) | LS | 1 | | |

TOTAL ADDITIVE BID PRICE _____

_____

_____

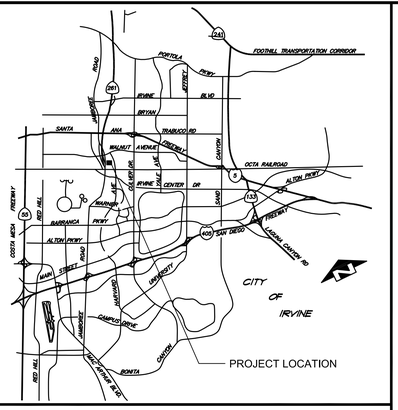
(Amount written in words)

Total Additive Bid Price (in figures) $_____

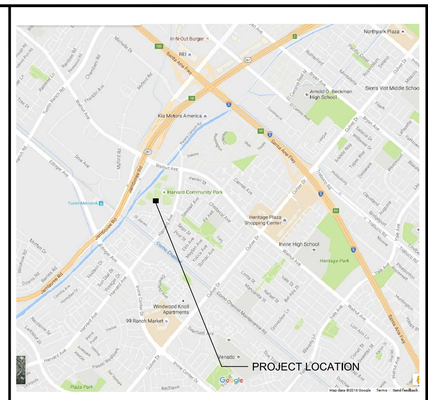
Bidder's name_____

# THE CITY OF IRVINE

## HARVARD PARK FACILITY IMPROVEMENTS CIP No. 361702




VICINITY MAP




LOCATION MAP

### PROJECT INFORMATION REQUIREMENTS

PROJECT LOCATION: < HARVARD PARK, 14701 HARVARD, IRVINE, CA 92606 >

PROJECT DESCRIPTION
<REFURBISHMENT OF EXISTING WARMING KITCHEN AND LIGHTING IN COMMUNITY CENTER, AND REFURBISHMENT TO BASEBALL FIELD DUGOUTS..

OCCUPANCY A-3

NUMBER OF STORIES <1 STORY>

MEZZANINES <NONE>

TYPE OF CONSTRUCTION <VB-1 HR>

FIRE PARTITION WALLS <NO>

FIRE BARRIER WALLS <NO>

FIRE WALL <NO>

HORIZONTAL ASSEMBLIES <NO>

FIRE SPRINKLERS
*N/A FOR THIS PROJECT

BASED ON NFPA 13, FIRE SPRINKLER SHALL BE PROVIDED UNDER SEPARATE APPROVAL THROUGH THE ORANGE COUNTY FIRE AUTHORITY.

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.

ALLOW HEIGHT AND AREA ANALYSIS PER CBC SECTION 504:

| ALLOWABLE HEIGHT AND BUILDING AREA (CBC TABLE 503) | | |
|---|---|---|
| COMMUNITY CENTER | ACTUAL | ALLOWABLE |
| HEIGHT (FT.) | -- | -- |
| NO. OF STORIES | 1 | -- |
| AREA (PER STORY, FT ABOVE GRADE | 3,160 | -- |
| | | |
| CONCESSION STAND | ACTUAL | ALLOWABLE |
| HEIGHT (FT.) | -- | -- |
| NO. OF STORIES | 1 | -- |
| AREA (PER STORY, FT ABOVE GRADE | 600 | -- |

PARKING SUMMARY: (NO CHANGE)
REQUIRED PARKING

ACCESSIBLE PARKING: (NO CHANGE)

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: <YES>*

### *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 GREEN BUILDING STANDARDS <SHEET T1.1> FOR COMPLETE COMPLIANCE DOCUMENTATION.

### *CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS*

PROVISIONS OF THE CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARD APPLY TO THIS PROJECT SEE TITLE 24 SHEET <SHEETS E3.0 & E4.0> 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.
*N/A FOR THIS PROJECT

### *CITY OF IRVINE MUNICIPAL CODE*

THE DESIGN AND CONSTRUCTION OF THIS PROJECT SHALL COMPLY WITH ALL APPLICABLE IRVINE MUNICIPAL CODE PROVISIONS INCLUDING BUT NOT LIMITED TO:

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

*N/A FOR THIS PROJECT

### *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. AND REQUIRED DOCUMENTATION REQUIRED AT THE RECEIPT OF ANY SHIPMENT OF OFF-SITE FABRICATED ITEMS.

*HANDRAILS - IB 311

### *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.
*N/A FOR THIS PROJECT

### *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.

### *ASBESTOS REMOVAL:*

NOTE:
THE REMOVAL OF ASBESTOS AND/OR LEAD CONTAINING MATERIAL SHALL BE EXECUTED BY A CERTIFIED FIRM IN COMPLIANCE WITH CAL-OSHA, FEDERAL STANDARDS AND AHERA.

### *FIRE DEPARTMENT NOTES:*

1. *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.*
2. *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.*
3. *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.*
4. *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.*
5. *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.*
6. *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.*
7. *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.*
8. *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.*
9. *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.*
10. *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- OR LIMITED-COMBUSTIBLE MATERIALS OR SIMILARLY PROTECTED OR SEPARATED. CFC 304.3*
11. *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.*
12. *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.*
13. *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.*
14. *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.*
15. *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.*
16. *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.*
17. *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.*
18. *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.*

### *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:*

1. *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.*
2. *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.*
3. *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.*
4. *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.*
5. *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.*
6. *TRASH AND CONSTRUCTION SOLID WASTES SHALL BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OF RAINWATER AND DISPERSAL BY WIND.*
7. *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 SWEPT UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.*
8. *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.*

### *RESTROOM ADA IMPROVEMENT PLANS:*

*PERMIT #00663396-CTIS*

### *SHEET INDEX:*

SHEET INDEX

| SHEET # | DESCRIPTION |
|---|---|
| T1.0 | TITLE SHEET |
| T1.1 | GREEN BUILDING STANDARDS & SPECIAL INSPECTIONS |
| ARCHITECTURAL | |
| A0.1 | OVERALL SITE PLAN - *FOR REFERENCE ONLY* |
| A0.2 | DISABLED ACCESS PLAN |
| A0.3 | SCHEDULES |
| XA1.0 | DEMO FLOOR PLAN |
| A1.0 | FLOOR PLAN |
| A1.1 | KITCHEN FLOOR PLAN & INTERIOR ELEVATIONS |
| A2.0 | REFLECTED CEILING PLAN |
| A5.0 | DETAILS |
| ELECTRICAL | |
| E0.1 | GENERAL NOTES, SYMBOL LIST, ABBREVIATIONS, APPLICABLE CODES AND SHEET INDEX |
| E0.2 | LIGHTING FIXTURE SCHEDULES, SINGLE LINE DIAGRAM AND PANEL SCHEDULES |
| XE1.0 | POWER DEMOLITION PLANS |
| E1.0 | POWER REMODEL PLANS |
| XE2.0 | LIGHTING DEMOLITION PLANS |
| E2.0 | LIGHTING REMODEL PLANS |
| E3.0 | TITLE 24 FORMS |
| E4.0 | TITLE 24 FORMS |
| | |

| NO. | DATE | REVISIONS |
|---|---|---|
| 1 | 09/29/16 | DESIGN DEVELOPMENT |
| 2 | 10/19/16 | PLAN CHECK |
| 3 | 11/01/16 | PLAN CHECK CORRECTIONS |
| 4 | 11/29/16 | BID SET |
| 5 | | |
| 6 | | |
| 7 | | |

DESIGNED: MP
DRAWN:
CHECKED: CP
DATE: 09/14/16
SCALE: AS SHOWN

CONSULTANT ENGINEER:

LICENSED ARCHITECT
CATHERINE ANNE PEPPARD
No. C-29191
L.S. 2017
RENEWAL DATE
STATE OF CALIFORNIA

PLANS PREPARED BY:
cap architecture
Catherine Anne Peppard
9202 Mesa Verde Drive
Fountain Valley, California 92708
tel: 714.378.3550
fax: 714.366.0337

ARCHITECT: LICENSE NO. EXP. DATE

SHEET TITLE: TITLE SHEET

CITY OF IRVINE
COMMUNITY DEVELOPMENT DEPARTMENT
Community Center/ Concession Stand/ Field Dugout Refurbishment at Harvard Park

PLAN CHECK :
PERMIT :

T1.0
SHEET: OF

11/29/2016 2:17:49 PM, 30x42

BID SET

# SPECIAL INSPECTION

## INFORMATIONAL BULLETIN

**Bulletin No.: 278**
Page 1 of 2
Effective: 2/18/99
Approved:

Chief Building Official

**Special Inspection Program Requirements**

When special inspection is required for a project, the Uniform Building Code requires a special inspection program to be submitted to the Chief Building Official for approval prior to issuance of the building permit. Such program shall be prepared by the architect or engineer of record and submitted with the plan check documents for the project. The program shall be included on the project plans in a prominent location such as on the first sheet of architectural or structural plans.

Attached: Special Inspection Program Form

B1

## SPECIAL INSPECTION PROGRAM SUMMARY

Building Address: _____
Project Description: _____
Plan Check Number: _____

I, as the owner, or agent of the owner (contractors may not employ the special inspector), certify that I, or the architect/engineer of record, will be responsible for employing the special inspector(s) as required by Uniform Building Code (UBC) Section 1701.1 for the construction project located at the site listed above. UBC Section 106.3.5.

Signed _____ Date _____

Print Name _____ ☐ Owner ☐ Engineer ☐ Architect

Firm _____

I, as the engineer/architect of record, certify that I have prepared the following special inspection program as required by UBC Section 106.3.5 for the construction project located at the site listed above.

Engineer's/Architect's Seal & Signature Here

Signed _____ Date _____

Firm _____ Phone _____

1. List of work requiring special inspection:

| | |
|---|---|
| ☐ Concrete | ☐ Structural Welding |
| ☐ Bolts in concrete and epoxy installation | ☐ High-Strength Bolting |
| ☐ Special-Moment Resisting Frame | ☐ Structural Masonry |
| ☐ Reinforcing Steel | ☐ Insulating Concrete Fill or Reinforced Gypsum Concrete |
| ☐ Prestressed Concrete | ☐ Spray-applied Fireproofing |
| ☐ Piling, and drilled piers | ☐ Shotcrete |
| ☐ Smoke-Control System | ☐ Other:_____ |

2. Name(s) of individual(s) or firm(s) responsible for the special inspections listed above:

A. _____
B. _____
C. _____

3. Duties of the special inspectors for the work listed above: (Attach additional sheets as necessary)

A. _____
B. _____
C. _____

Special inspectors shall notify the City of Irvine Building and Safety Division at (949) 724-6331 and present their credentials for approval prior to beginning work on the job site.

FORM 65-34

B2

# GREEN BUILDING STANDARDS

**Composite wood products** shall meet the applicable standards of CGBSC 5.504.4.5 and table 5.504.4.5.

**Environmental Tobacco Smoke Control (5.504.5.3)**
N/A See plan sheet _____ for designated outdoor smoking area which shows a minimum of 25 feet from building entries, outdoor ventilation intakes and operable windows.

**Ventilation filtration-** Outside and return air shall pass through filtration media having a rating of MERV 8 or better, see plan sheet _____ for specification (CGBSC 5.504.5.3).

**ENVIRONMENTAL COMFORT (CGBSC 5.507)**

**Exterior Noise** *[Note for zone boundaries refer to Sound Transmission Class (STC) Map Sound Transmission Class (STC) Map @ www.cityofirvine.org in the form catalog]*

N/A 1. A portion or the entire building is within 1,000 feet of freeway right-of-way therefore the specified exterior wall assemblies and roof or roof-ceiling assemblies have a sound transmission coefficient of 50 or more and the specified window assemblies have a sound transmission coefficient of 30 or more. For details and specifications see plan sheets _____.

N/A 2. A portion or the entire building is within the 65 CNEL contour for John Wayne Airport therefore the specified exterior wall assemblies and roof or roof-ceiling assemblies have a sound transmission coefficient of 50 or more and the specified window assemblies have a sound transmission coefficient of 30 or more. For details and specifications see plan sheets _____.

N/A 3. The project site fronts a street indentified as producing 65 CNEL contours extending beyond the right of way therefore the specified exterior wall assemblies and roof or roof-ceiling assemblies have a sound transmission coefficient of 50 or more and the specified window assemblies have a sound transmission coefficient of 30 or more. For details and specifications see plan sheets _____.

N/A This building is a factory, storage facility, utility building, enclosed parking structure or stadium therefore no STC assemblies are required.

N/A A noise study has been approved by the City that demonstrates a CNEL below 65 therefore no STC assembles are required. (Note: This may only be accepted to relieve the requirement for item 3 above.)

**Interior Sound**
N/A Wall and floor-ceiling assemblies separating tenant spaces and tenant spaces and public places shall have an STC of at least 40. Note: Examples of assemblies and their various STC ratings may be found in the catalog of STC and ICC Ratings for Wall and Floor/Ceiling Assemblies. For details and specifications see plan sheets _____.

N/A No interior walls separate tenant spaces or occupant spaces and public areas.

Note: Sound transmission control (STC) ratings shall be in accordance with ASTM E 90 and ASTM E 413.

FORM 66-113
Revised 9/27/11

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Landscape and irrigation design shall comply with the City of Irvine Municipal Code Chapter 7 of Title 5, Sustainability In Landscaping.

**WATER RESISTANCE AND MOISTURE MANAGEMENT** (CGBSC 5.407)
**ENTRIES AND OPENINGS** To prevent water intrusion into exterior entries and/or openings subject to foot traffic or wind-driven rain, the following features have been incorporated into the design:
N/A Overhangs and/or recesses, see plan sheet: _____.
N/A Flashings integrated with a drainage plane, see plan sheet: _____.
N/A Nonabsorbent floor and wall finishes within at least two feet around and perpendicular to such openings, see plan sheet: _____.

**MATERIAL CONSERVATION AND RESOURCE EFFICIENCY- CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING** (CGBSC 5.408)
Recycling of materials shall conform to the Construction and Demolition Materials Recycling Requirements of the City of Irvine Municipal Code, sections 6-7-901 through 6-7-912.

**BUILDING MAINTENANCE AND OPERATION** (CGBSC 5.410)
**RECYCLING BY OCCUPANTS**
X **[P]** Designated recycling areas shall be provided as required by sections 3-23-1 through 3-23-4 of the City of Irvine Zoning Code. See plan sheet **A1.1**.

N/A **COMMISSIONING** For buildings greater than 10,000 square feet, building commissioning.

**Design**
Using the templates available through the California Building Commission available in "Part 4 Suggested Forms and Templates" of the Guide to the Nonresidential CalGreen Code at: www.bsc.ca.gov/Home/CALGreen.aspx, the following documents are complete and included in the plans as follows:
- Completed and signed Owner's Project Requirements (OPR), see sheet _____.
- Completed and signed Basis of Design (BOD), see sheet _____.
- Commissioning Plan, including a completed and signed "Commissioning Plan" form and complete coverage of each of the elements 1-9 as specified therein. Functional performance testing shall utilize templates available at the above referenced website, see sheet _____.

**Construction-Prior to Final Inspection Approval**
- A completed Commissioning Report shall be provided to the City Inspector prior to final inspection approval. Contents, pursuant to section 5.410.2.6, shall include a description of the commissioning process activities undertaken through the design, construction and reporting recommendations for post construction phases. In addition all required functional performance testing reports shall be included.
- A completed Systems Manual shall be made available for review by the City Inspector prior to final inspection approval. Contents shall include a completed and signed "System Manual" form from the above referenced website and complete coverage of each of the elements 1-7 as specified therein.

Note: Approved equals may be substituted for the forms specified herein which may include acceptance forms required under the California Building Energy Efficiency Standards.

FORM 66-113
Revised 9/27/11

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CITY OF IRVINE STANDARD NOTES
NON-RESIDENTIAL CONSTRUCTION
2010 CALIFORNIA GREEN BUILDING STANDARD (2.1)

Applies to ***Newly Constructed Non-residential Buildings and any subsequent initial tenant improvements*** for which permit application is made on or after January 1, 2011- the following standard notes shall be completed and incorporated into the approved plans and all effected design features and specifications shall be made to conform.

*(Instructions: Designer to place an* **X** *preceding each applicable section and complete the notes or indicate* **N/A** *if not applicable. Building plan check shall be responsible for verification except for those items preceded by a* **[P]** *which will be verified by Planning.)*

**PARKING AND CHANGING ROOMS** (CGBSC 5.106.4)
**Check the appropriate box and provide complete input for each selection as applicable:**
N/A **[P]** Short-term bicycle parking (bicycle racks) are provided to accommodate anticipated visitor traffic. The total number provided is: _____. These racks are located within 200 feet of the visitor's entrance as depicted on plan sheet: _____.
N/A This project will accommodate over 10 tenant-occupants, therefore long term bicycle parking is provided. The total number provided equal to 5% of the required parking is: _____. The method(s) selected to satisfy this requirement is (are):

___ Covered, lockable enclosures with permanently anchored racks for bicycles, the total number provided is: _____, see plan sheet: _____.

___ Lockable bicycle rooms with permanently anchored racks, the total number provided is: _____, see plan sheet: _____.

___ Lockable, permanently anchored bicycle lockers, the total number provided is: _____, see plan sheet: _____.

**DESIGNATED PARKING FOR "CLEAN AIR VEHICLES** (CGBSC 5.106.5.2)
N/A Per Table 5.106.5.2, a total of _____ Clean Air Vehicle parking spaces are provided. Spaces shall be permanently identified in 12 inch high lettering that says "CLEAN AIR VEHICLES". Such lettering shall align with the end of the stall striping so as to be visible when a vehicle is parked in the stall. See plan sheet _____ defining designated stalls and lettering details.

**LIGHT POLLUTION REDUCTION** (CGBSC 5.106.8)
N/A **[P]** Outdoor lighting designed to comply with the City of Irvine Security Code and section 3-16-1 of the City of Irvine Zoning Code which requires all direct rays to be confined to the site and that adjacent properties are protected from glare are depicted on plan sheet _____ along with photometrics.

FORM 66-113
Revised 9/27/11

1 of 5

N/A **TESTING AND ADJUSTING.** For buildings not exceeding 10,000 square feet, testing and adjusting are required.

**Design**
See sheet _____ for procedures for testing and adjusting systems, which includes:
- HVAC systems and controls.
- HVAC balancing per the Testing Adjusting and Balancing Bureau National Standards; the National Environmental Balancing Bureau Procedural Standards; or Associated Air Balance Council National Standards or approved equal.
- Indoor and outdoor lighting and controls.
- Water heating systems.
- Renewable energy systems.
- Landscape irrigation systems.
- Water reuse systems.

Functional performance testing report scope and content shall be consistent with CALGreen Compliance Form "Functional Performance Testing" available in the Guide to Nonresidential Commissioning at www.bsc.ca.gov/Home/CALGreen.aspx, or approved equals and may incorporate acceptance forms required under the California Building Energy Efficiency Standards. For itemized list of functional tests required see sheet _____.

**Construction-Prior to Final Inspection Approval**
Completed testing, adjusting, and balancing reports shall be provided to the City Inspector prior to final inspection approval. Contents shall match those specified in the procedures section above and be signed by the responsible parties.

**ENVIRONMENTAL QUALITY**

N/A **FIREPLACES** Wood burning devices including fireplaces are not permitted under SQAQMD Rule 443. Any installed gas fireplace shall be a direct-vent sealed-combustion type. (CGBSC 5.503)

**MECHANICAL EQUIPMENT AND DUCT PROTECTION** To reduce the amount of dust and debris collected in mechanical equipment and ducts, all duct openings and other related air distribution equipment component openings shall be covered from the time of delivery at the jobsite through the construction until final start up. (CGBSC 5.504.3)

**FINISH MATERIAL POLLUTANT CONTROL**
- **Adhesives, sealants and caulks** shall meet the applicable standards of CGBSC 5.504.4.1 and tables 5.504.4.1 and 5.504.4.2 for VOC limits and content prohibitions.
- **Paints and coatings** shall meet the applicable standards of CGBSC 504.4.3 and table 5.504.4.3 for VOC limits.
- **Aerosol paints and coatings** shall meet the applicable standards of CGBSC 5.504.4.3.1.

**Carpet systems** shall meet the applicable standards of CGBSC 5.504.4.4 including CGBSC 5.504.4.4.1 for **carpet cushions** and CGBSC 5.504.4.4.2 for **carpet adhesives**.

**Resilient flooring** shall meet the applicable standards of CGBSC 5.504.4.6.

FORM 66-113
Revised 9/27/11

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**WATER EFFICIENCY AND CONSERVATION** (CGBSC 5.3)
**Separate Meters or metering devices**
N/A This project consists of a single tenant building with a dedicated meter.
N/A A separate meter or metering device is provided for the following spaces: _____. See plan sheet _____ for details and specifications defining metering design.
N/A Separate meters or metering devices are not provided.

Notes: (1) A single tenant building without a dedicated meter must be shown to use less than 1000 gals/day via worksheet WS-1 found in chapter 8 of the CGBSC and any necessary addendum worksheet to reflect process water or other uses not represented on the worksheet. (2) For buildings having a total floor area greater than 50,000 square feet, all its spaces not having a separate meter must be shown to have a projected consumption of less than 100 gals/day via worksheet WS-1 found in chapter 8 of the CGBSC and any necessary addendum worksheet to reflect process water or other uses not represented on the worksheet.

**INDOOR WATER USE**(CGBSC 5.303)
Indoor water use shall be reduced by 20 percent using one of the following methods:
X Water saving fixtures shall be used meeting the flow rate of the "20% Reduction" column specified in Table 5.303.2.3, see below, unless item 2 below is selected and an approved alternate fixture table is included in the plans and cross-referenced from these notes.
N/A A 20 percent reduction in baseline water use shall be demonstrated via approved calculations pursuant to CGBSC section 5.303.2 item 2. For alternate fixture table, see plan sheet: _____.

TABLE 5.303.2.3 (modified)
FIXTURE FLOW RATES

| FIXTURE TYPE | FLOW RATE | MAXIMUM FLOW RATE AT 20% REDUCTION |
|---|---|---|
| Showerheads | 2.5 gpm @ 80 psi | 2 gpm @ 80 psi |
| Lavatory faucets | 0.5 gpm @ 60 psi | 0.4 gpm @ 60 psi |
| Kitchen faucets | 2.2 gpm @ 60 psi | 1.8 gpm @ 60 psi |
| Wash fountain | 2.2[rim space (in.)/20 gpm @60 psi] | 1.8[rim space (in.)/20 gpm @60 psi] |
| Metering faucet | 0.2 gallons/cycle | 0.2 gallons/cycle |
| Metering faucet for wash fountains | 0.25[rim space (in.)/20 gpm @60 psi] | 0.2[rim space (in.)/20 gpm @60 psi] |
| Water Closets | 1.6 gallons/flush | 1.28 gallons/flush* |
| Urinal | 1.0 gallons/flush | 0.5 gallons/flush |

* Includes single and dual flush water closets with an effective flush rate of 1.28 gallons or less:
Single flush toilets—The effective flush volume shall not exceed 1.28 gallons (4.8 liters). The effective flush volume is the average flush volume when tested in accordance with ASME A 112.19/233.2.
Dual flush toilets—The effective flush volume shall not exceed 1.28 gallons (4.8 liters). The effective flush volume is defined as the composite, average flush volume of two reduced flushes and one full flush. Flush volumes will be tested in accordance with ASME A 112.19.2 and ASME A 112.19.14.

Note: The combined flow of multiple showerheads serving a single shower shall not exceed maximum allowable flow rate for a single fixture shower or the control valves shall be arranged to only allow one shower head to operate at a time.

**OUTDOOR WATER USE** (CGBSC 5.304)

FORM 66-113
Revised 9/27/11

2 of 5

| NO. | DATE | REVISIONS |
|---|---|---|
| 7 | | |
| 6 | | |
| 5 | 11/28/16 | BID SET |
| 4 | 11/01/16 | PLAN CHECK CORRECTIONS |
| 3 | 10/19/16 | PLAN CHECK |
| 2 | 09/29/16 | DESIGN DEVELOPMENT |
| 1 | | |

DESIGNED:
DRAWN: MP
CHECKED: CP
DATE: 09/14/16
SCALE: AS SHOWN

CONSULTANT ENGINEER:

LICENSED ARCHITECT
CATHERINE ANNE PEPPARD
No. C-26191
31, 2017
RENEWAL DATE
STATE OF CALIFORNIA

PLANS PREPARED BY:
cap architecture
8700 Warner Avenue, Suite 250 tel: 714.418.2550
Fountain Valley, California 92708 fax: 714.360.0337

ARCHITECT: LICENSE NO. EXP. DATE

SHEET TITLE:
GREEN BUILDING STANDARDS
& SPECIAL INSPECTIONS

CITY OF IRVINE
COMMUNITY DEVELOPMENT DEPARTMENT
Community Center/ Concession Stand/ Field Dugout Refurbishment at Harvard Park

PLAN CHECK :
PERMIT :

T1.1
SHEET: OF

11/29/2016 2:18:32 PM, 30x42

Peters Canyon Flood Control Channel

75' Peters Canyon channel easement - see legal description

FIELD #4

FIELD #3

FIELD #2

FIELD #1

652' (to N.E. corner of multi-use building)

778'

570'

1044'

582'

640'

204'

129'

existing 12"

3 conventional parking spaces

## Legend

- picnic tables - Mexico Forge # 511-080
- park stoves - Mexico Forge # 466-000
- trash receptacles - Cowan Concrete Products # CTR-10
- park benches - Gametime # 5560
- bike racks - Rally Racks # RR-200 permenant installation
- drinking fountain - Haws # 3340 w/step # 4624
- drinking fountain - Haws # 3376 -
- easement lines - see legal description
- property lines
- catch basins -
- chain link fence
- 4" dugout drain lines
- 4" V.C.P. sewer line
- sewer manhole

## Notes

Assumed grid: intersection of 0+00 W and 0+00 S to be the conjunction of the eastern most & northern most property lines as described and located by the property legal description. 100 sq. grids

Vertical datum: O.C.S. B.M.'s 38-67-68 Elev. 36.97' and 3H-11-71 Elev. 82.35'

Horizontal datum: California coordinate system Zone 6 based on R.S. 88-28

The above information for Vertical and Horizontal control was taken from topographical map prepared by: E.L. Pearson & Associates - Newport Beach Calif. date of photography - July 8, 1974

# OVERALL SITE PLAN - *FOR REFERENCE ONLY*

SCALE: 1"=40'

NORTH

| NO. | DATE | REVISIONS |
|---|---|---|
| 7 | | |
| 6 | | |
| 5 | 11/28/16 | BID SET |
| 4 | 11/01/16 | PLAN CHECK CORRECTIONS |
| 3 | 10/19/16 | PLAN CHECK |
| 2 | 09/29/16 | DESIGN DEVELOPMENT |
| 1 | | |

DESIGNED:
DRAWN: MP
CHECKED: CP
DATE: 09/14/16
SCALE: AS SHOWN

CONSULTANT ENGINEER:

LICENSED ARCHITECT CATHERINE ANNE PEPPARD No. C-29191 11-31-2017 RENEWAL DATE STATE OF CALIFORNIA

PLANS PREPARED BY: cap architecture, 8700 Warner Avenue, Suite 280, Fountain Valley, California 92708, ph: 714.378.2550, fax: 714.300.0337

ARCHITECT: LICENSE NO. EXP. DATE

SHEET TITLE: OVERALL SITE PLAN - *FOR REFERENCE ONLY*

CITY OF IRVINE
COMMUNITY DEVELOPMENT DEPARTMENT
Community Center/ Concession Stand/ Field Dugout Refurbishment at Harvard Park

PLAN CHECK :
PERMIT :

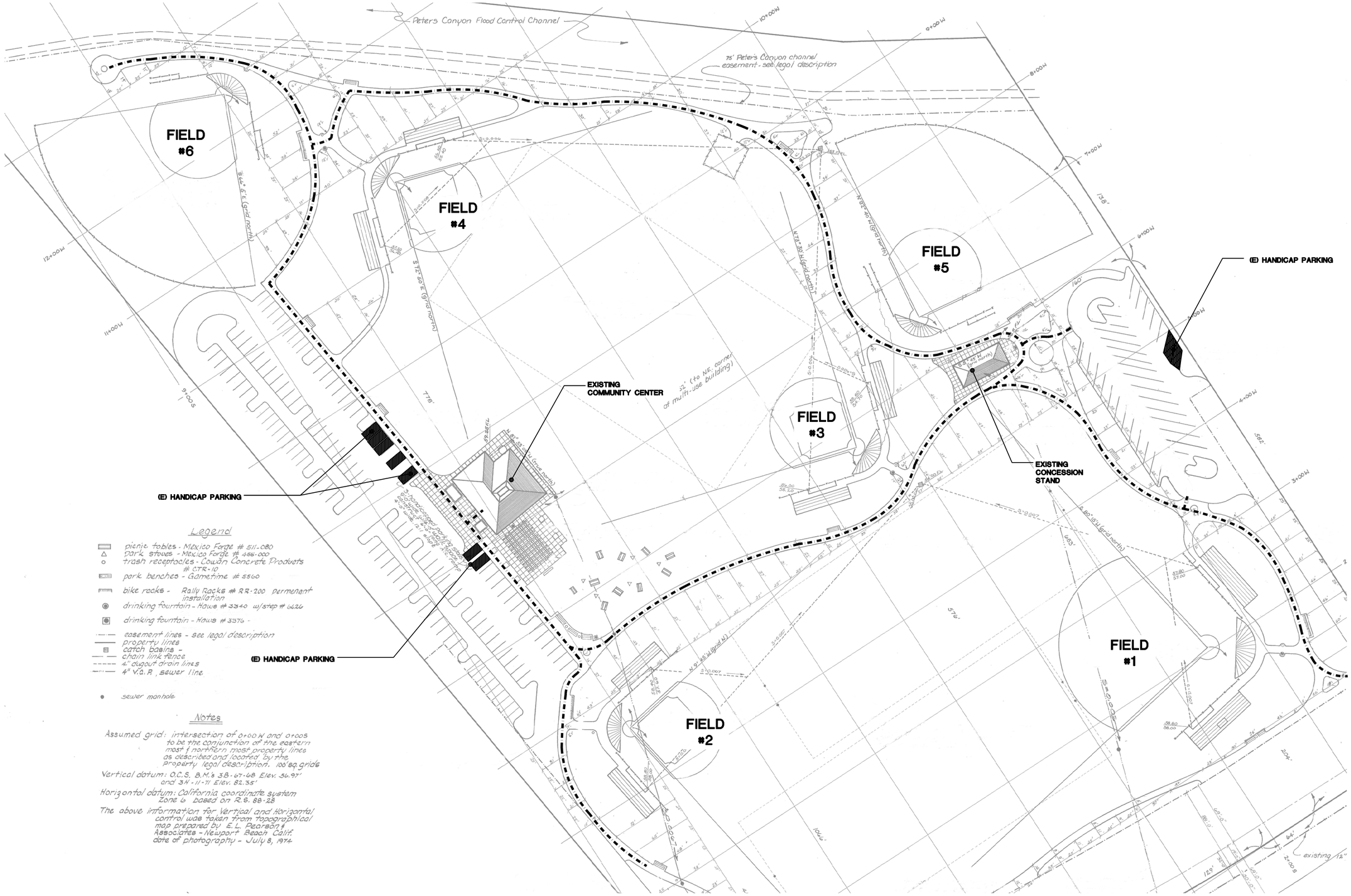
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SHEET: OF

11/29/2016 2:19:39 PM, 30x42



BID SET




| LEGEND: | |
|---|---|
| - - - - - - - - - - | DISABLED PATH OF TRAVEL |

DISABLED ACCESS PLAN
SCALE: 1"=40'

A0.2

NORTH

| NO. | DATE | REVISIONS |
|---|---|---|
| 7 | | |
| 6 | | |
| 5 | 11/29/16 | BID SET |
| 4 | 11/01/16 | PLAN CHECK CORRECTIONS |
| 3 | 10/19/16 | PLAN CHECK |
| 2 | 09/29/16 | DESIGN DEVELOPMENT |
| 1 | | |

DESIGNED:
DRAWN: MP
CHECKED: CP
DATE: 09/14/16
SCALE: AS SHOWN

CONSULTANT ENGINEER:

LICENSED ARCHITECT CATHERINE ANNE PEPPARD No. C-28191 (_91_2017 RENEWAL DATE) STATE OF CALIFORNIA

PLANS PREPARED BY:
cap architecture
9530 Warner Avenue, Suite 200 Fountain Valley, California 92708 ph: 714.573.2550 fax: 714.360.0337

ARCHITECT: LICENSE NO. EXP. DATE

SHEET TITLE: DISABLED ACCESS PLAN

CITY OF IRVINE
COMMUNITY DEVELOPMENT DEPARTMENT
Community Center/ Concession Stand/ Field Dugout Refurbishment at Harvard Park

PLAN CHECK:
PERMIT:

A0.2
SHEET: OF

11/29/2016 2:20:15 PM, 30x42



BID SET

# FINISH LIST

## PAINT

| | | | |
|---|---|---|---|
| PNT-01 | Manufacturer:<br>Number:<br>Color:<br>Type: | Dunn Edwards<br>SP836<br>Swiss Coffee<br>Semi- Gloss | INTERIOR WALLS: PAINT, PATCH & REPAIR WORK AT GYP. BD. WALLS ONLY. |
| PNT-02 | Manufacturer:<br>Number:<br>Color:<br>Type: | Dunn Edwards<br>SP836<br>Swiss Coffee<br>Flat | CEILINGS: PAINT, PATCH & REPAIR WORK AT GYP. BD. |
| PNT-03 | Manufacturer:<br>Type:<br>Number:<br>Color: | Dunn Edwards<br>Enduralastic 10<br>EDLX10-0<br>Green | *TOP OF DUGOUT.<br>*STEPS CONTRAST STRIPE. |
| PNT-04 | Manufacturer:<br>Type:<br>Number:<br>Color: | Dunn Edwards<br>-<br>DEC756<br>Weathered Brown | *STORAGE CABINETS @ CONCESSION STAND EXTERIOR.<br>*WOOD TRIM @ CONCESSION STAND EXTERIOR. |
| PNT-05 | Manufacturer:<br>Color: | Dunn Edwards<br>Black (Match Existing) | *INTERIOR CABINETS @ CONCESSION STAND. |
| PNT-06 | Manufacturer:<br>Type:<br>Number:<br>Color: | Dunn Edwards<br>-<br>0311-1011-0316<br>Grey Brown | *INTERIOR DOOR TRIM/ PASSAGE WAY DOORS |
| PNT-07 | Manufacturer:<br>Number:<br>Color:<br>Type: | Dunn Edwards<br>SP836<br>Swiss Coffee<br>Satin Finish | INTERIOR WALLS: PAINT, PATCH & REPAIR WORK AT GYP. BD. WALLS ONLY. |

## SPECIAL FINISHES

| | | | |
|---|---|---|---|
| SPF-01 | Manufacturer:<br>Style:<br>Color:<br>Thickness: | DUPONT/ CORIAN<br>Solid Surface<br>Graylite<br>- | NEW COUNTERTOP & BACKSPLASH. |
| SPF-02 | Material:<br>Manufacturer:<br>Finish:<br>Style/ Color: | Plastic Laminate<br>Wilsonart<br>Matt<br>#7946 / Brazilwood | CABINETS: BASE & UPPER EXTERIOR FINISH.<br>**USE 3/4" PLYWOOD BACKING, TYPICAL. |

## VINYL COMPOSITION

| | | | |
|---|---|---|---|
| VCT-01 | Manufacturer:<br>Style:<br>Item #:<br>Color:<br>Size: | Armstrong Flooring<br>Vinyl Tile<br>51001<br>Shale Gray<br>12"x12" | NEW FLOORING @ KITCHEN & CORRIDOR. |
| | | | |

## RESILIENT BASE

| | | | |
|---|---|---|---|
| RBC-01 | Manufacturer:<br>Material:<br>Color:<br>Size: | Armstrong Flooring<br>Rubber Cove Base<br>V2115 Zinc<br>6" | |

# FINISH SCHEDULE

| ROOM # | ROOM NAME | FLOOR | BASE | WALLS NORTH | WALLS EAST | WALLS SOUTH | WALLS WEST | CLG | HT. (AFF) | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| 101 | (E) WARMING KITCHEN | VCT-01 | RBC-01 | PNT-01 | PNT-01 | PNT-01 | PNT-01 | PNT-02 | (E) 8'-0" | CABINET FINISH: PNT-03 |
| 102 | (E) CORRIDOR | VCT-01 | RBC-01 | PNT-07 | PNT-07 | PNT-07 | (E) BRICK | PNT-02 | (E) 8'-0" | EXISTING BRICK TO REMAIN (DO NOT PAINT!) |
| 201 | (E) CONCESSION STAND | (E) | (E) | (E) | (E) | (E) | (E) | PNT-02 | (E) 8'-0" | CABINET FINISH: PNT-05 |
| - | CONCESSION STAND EXTERIOR | (E) | (E) | -- | -- | -- | -- | -- | -- | -- |
| - | DUGOUT | (E) | (E) | -- | -- | -- | -- | -- | -- | -- |
| 103 | MULTI-PURPOSE ROOM | (E) | (E) | PNT-07 | PNT-07 | PNT-07 | PNT-07 | PNT-02 | -- | INTERIOR DOOR TRIM/ PASSAGE WAY DOORS: PNT-06<br>EXISTING BRICK TO REMAIN (DO NOT PAINT!) |
| 104 | OFFICE | (E) | (E) | PNT-07 | PNT-07 | PNT-07 | (E) BRICK | PNT-02 | -- | INTERIOR DOOR TRIM/ PASSAGE WAY DOORS: PNT-06<br>EXISTING BRICK TO REMAIN (DO NOT PAINT!) |
| 105 | OFFICE | (E) | (E) | PNT-07 | PNT-07 | (E) BRICK | PNT-07 | PNT-02 | -- | INTERIOR DOOR TRIM/ PASSAGE WAY DOORS: PNT-06<br>EXISTING BRICK TO REMAIN (DO NOT PAINT!) |

## ABBREVIATIONS

PNT-## PAINT AND NUMBER
SPF-## SPECIAL FINISHES
VCT-## VINYL COMPOSITION TILE
RBC-## RUBBER WALL BASE

## FINISH LEGEND




# PLUMBING SCHEDULE

## TYPE

A. PLUMBING HARDWARE:

1. KITCHEN SINK:

| | | | | | |
|---|---|---|---|---|---|
| a. | Make: | ELKAY | e. | Dimensions: | 30" x 18" x 10" |
| b. | Model #: | Avado #EFRU281610 | f. | Finish: | Stainless Steel |
| c. | Type: | Single Bowl/ Undermount | | | |
| d. | Bowl Depth: | 10" | | | |

A. PLUMBING FIXTURE:

1. KITCHEN FAUCET:

| | | | | | |
|---|---|---|---|---|---|
| a. | Make: | DELTA | d. | Finish: | Chrome |
| b. | Model #: | 9659-DST Trinsic Pro | | | |
| c. | Type: | Single Handle Pull-Down Kitchen Faucet w/ Spring Spout | | | |

# APPLIANCE SCHEDULE

## TYPE

A. REFRIGERATION APPLIANCES:

1. REFRIGERATOR:

| | | | | | |
|---|---|---|---|---|---|
| a. | Make: | General Electric | f. | Dimensions: | 32 7/8"W x 34"D x 66 3/4"H |
| b. | Model #: | GIE21GSHSS | g. | Ice Maker: | Yes |
| c. | Type: | Freestanding | h. | Energy Star: | Yes |
| d. | Storage Capacity: | 21.2 cu. ft. | i. | ADA compliant: | Yes |
| e. | Color: | Stainless Steel | | | |

B. MICROWAVE APPLIANCES:

1. MICROWAVE OVEN:

| | | | | | |
|---|---|---|---|---|---|
| a. | Make: | General Electric | f. | Dimensions: | 21 7/8"W x 20 1/8"D x 13 3/8"H |
| b. | Model #: | PEB9159SJSS | g. | Mounting: | Wall Cabinet |
| c. | Type: | GE Profile Series | h. | Color: | Stainless Steel |
| d. | Oven Capacity: | 1.5 cu. ft. | i. | ADA compliant: | Yes |
| e. | Convection: | Yes | | | |

C. COOKING APPLIANCES:

1. ELECTRIC RANGE:

| | | | | | |
|---|---|---|---|---|---|
| a. | Make: | General Electric | e. | Dimensions: | 31 1/4"W x 27 13/16"D x 36 1/4"H |
| b. | Model #: | JS250RFSS | f. | Color: | Stainless Steel |
| c. | Type: | Electric | g. | Energy Star: | No |
| d. | Size: | 30" Slide-In - ADA | h. | ADA compliant: | Yes |

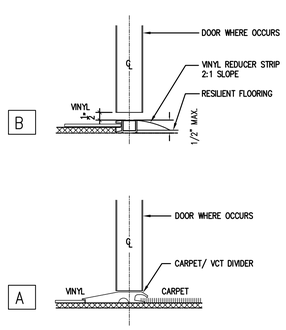
2. RANGE HOOD:

| | | | | | |
|---|---|---|---|---|---|
| a. | Make: | General Electric | e. | Dimensions: | 5 15/16"H x 29 7/8"W x 19 1/2"D |
| b. | Model #: | JVE40STSS | f. | Color: | Stainless Steel |
| c. | Type: | Electric | g. | Energy Star: | Yes |
| d. | Size: | 30" | h. | ADA compliant: | N/A |

D. DISPOSAL:

1. GARBAGE DISPOSAL:

| | | | | | |
|---|---|---|---|---|---|
| a. | Make: | In-Sink-Erator | c. | Volts: | 120vac |
| b. | Model #: | Evolution Essential | d. | HP: | 3/4 |




THRESHOLD DETAILS — SCALE: 3"=1'-0" — 1A

# DOOR SCHEDULE

| DOOR/OPENING NUMBER | FIRE RATING | CORE | MATERIAL | DOOR SIZE (U.O.N.) (WIDTH X HEIGHT) | THICKNESS | FRAME TYPE | HARDWARE SET | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 100A | -- | SC | WD | PAIR 2'-6" X 3'-6" | 1 3/4" | (E) | 01 | |
| -- | -- | -- | -- | -- | -- | -- | 02 | CABINET HARDWARE |
| | | | | | | | | |
| | | | | | | | | |

## ABBREVIATIONS

WD - WOOD
HM - HOLLOW METAL
SC - SOLID CORE
RO - ROUGH OPENING
ALUM - ALUMINUM
MET - METAL
TGL - TEMPERED GLASS

## HARDWARE SET

GROUP 01 - Doors

- 3 HEAVY DUTY HINGES
- LATCH, TO MATCH (E)

GROUP 02 - Cabinets

Hardware:
- Manuf: xxx
- Style: xxx
- Finish: Polished Chrome

Locks:
- Manuf: OLYMPUS LOCK CO.
- Model: 725RD-DW-VH-620
- Finish: US26 / 625 Polished Chrome

| NO. | DATE | REVISIONS |
|---|---|---|
| 7 | | |
| 6 | | |
| 5 | 11/29/16 | BID SET |
| 4 | 11/01/16 | PLAN CHECK CORRECTIONS |
| 3 | 10/19/16 | PLAN CHECK |
| 2 | 09/29/16 | DESIGN DEVELOPMENT |
| 1 | DATE | |

DESIGNED:
DRAWN: MP
CHECKED: CP
DATE: 09/14/16
SCALE: AS SHOWN

CONSULTANT ENGINEER:

LICENSED ARCHITECT
CATHERINE ANNE PEPPARD
No. C-28591
1-31-2017
RENEWAL DATE
STATE OF CALIFORNIA

PLANS PREPARED BY:
cap architecture
1530 Monrovia Avenue, Suite 250, Fountain Valley, California 92708
ph: 714.418.2550 fax: 714.300.0337

ARCHITECT: LICENSE NO. EXP. DATE

SHEET TITLE: SCHEDULES

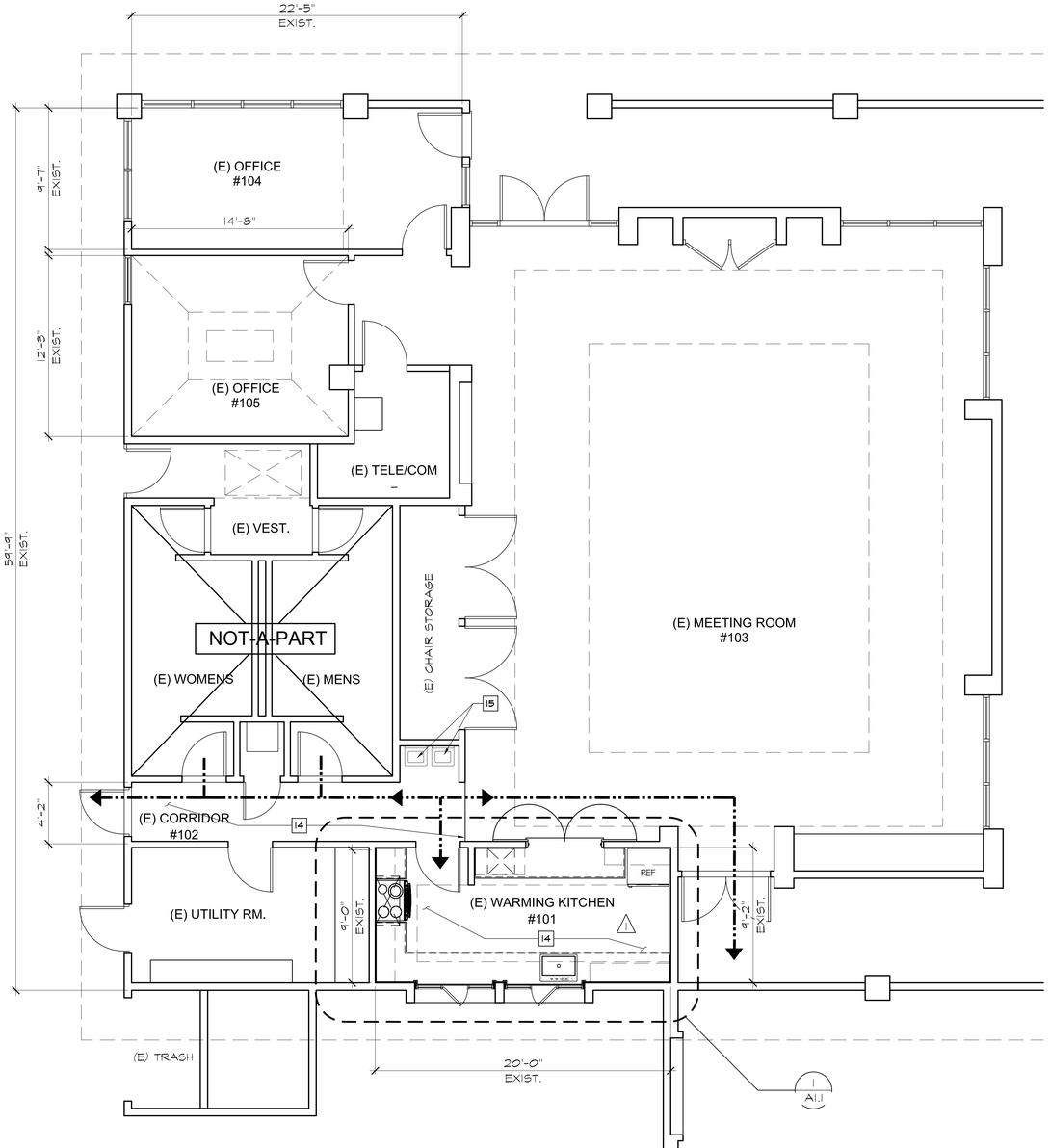
CITY OF IRVINE
COMMUNITY DEVELOPMENT DEPARTMENT
Community Center/ Concession Stand/ Field Dugout Refurbishment at Harvard Park

PLAN CHECK:
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SHEET: OF

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BID SET



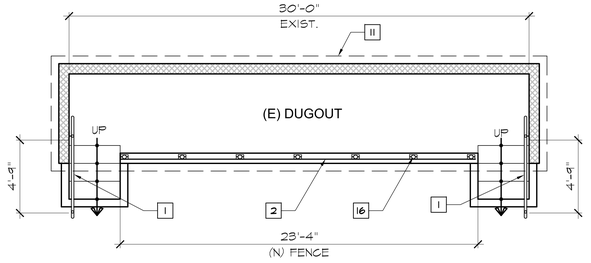

## FLOOR PLAN - COMMUNITY CENTER

SCALE: 1/4"=1'-0"

3 / A1.0



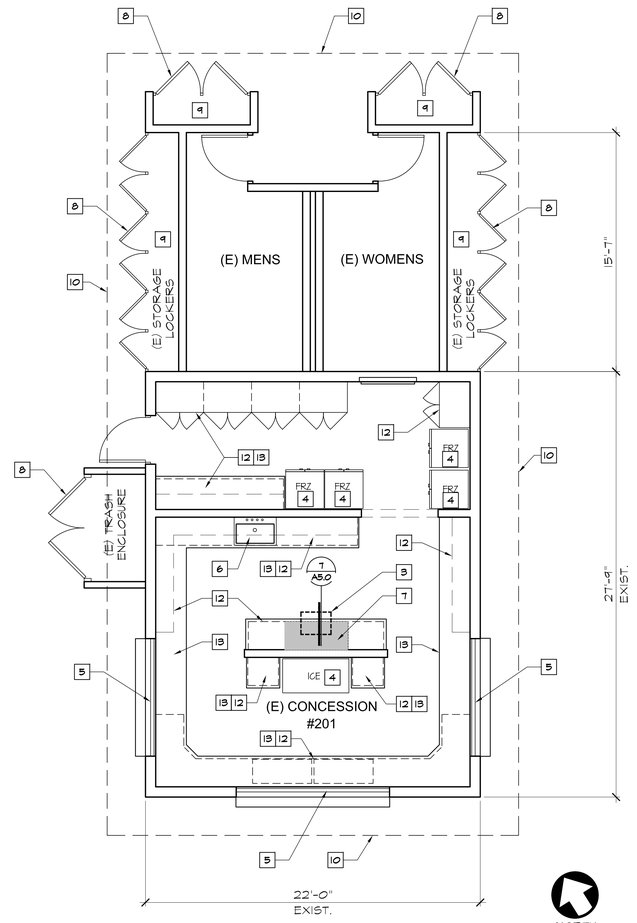

CHAIN-LINK FENCE REPLACEMENT A




## FLOOR PLAN - DUGOUT (TYPICAL)

SCALE: 1/4"=1'-0"

1 / A1.0




## FLOOR PLAN - CONCESSION STAND

SCALE: 1/4"=1'-0"

2 / A1.0

## KEYNOTES:

1. (N) DUGOUT GALV. STEEL HANDRAIL. SEE DETAIL 1/A5.0. PAINT W/ GALV. PAINT.
2. (N) 44"-48"H GALVANIZED CHAINLINK FENCE. FIELD VERIFY ACTUAL HEIGHT OF FENCE.
3. (N) STAINLESS STEEL REGISTER/ VENT COVER AT (E) HOOD LOCATION. 7/A5.0
4. (E) APPLIANCE TO REMAIN.
5. (E) ROLL-UP DOOR, TO REMAIN.
6. (E) SINK, TO REMAIN.
7. (N) S.S. COUNTERTOP WELDED TO (E) S.S. COUNTERTOP, ALL WELDS TO BE FLUSH WITH (E) COUNTERTOP (V.I.F.).
8. PAINT ALL (E) EXTERIOR WOOD (DOORS, TRIM, EAVES) COLOR TO MATCH (E). PREP & PRIME SURFACES BEFORE PAINTING.
9. PAINT INTERIOR OF (E) EXTERIOR STORAGE LOCKERS, COLOR TO MATCH (E). PREP & PRIME SURFACES BEFORE PAINTING.
10. PATCH & REPAIR (E) RAFTER TAILS. PREP/ PAINT, COLOR TO MATCH (E).
11. PATCH & REPAIR TOP OF (E) DUGOUT. PRIME & PAINT, COLOR TBD.
12. PAINT ALL (E) UPPER & LOWER CABINETRY (EXTERIOR ONLY), COLOR TO MATCH (E). PREP SURFACES BEFORE PAINTING.
13. (E) STAINLESS STEEL COUNTER, TO REMAIN.
14. (N) VCT FLOORING, TO MATCH (E).
15. (E) DRINKING FOUNTAINS, TO REMAIN.
16. (E) GALV POSTS & HORIZ. RAILS TO BE SANDED, PRIMED AND PAINTED W/ (2) COATS GALV. PAINT.

## GENERAL NOTES:

1. CONTRACTOR TO VERIFY DIMENSIONS IN FIELD. ANY DISCREPANCIES SHALL BE REPORTED TO PROJECT MANAGER AND ARCHITECT PRIOR TO COMMENCEMENT OF WORK.
2. CONTRACTOR SHALL PROTECT IN PLACE ALL EXISTING FIXTURES, FINISHES, & EQUIPMENT UNLESS NOTED OTHERWISE.
3. INCLUDE FOR PATCH & REPAIR TO WALLS AROUND WHEREVER ELECTRICAL/ PLUMBING IS REROUTED.
4. SEE A0.3 FOR PAINT SCHEDULE.

## LEGENDS:

DIRECTION OF EGRESS

| NO. | DATE | REVISIONS |
|---|---|---|
| 7 | | |
| 6 | | |
| 5 | 11/28/16 | BID SET |
| 4 | 11/01/16 | PLAN CHECK CORRECTIONS |
| 3 | 10/19/16 | PLAN CHECK |
| 2 | 09/28/16 | DESIGN DEVELOPMENT |
| 1 | | |

DESIGNED:
DRAWN: MP
CHECKED: CP
DATE: 09/14/16
SCALE: AS SHOWN

CONSULTANT ENGINEER:

LICENSED ARCHITECT
CATHERINE ANNE PEPPARD
No. C-28191
- 31 - 2017 -
RENEWAL DATE
STATE OF CALIFORNIA

PLANS PREPARED BY:
cap architecture
9733 Warner Avenue, Suite 200 ph: 714.978.2550
Fountain Valley, California 92708 fax: 714.393.0337

ARCHITECT: LICENSE NO. EXP. DATE

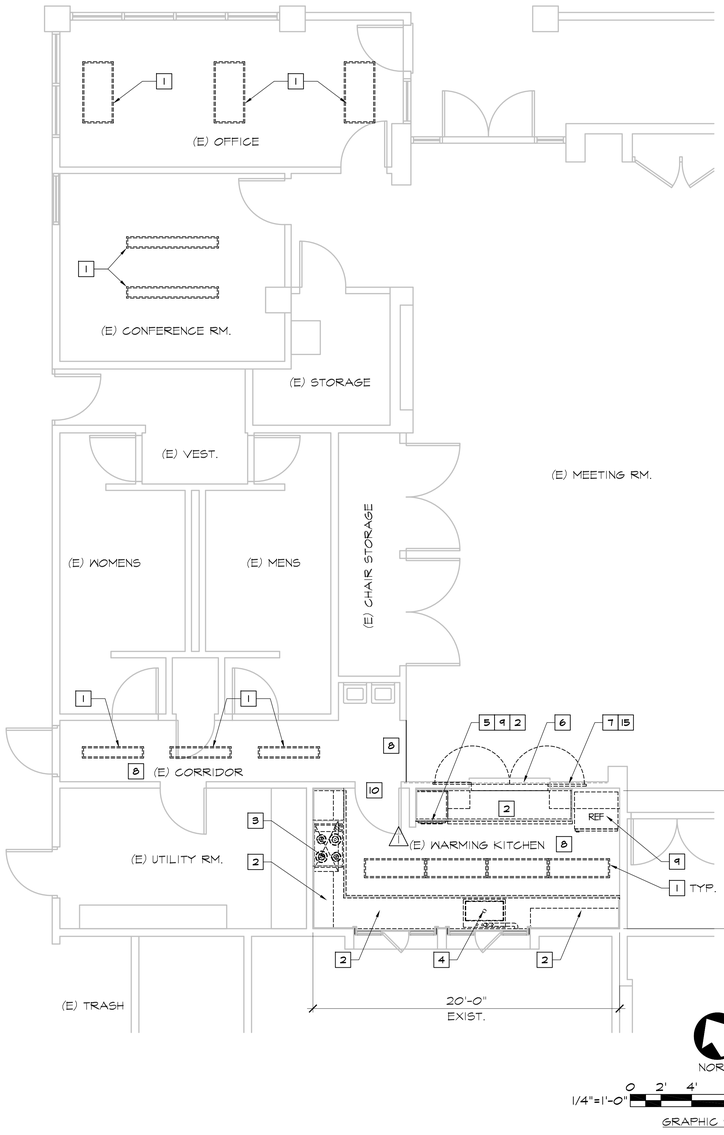
SHEET TITLE:
FLOOR PLANS:
CONCESSION STAND & COMMUNITY CENTER

CITY OF IRVINE
COMMUNITY DEVELOPMENT DEPARTMENT
Community Center/ Concession Stand/ Field Dugout Refurbishment at Harvard Park

PLAN CHECK :
PERMIT :

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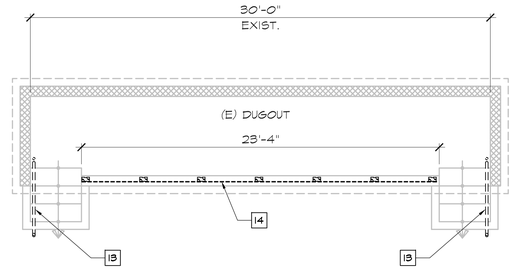
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DEMO PLAN - COMMUNITY CENTER

SCALE: 1/4"=1'-0"

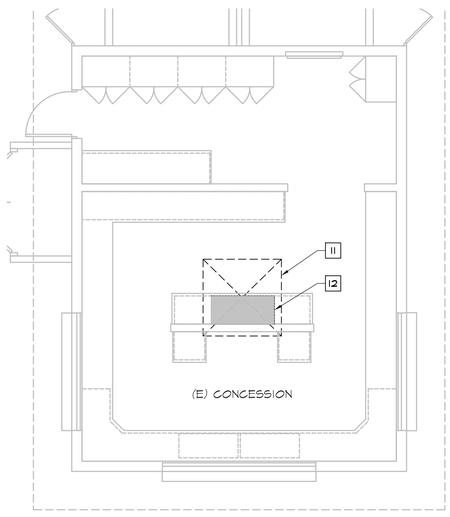
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DEMO PLAN - DUGOUT (TYPICAL)

SCALE: 1/4"=1'-0"

1 XA1.0




DEMO PLAN - CONCESSION STAND

SCALE: 1/4"=1'-0"

2 XA1.0

## DEMO KEYNOTES:

1. DEMO (E) LIGHTING.
2. DEMO (E) UPPER & LOWER CABINETS, COUNTERTOPS & BACKSPLASH.
3. DEMO (E) STOVE & HOOD.
4. DEMO (E) SINK.
5. DEMO (E) OVEN.
6. DEMO (E) WAINSCOT PANELING.
7. DEMO (E) COUNTER AND WALL BELOW FOR (N) COUNTER HEIGHT.
8. DEMO (E) FLOOR FINISH & BASEBOARDS.
9. REMOVE (E) REFRIGERATOR & MICROWAVE, STORE PER OWNER DIRECTION.
10. (E) DOOR, TO REMAIN.
11. DEMO (E) HOOD ASSEMBLY, FAN TO REMAIN OPERATIONAL.
12. DEMO (E) HOOD COUNTERTOP.
13. DEMO (E) HANDRAIL & HARDWARE.
14. DEMO (E) C.L. FENCE.
15. REMOVE (E) DOORS, LEAVE (E) FRAME.

## DEMO NOTES:

1. CONTRACTOR TO VERIFY DIMENSIONS IN FIELD. ANY DISCREPANCIES SHALL BE REPORTED TO PROJECT MANAGER AND ARCHITECT PRIOR TO COMMENCEMENT OF WORK.
2. CONTRACTOR SHALL PROTECT IN PLACE ALL EXISTING FIXTURES, FINISHES, & EQUIPMENT UNLESS NOTED OTHERWISE.
3. INCLUDE FOR PATCH & REPAIR TO WALLS AROUND DEMO WORK, OR WHEREVER ELECTRICAL/ PLUMBING HAS BEEN AFFECTED & WHERE (E) LAMINATE IS REMOVED.
4. CONTRACTOR TO REMOVE EXISTING DOUBLE COMPARTMENT SINK, DOUBLE WYE FITTING AND EXISTING ANGLE STOP.

| NO. | DATE | REVISIONS |
|---|---|---|
| 7 | | |
| 6 | | |
| 5 | 11/29/16 | BID SET |
| 4 | 11/01/16 | PLAN CHECK CORRECTIONS |
| 3 | 10/19/16 | PLAN CHECK |
| 2 | 09/29/16 | DESIGN DEVELOPMENT |
| 1 | | |

DESIGNED: MP
DRAWN: CP
CHECKED:
DATE: 09/14/16
SCALE: AS SHOWN

CONSULTANT ENGINEER:

LICENSED ARCHITECT
CATHERINE ANNE PEPPARD
No. C-29191
31 2017
RENEWAL DATE
STATE OF CALIFORNIA

PLANS PREPARED BY:
cap architecture
8700 Warner Avenue, Suite 250 ph: 714.876.2550
Fountain Valley, California 92708 fax: 714.360.0337

ARCHITECT: LICENSE NO. EXP. DATE

CITY OF IRVINE
COMMUNITY DEVELOPMENT DEPARTMENT
Community Center/ Concession Stand/ Field Dugout Refurbishment at Harvard Park

SHEET TITLE: DEMO PLANS: CONCESSION STAND & COMMUNITY CENTER

PLAN CHECK :
PERMIT :

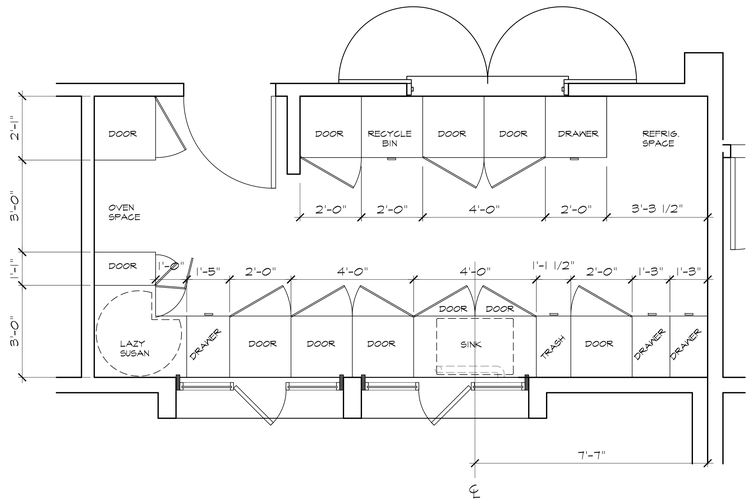
XA1.0

SHEET: OF

11/29/2016 2:19:14 PM, 30x42



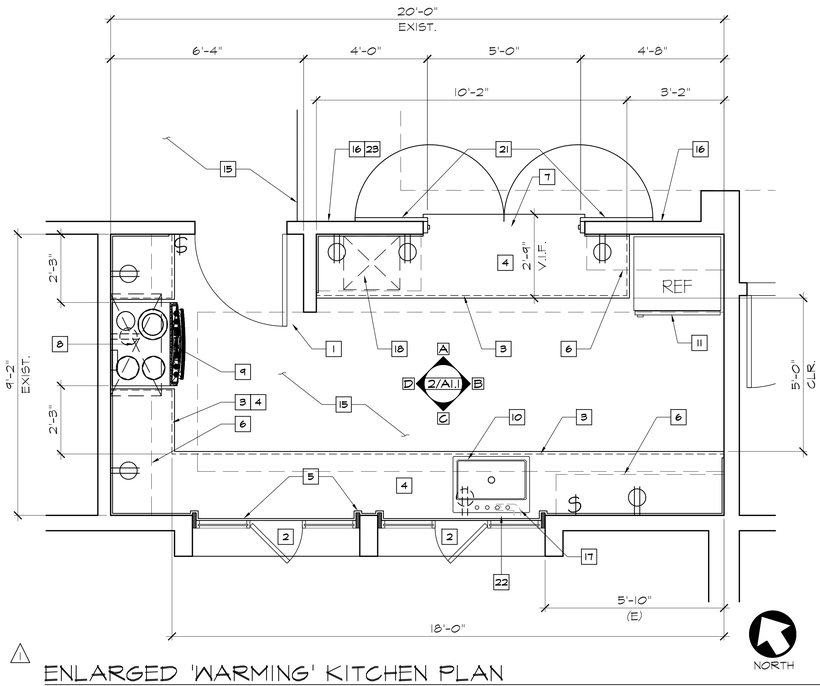
BID SET




## LOWER CABINET PLAN

SCALE: 1/2"=1'-0"

3 / A1.1



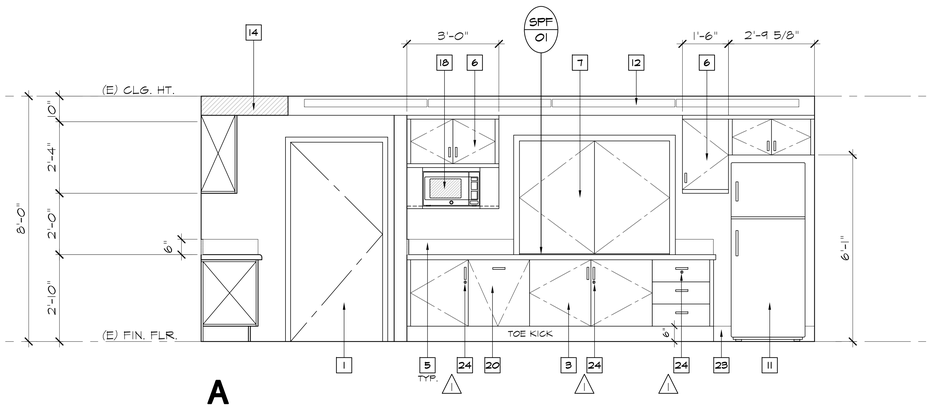

## ENLARGED 'WARMING' KITCHEN PLAN

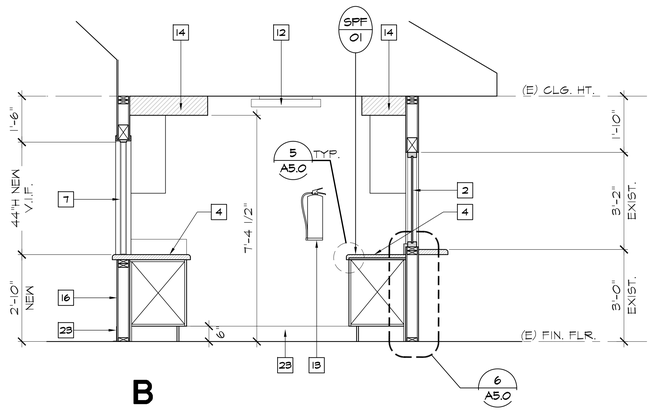
SCALE: 1/2"=1'-0"

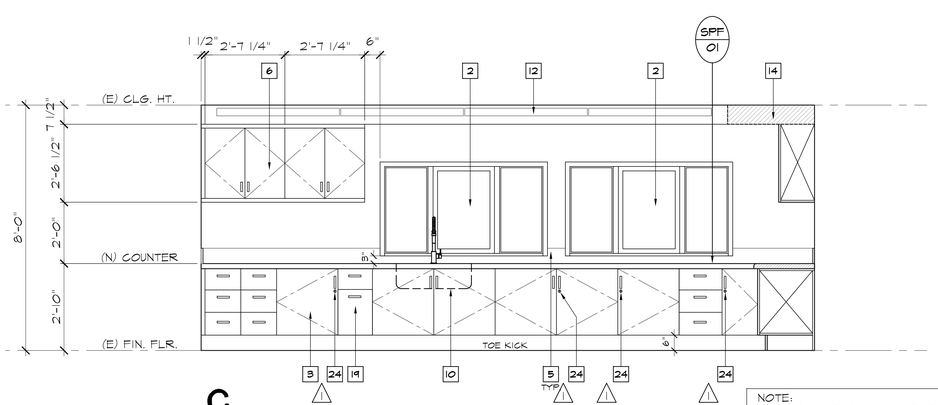
1 / A1.1

## KEYNOTES:

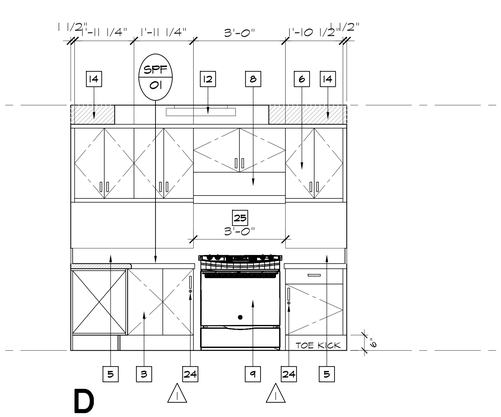
1. (E) DOOR, TO REMAIN.
2. (E) WINDOW, TO REMAIN.
3. (N) BASE CABINETS W/ (N) HARDWARE.
4. (N) COUNTEROP. CORIAN TOP. SEE FINISH SCHEDULE A0.3.
5. (N) 6"H CORIAN SPLASH, TO MATCH (N) COUNTERTOP. (8 / A5.0)
6. (N) UPPER CABINETS.
7. (N) PASS-THRU OPENING, LOWER (E) SILL HEIGHT TO ALLOW (N) COUNTERTOP TO GO THROUGH.
8. (N) RANGE HOOD. SEE APPLIANCE SCHEDULE SHEET A0.3.
9. (N) ELECTRIC RANGE. SEE APPLIANCE SCHEDULE SHEET A0.3.
10. (N) SINGLE-BOWL KITCHEN SINK W/ (N) FAUCET. SEE PLUMBING SCHEDULE SHEET A0.3.
11. (N) REFRIGERATOR. USE (E) WATERLINE FOR (N) ICE MAKER. SEE PLUMBING SCHEDULE SHEET A0.3.
12. (N) LIGHTING. SEE ELECTRICAL PLANS.
13. (N) FIRE EXTINGUISHER, MOUNTED TO WALL PER CODE REQUIREMENTS.
14. (E) SOFFIT, TO REMAIN.
15. (N) VCT FLOORING & BASE, TO MATCH (E).
16. PATCH & REPAIR WALL WHERE PANELING WAS REMOVED. TEXTURE, PRIME AND PAINT TO MATCH (E).
17. REPLACE (E) KITCHEN P-TRAP, DRAIN & CLEAN-OUT. PATCH & REPAIR (E) WALL, PAINT TO MATCH (E).
18. (N) BUILT-IN MICROWAVE. SEE APPLIANCE SCHEDULE SHEET A0.3.
19. (N) PULL-OUT 2-BIN TRASH CAN; MANUF.: REV-A-SHELF; MODEL #4WCTM-15DM2; CONTRACTOR TO PROVIDE TRASH BINS.
20. (N) PULL-OUT RECYCLE BIN. CONTRACTOR TO PROVIDE RECYCLE BIN.
21. (N) PAIR 44"H WOOD DOORS WITH STAINLESS STEEL HINGE AT TOP AND BOTTOM. (N) LATCH TO MATCH (E); CLOSER AT TOP OF DOOR(S). USE (E) FRAME. VERIFY IN FIELD. (9 / A5.0)
22. REMOVE & REPLASTER WALL BEHIND SINK, APPROX. 6' IN LENGTH.
23. (N) BASE COVING. SEE SCHEDULE A0.3.
24. (N) CABINET LOCKS; OLYMPUS LOCK CO.; 725RD-DN-VH-620
25. (N) FULL-HT. CORIAN SPLASH, TO MATCH (N) COUNTERTOP.




NOTE:
NEW BACKSPLASH TO WRAP COLUMNS BY WINDOWS & FINISH FLUSH WITH TOP OF WINDOW SILLS.




## INTERIOR ELEVATIONS

SCALE: 1/2"=1'-0"

2 / A1.1

## GENERAL NOTES:

1. CONTRACTOR TO VERIFY DIMENSIONS IN FIELD. ANY DISCREPANCIES SHALL BE REPORTED TO PROJECT MANAGER AND ARCHITECT PRIOR TO COMMENCEMENT OF WORK.
2. CONTRACTOR SHALL PROTECT IN PLACE ALL EXISTING FIXTURES, FINISHES, & EQUIPMENT UNLESS NOTED OTHERWISE.
3. INCLUDE FOR PATCH & REPAIR TO WALLS AROUND DEMO WORK, OR WHEREVER ELECTRICAL/ PLUMBING HAS BEEN AFFECTED & WHERE (E) LAMINATE IS REMOVED.
4. FOR ALL FINISHES SEE SCHEDULES SHEET A0.3.
5. PATCH & REPAIR WALLS WHERE EXISTING & NEW ELECTRICAL OUTLETS ARE RELOCATED.

DESIGNED:
DRAWN: MP
CHECKED: CP
DATE: 09/14/16
SCALE: AS SHOWN

| NO. | DATE | REVISIONS |
|---|---|---|
| 6 | | |
| 5 | 11/28/16 | BID SET |
| 4 | 11/01/16 | PLAN CHECK CORRECTIONS |
| 3 | 10/19/16 | PLAN CHECK |
| 2 | 09/28/16 | DESIGN DEVELOPMENT |
| 1 | | |

CONSULTANT ENGINEER:

LICENSED ARCHITECT CATHERINE ANNE PEPPARD No. C-28591 11-30-2017 RENEWAL DATE STATE OF CALIFORNIA

PLANS PREPARED BY:
cap architecture
8729 Warner Avenue, Suite 200, Fountain Valley, California 92708
ph: 714.479.2550 fax: 714.360.0337

ARCHITECT: LICENSE NO. EXP. DATE

SHEET TITLE: KITCHEN: FLOOR PLAN & INTERIOR ELEVATIONS

CITY OF IRVINE
COMMUNITY DEVELOPMENT DEPARTMENT
Community Center/ Concession Stand/ Field Dugout Refurbishment at Harvard Park

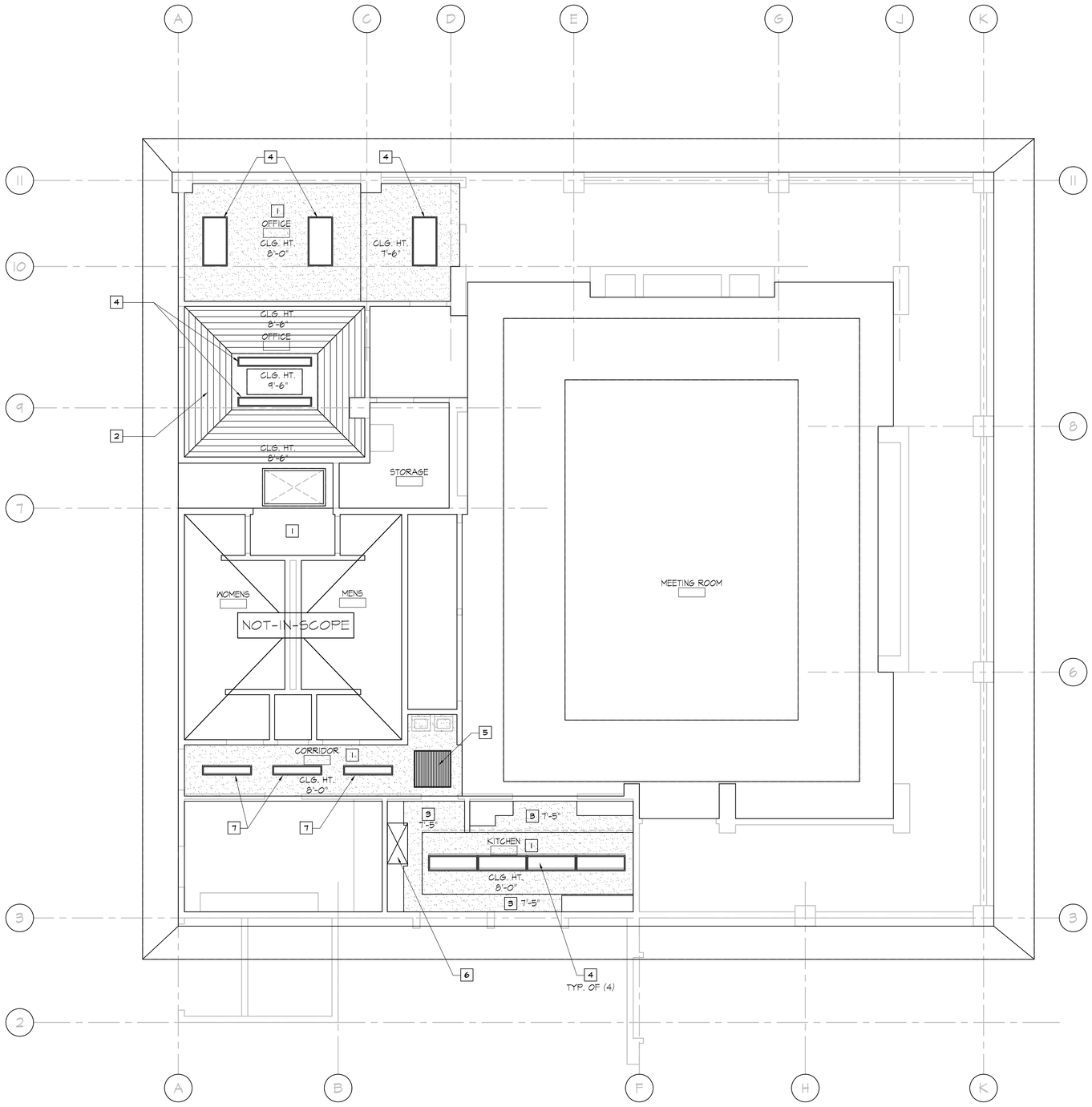
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A1.1
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BID SET




## REFLECTED CEILING PLAN

SCALE: 1/4"=1'-0"

A2.0

## RCP KEYNOTES:

1. (E) GYP. BD. CEILING.
2. (E) WOOD PANEL CEILING.
3. (E) SOFFIT.
4. (N) LIGHT FIXTURE TO REPLACE (E). SEE ELECTRICAL DWG'S
5. (E) HVAC SUPPLY GRILLE, TO REMAIN.
6. (N) RANGE HOOD.
7. (N) LIGHT FIXTURE, TO MATCH PROPOSED (N) LIGHTS IN (E) RESTROOM. SEE ELEC. DWG'S.

## GENERAL NOTES:

1. CONTRACTOR TO VERIFY DIMENSIONS IN FIELD. ANY DISCREPANCIES SHALL BE REPORTED TO DLR PROJECT MANAGER AND ARCHITECT PRIOR TO COMMENCEMENT OF WORK.
2. CONTRACTOR SHALL PROTECT IN PLACE ALL EXISTING FIXTURES, FINISHES, & EQUIPMENT UNLESS NOTED OTHERWISE.
3. INCLUDE FOR PATCH & REPAIR TO WALLS AROUND WHEREVER ELECTRICAL/ PLUMBING IS REROUTED.

NORTH

1/4"=1'-0" 0 2' 4' 8' 12'

| NO. | DATE | REVISIONS |
|---|---|---|
| 5 | 11/29/16 | BID SET |
| 4 | 11/01/16 | PLAN CHECK CORRECTIONS |
| 3 | 10/19/16 | PLAN CHECK |
| 2 | 09/29/16 | DESIGN DEVELOPMENT |
| 1 | | |
| 6 | | |
| 7 | | |

DESIGNED: MP
DRAWN: CP
CHECKED:
DATE: 09/14/16
SCALE: AS SHOWN

CONSULTANT ENGINEER:

LICENSED ARCHITECT CATHERINE ANNE PEPPARD No. C-28191 (-31-2017) RENEWAL DATE STATE OF CALIFORNIA

PLANS PREPARED BY:
cap architecture
9709 Irvine Avenue, Suite 200 Fountain Valley, California 92708
ph: 714.775.2550 fax: 714.380.0337

ARCHITECT: LICENSE NO. EXP. DATE

SHEET TITLE:
COMMUNITY CENTER
REFLECTED CEILING PLAN

CITY OF IRVINE
COMMUNITY DEVELOPMENT DEPARTMENT
Community Center/ Concession Stand/ Field Dugout Refurbishment at Harvard Park

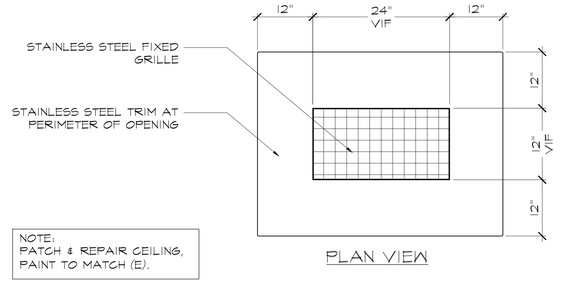
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A2.0
SHEET: OF

11/29/2016 2:24:22 PM, 30x42



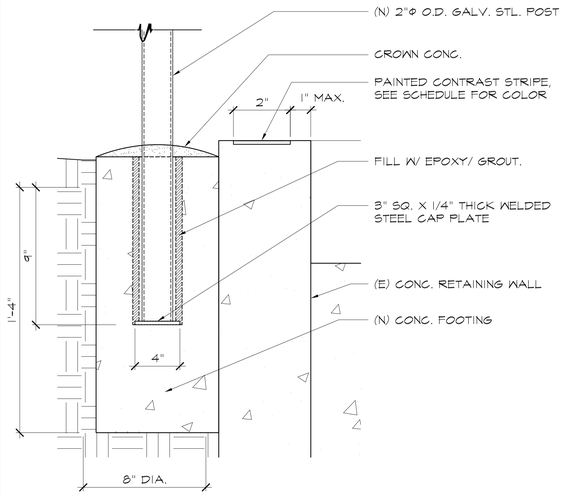
BID SET




## EXHAUST FAN GRILLE

SCALE: NTS

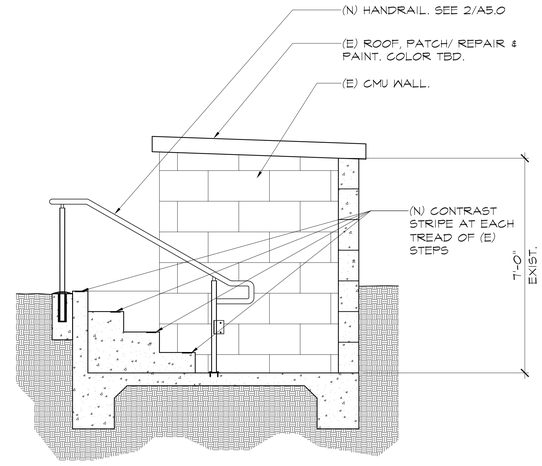
7 / A5.0




## POST ATTACHMENT DETAIL

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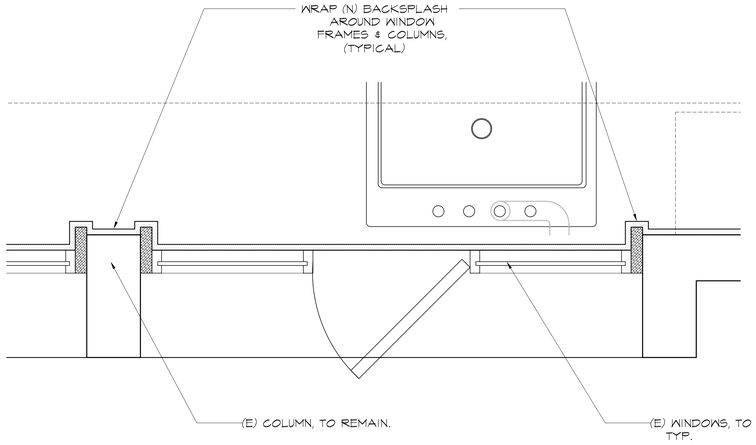
4 / A5.0




## DUGOUT SECTION

SCALE: 1/2"=1'-0"

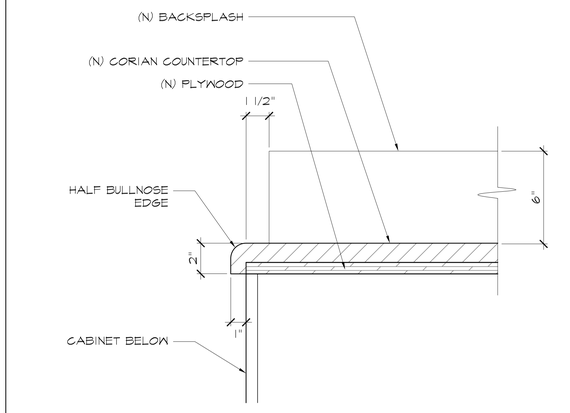
A5.0




## BACKSPLASH DETAIL AT WINDOWS

SCALE: 1 1/2"=1'-0"

8 / A5.0

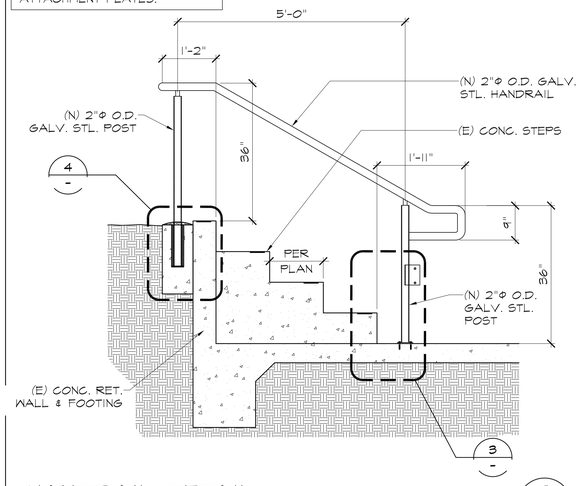



## EDGE & BACKSPLASH DETAIL

SCALE: 3"=1'-0"

5 / A5.0

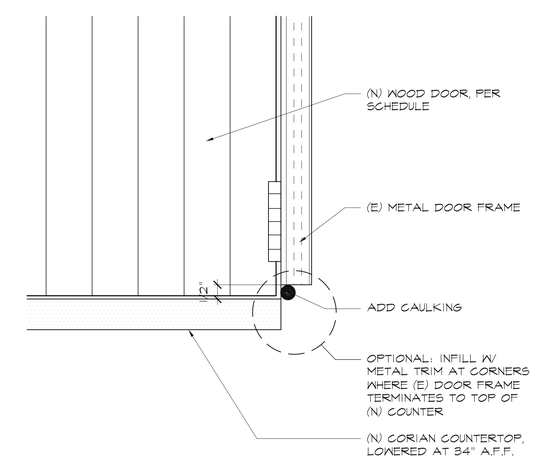
NOTE:
PRIME & ADD (2) COATS GALV. PAINT TO HANDRAILS & ATTACHMENT PLATES.




## HANDRAIL DETAIL

SCALE: 3/4"=1'-0"

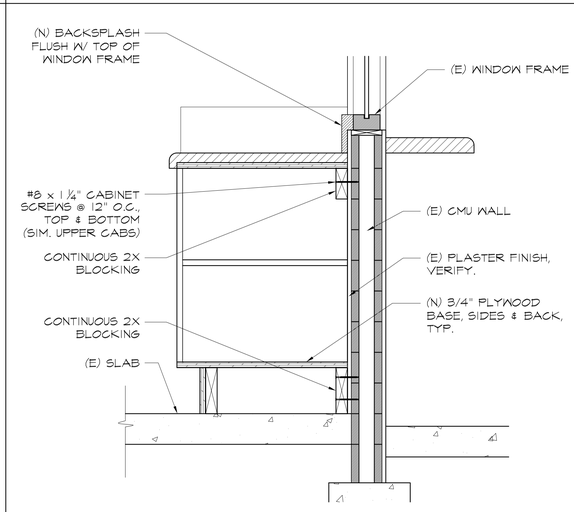
2 / A5.0




## COUNTER AT SERVING HATCH

SCALE: 3"=1'-0"

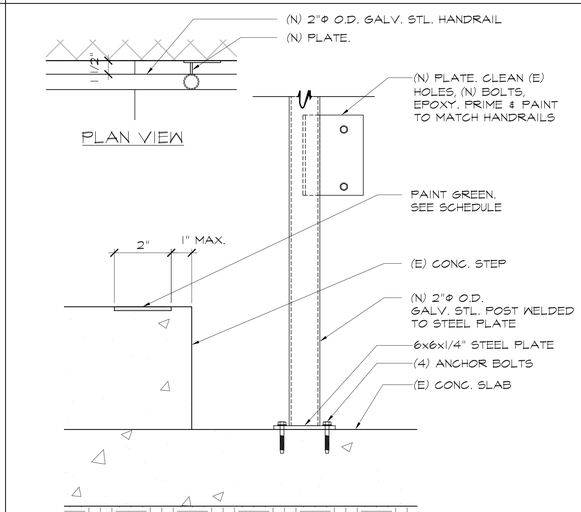
9 / A5.0




## CABINET ATTACHMENT DETAIL

SCALE: 1 1/2"=1'-0"

6 / A5.0




## POST ATTACHMENT DETAIL

SCALE: 3"=1'-0"

3 / A5.0

| NO. | DATE | REVISIONS |
|---|---|---|
| 5 | 11/29/16 | BID SET |
| 4 | 11/01/16 | PLAN CHECK CORRECTIONS |
| 3 | 10/19/16 | PLAN CHECK |
| 2 | 09/29/16 | DESIGN DEVELOPMENT |
| 1 | | |

DESIGNED:
DRAWN: MP
CHECKED: CP
DATE: 09/14/16
SCALE: AS SHOWN

CONSULTANT ENGINEER:

LICENSED ARCHITECT CATHERINE ANNE PEPPARD No. C-29191 31.2017 RENEWAL DATE STATE OF CALIFORNIA

LICENSE NO. EXP. DATE

PLANS PREPARED BY:
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8700 Warner Avenue, Suite 200, Fountain Valley, California 92708
ph: 714.418.2550 fax: 714.380.0337

ARCHITECT:

CITY OF IRVINE
COMMUNITY DEVELOPMENT DEPARTMENT
Community Center/ Concession Stand/ Field Dugout Refurbishment at Harvard Park

SHEET TITLE: DETAILS

PLAN CHECK :
PERMIT :

A5.0
SHEET: OF

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BID SET

# GENERAL NOTES

1. THE SEISMIC BRACING AND ANCHORAGE OF PIPING, DUCTS AND CONDUITS SHALL BE SUPPORTED AND BRACED IN ACCORDANCE WITH ANCHORAGE PRE-APPROVALS NUMBER.

   A. EQUIPMENT:
   ATTACHMENT OF EQUIPMENT WEIGHING LESS THAN 400 LBS AND SUPPORTED DIRECTLY ON THE FLOOR OR ROOF STRUCTURE, FURNITURE OR TEMPORARY OR MOVABLE EQUIPMENT AND EQUIPMENT WEIGHING LESS THAN 20 LBS THAT IS SUPPORTED BY VIBRATION ISOLATION DEVICES SUSPENDED FROM THE ROOF, WALL OR FLOOR NEED NOT BE DETAILED ON THE PLANS (CBC TITLE 24, PART I, SECTION 7-125(c)(2)(L), 7-125(c)(3)(C), 7-125(c)(4)(M) AND 7-125(c)(5)(L). HOWEVER, SUCH EQUIPMENT MUST BE SUPPORTED AND ANCHORED TO RESIST THE FORCES PRESCRIBED BY SECTION 1632A AND THE ANCHORAGE SHALL BE THE APPROPRIATE DESIGN PROFESSIONAL OF RECORD AND AS A PART OF FIELD REVIEWS/INSPECTIONS. THE INSPECTOR OF RECORD (IOR) SHALL ASSURE THAT THE ABOVE REQUIREMENTS ARE FORCED.

   B. PIPE AND DUCTS SUPPORT
   THE SUPPORT AND BRACING OF ALL PIPES, DUCTS AND CONDUITS SHALL BE IN ACCORDANCE WITH ANCHORAGE PRE-APPROVALS NUMBER. SEE LIST OF PRE-APPROVAL NUMBER BELOW.

| PRE-APPROVAL NO. | MANUFACTURER | PROD. DESCRIPTION |
|---|---|---|
| OPA-0349 | MASON IND., INC. | MASON SEISMIC RESTRAINT GUIDELINES FOR SUSPENDED PIPING |
| OPA-0485 | TOMARCO CONT. SPEC'TIES | TOMARCO ISAT SEISMIC RESTRAINT SYSTEM |

2. ALL ELECTRICAL PREFABRICATED EQUIPMENT SHALL BE DESIGNED AND CONSTRUCTED IN SUCH A MANNER THAT ALL PORTIONS, ELEMENTS, SUB-ASSEMBLIES AND/OR PARTS OF SAID EQUIPMENT, AND THE EQUIPMENT AS A WHOLE INCLUDING ITS ATTACHMENTS, WILL RESIST A LOAD WHICH EXCEEDS THE FORCE LEVEL USED TO RESTRAIN AND ANCHOR THE EQUIPMENT TO THE SUPPORTING STRUCTURE.

3. ALL ELECTRICAL MATERIALS AND EQUIPMENT SHALL BE NEW AND SHALL BE LISTED BY UNDERWRITER'S LABORATORIES (UL) AND BEAR THEIR LABEL, OR LISTED AND CERTIFIED BY A NATIONALLY RECOGNIZED TESTING AUTHORITY WHERE UL DOES NOT HAVE A LISTING. CUSTOM MADE EQUIPMENT SHALL HAVE COMPLETE TEST DATA SUBMITTED BY THE MANUFACTURER ATTESTING TO ITS SAFETY. IN ADDITION, THE MATERIALS, EQUIPMENT, AND INSTALLATION SHALL COMPLY WITH THE REQUIREMENTS OF THE FOLLOWING:

   AMERICAN SOCIETY OF TESTING MATERIALS (ASTM)
   INSULATED POWER CABLE ENGINEERS ASSOCIATION (IPCEA)
   NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)
   AMERICAN STANDARD ASSOCIATION (ASA)
   NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)
   AMERICAN NATIONAL STANDARD INSTITUTE (ANSI)
   CALIFORNIA ELECTRICAL CODE (CEC)
   CALIFORNIA CODE OF REGULATIONS TITLE 24 (CCR)
   INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS (IEEE)
   ALL LOCAL CODES HAVING JURISDICTION.
   WHERE THE CODES HAVE DIFFERENT LEVELS OF REQUIREMENTS, THE MOST STRINGENT RULE SHALL APPLY.

4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN A COMPLETE SET OF CONTRACT DOCUMENTS, ADDENDA, DRAWINGS AND SPECIFICATIONS. HE SHALL CHECK THE DRAWINGS OF THE OTHER TRADES AND SHALL CAREFULLY READ THE ENTIRE SPECIFICATIONS AND DETERMINE HIS RESPONSIBILITIES. FAILURE TO DO SO SHALL NOT RELEASE THE CONTRACTOR FROM DOING THE WORK IN COMPLETE ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS.

5. THE CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS, FEES, CHARGES, AND INCIDENTAL COSTS NECESSARY FOR EXECUTION AND COMPLETION OF ELECTRICAL WORK, INCLUDING ALL CHARGES BY STATE, COUNTY AND LOCAL GOVERNMENTAL AGENCIES.

6. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER TRADES AT THE SITE. ANY COSTS TO INSTALL WORK TO ACCOMPLISH SAID COORDINATION WHICH DIFFERS FROM THE WORK AS SHOWN ON THE DRAWINGS SHALL BE INCURRED BY THE CONTRACTOR. ANY DISCREPANCIES, AMBIGUITIES OR CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT DURING BID TIME FOR CLARIFICATION. ANY SUCH CONFLICTS NOT CLARIFIED PRIOR TO BID SHALL BE SUBJECT TO THE INTERPRETATION OF THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.

7. THE CONTRACTOR SHALL PROVIDE AND KEEP UP-TO-DATE A COMPLETE RECORD SET OF DRAWINGS. THESE PRINTS SHALL BE CORRECTED DAILY AND SHOW EVERY CHANGE FROM THE ORIGINAL DRAWINGS. THIS SET OF DRAWINGS SHALL BE KEPT ON THE JOB SITE AND SHALL BE USED ONLY AS A RECORD SET. THIS SHALL NOT BE CONSTRUED AS AUTHORIZATION FOR THE CONTRACTOR TO MAKE CHANGES IN THE LAYOUT WITHOUT DEFINITE INSTRUCTION IN EACH CASE. UPON COMPLETION OF THE WORK, A SET OF REPRODUCIBLE CONTRACT DRAWINGS SHALL BE OBTAINED FROM THE ARCHITECT, AND ALL CHANGES AS NOTED ON THE RECORD SET OF DRAWINGS SHALL BE INCORPORATED THEREON WITH BLACK INK IN A NEAT, LEGIBLE, UNDERSTANDABLE AND PROFESSIONAL MANNER. FAILURE TO KEEP RECORD DRAWINGS UP-TO-DATE SHALL CONSTITUTE CAUSE FOR WITHHOLDING OF PROGRESS PAYMENTS.

8. IN SOME INSTANCES, IT MAY BE NECESSARY TO DEFER WORK IN CERTAIN AREAS AND LOCATIONS UNTIL SUCH TIME AS EXISTING FACILITIES CAN BE TEMPORARILY OR PERMANENTLY REARRANGED BY THE OWNER. THEREFORE, WHENEVER IT BECOMES NECESSARY FOR THE CONTRACTOR TO PERFORM WORK UNDER THIS CONTRACT IN EXISTING AREAS IN WHICH THE OWNER'S WORK IS BEING PERFORMED, THE CONTRACTOR SHALL ADVISE THE ARCHITECT AND THE OWNER RELATIVE TO THIS REQUIREMENT AND SHALL FOLLOW CLOSELY THE DIRECTIVE ISSUED BY THE ARCHITECT INSOFAR AS TIME AND PROCEDURE ARE CONCERNED. THE CONTRACTOR SHALL INCLUDE IN HIS BID ALL PREMIUM TIME TO WHICH HE MAY BE SUBJECTED FOR PERFORMING WORK IN SUCH PROCEDURE AND AT SUCH TIMES AS MAY BE NECESSARY TO CAUSE THE LEAST INTERFERENCE WITH THE OPERATIONS OF THE OWNER.

9. SHOP DRAWINGS SHALL BE SUBMITTED WITHIN THIRTY DAYS AFTER AWARD OF THE CONTRACT. THE CONTRACTOR SHALL SUBMIT EIGHT COPIES OF A COMPLETE LIST OF MATERIALS AND EQUIPMENT INCLUDING MANUFACTURER AND MODEL NUMBER PROPOSED FOR THE JOB. SHOP DRAWINGS SHALL INCLUDE JOB DESCRIPTION, ARCHITECT AND ENGINEER IDENTIFICATION, AND ALL DATA WITH CAPACITIES, SIZES, DIMENSIONS, CATALOG NUMBERS, AND MANUFACTURER'S BROCHURES. SHOP DRAWINGS SHALL BE SUBMITTED FOR ITEMS LISTED IN SPECIFICATIONS. PARTIAL, INCOMPLETE, OR UNBOUND SUBMITTALS WILL BE RETURNED WITHOUT REVIEW. CONTRACTOR SHALL SUBMIT A SCHEDULE OF ALL SHOP DRAWINGS AND SUBMITTALS WHICH ARE TO BE REVIEWED WITHIN FIFTEEN DAYS OF CONTRACT AWARD. CONTRACTOR TO INCLUDE IN HIS CONSTRUCTION SCHEDULE ALL THE LEAD TIME REQUIRES IN THE PROCUREMENT OF THE ELECTRICAL EQUIPMENT AND DEVICES FOR THE TIMELY DELIVERY AND COMPLETION OF THE PROJECT.

10. THE CONTRACTOR SHALL FURNISH A ONE YEAR WRITTEN GUARANTEE OF MATERIALS AND WORKMANSHIP FROM THE DATE OF SUBSTANTIAL COMPLETION.

11. EXACT METHOD AND LOCATION OF CONDUIT PENETRATION AND OPENINGS IN CONCRETE WALLS OR FLOORS OR STRUCTURAL STEEL MEMBERS SHALL BE AS DIRECTED BY THE STRUCTURAL ENGINEER. PERFORM CORING, SAWCUTTING, PATCHING, AND REFINISHING OF EXISTING WALLS AND SURFACES WHEREVER IT IS NECESSARY TO PENETRATE. OPENINGS SHALL BE SEALED IN AN APPROVED METHOD TO MEET THE FIRE RATING OF THE PARTICULAR WALL, FLOOR OR CEILING. EXACT METHOD AND LOCATIONS OF CONDUIT PENETRATIONS AND OPENINGS IN CONCRETE WALLS OR FLOORS SHALL BE UL APPROVED. ALL COSTS RELATIVE TO THESE WORKS SHALL BE INCLUDED IN THE BID PRICE.

12. ROUTE EXPOSED CONDUIT AND CONDUIT ABOVE ACCESSIBLE CEILING SPACES PARALLEL AND PERPENDICULAR TO WALLS AND ADJACENT PIPING. ARRANGE CONDUIT TO MAINTAIN HEADROOM AND TO PRESENT A NEAT APPEARANCE.

13. ATTENTION IS CALLED TO THE FACT THAT THE CEILING SYSTEMS FOR THE MOST PART ARE CONSIDERED TO BE INACCESSIBLE. THE CONTRACTOR SHALL STRATEGICALLY LOCATE BOXES, ETC., IN AN ACCESSIBLE CEILING SPACE.

14. WHENEVER A DISCREPANCY IN QUANTITY OR SIZE OF CONDUIT, WIRE, EQUIPMENT DEVICES, CIRCUIT BREAKERS, GROUND FAULT PROTECTION SYSTEMS, ETC. (ALL MATERIALS), ARISES ON THE DRAWINGS OR SPECIFICATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL MATERIAL AND SERVICES REQUIRED BY THE STRICTEST CONDITIONS NOTED ON THE DRAWINGS OR IN THE SPECIFICATIONS TO ENSURE COMPLETE AND OPERABLE SYSTEMS AS REQUIRED BY THE OWNER AND ARCHITECT/ENGINEER.

15. UTILITY PENETRATIONS OF ANY KIND IN FIRE AND SMOKE PARTITIONS AND CEILING ASSEMBLIES, SHALL BE FIRESTOPPED AND SEALED WITH AN APPROVED MATERIAL SECURELY INSTALLED.

    STEEL ELECTRICAL OUTLET BOXES WHICH EXCEED 16 SQUARE INCHES IN AREA, AND ALL OTHER STEEL UTILITY OUTLET BOXES REGARDLESS OF SIZE, SHALL BE PROTECTED BY AN APPROVED FIRESTOP MATERIAL AS LISTED OR EQUAL.

    OCCUR ON OPPOSITE SIDES OF THE WALL WITHIN 24 INCH HORIZONTAL DISTANCE OF ONE ANOTHER. IN CASE, ONLY ONE OUTLET BOX NEED TO PROTECTED BY AN SIZE, SHALL BE PROTECTED BY AN APPROVED FIRESTOP MATERIAL AS APPROVED FIRESTOP MATERIAL OR DETAIL TO CORRECT THIS CONDITION

    OCCUR IN COMBINATION WITH OUTLET BOXES OF ANY SIZE SUCH THAT THE AGGREGATE AREA OF UNPROTECTED OUTLET BOXES EXCEEDS 100 SQUARE INCHES IN ANY 100 SQUARE FEET OF WALL AREA. IN THIS CASE, ONLY A SUFFICIENT NUMBER OF OUTLET BOXES NEED BE PROTECTED BY AN APPROVED MATERIAL OR DETAIL TO DECREASE THE AGGREGATE AREA OF UNPROTECTED UTILITY BOXES TO LESS THAN 100 SQUARE INCHES IN ANY 100 SQUARE FEET OF WALL.

    FIRESTOPPING MATERIAL:
    3M #MPP + UL 90G9
    3M CONTRACTOR PRODUCTS

    FSP FIRESTOP PUTTY PADS
    HEVI-DUTY NELSON PRODUCTS
    TULSA, OK

    FLAMESAFE FSP 1077 FIRESTOP PADS
    INTERNATIONAL PROTECTIVE COATINGS
    OAKHURST, NJ

    STEEL UTILITY BOXES WHICH EXCEED 100 SQUARE INCHES IN AREA SHALL BE PROTECTED BY ENCASEMENT. UTILITY AND ELECTRICAL OUTLETS OR BOXES SHALL BE SECURELY FASTENED TO THE STUD OF FRAMING OF THE WALL, PARTITION OR CEILING ASSEMBLY. THE OPENING IN THE GYPSUM BOARD FACING SHALL BE CUT SO THAT THE CLEARANCE BETWEEN THE BOX AND THE GYPSUM BOARD DOES NOT EXCEED 1/8 INCH. IN SMOKE WALLS OR PARTITIONS, THE 1/8 INCH CLEARANCE SHALL BE FILLED WITH AN APPROVED FIRE-RATED SEALANT.

16. REFER TO SINGLE LINE DIAGRAM AND FEEDER SCHEDULES FOR CONDUIT AND CONDUCTOR SIZE TO PANELS, TRANSFORMERS, MECHANICAL AND PLUMBING EQUIPMENT, ETC. CONDUIT RUNS MAY NOT BE SHOWN ON DRAWINGS, BUT ARE PART OF THIS CONTRACT.

17. STRAIGHT FEEDER, BRANCH CIRCUIT, AND CONDUIT RUNS SHALL BE PROVIDED WITH SUFFICIENT PULL BOXES OR JUNCTION BOXES TO LIMIT THE MAXIMUM LENGTH OF ANY SINGLE CABLE PULL TO 100 FEET. PULL BOXES SHALL BE SIZED PER CODE OR AS INDICATED ON DRAWINGS. LOCATIONS SHALL BE DETERMINED IN THE FIELD OR AS INDICATED ON THE DRAWINGS.

18. MAXIMUM NUMBER OF CONDUCTORS IN OUTLET OR JUNCTION BOXES SHALL CONFORM TO THE CALIFORNIA ELECTRICAL CODE, ARTICLE 314-16, BUT IN NO CASE SHALL CONTAIN MORE THAN THE FOLLOWING NUMBER OF #12 AWG CONDUCTORS FOR THE SIZE OF BOX INDICATED. THE MINIMUM SIZE OUTLET OR JUNCTION BOX PERMITTED IN A WALL IS FOUR INCHES SQUARE BY 1-1/2 INCHES DEEP.

    4" SQ. BY 1-1/2" D = 9 CONDUCTORS
    4" SQ. BY 2-1/8" D = 13 CONDUCTORS
    4" SQ. BY 1-1/2" D = 11 CONDUCTORS
    4" SQ. BY 2-1/8" D = 18 CONDUCTORS

    ALL OUTLET BOXES CONTAINING MORE THAN ONE DEVICE SHALL BE GANGED. TWO DEVICES DOUBLE GANGED, MINIMUM.

19. WHERE MULTI-HOMERUNS ARE INDICATED ON DRAWINGS INDICATING THE SAME PANELBOARD CIRCUIT NUMBER, PROVIDE JUNCTION BOX ABOVE ACCESSIBLE CEILING AND ROUTE ONE SET OF WIRES TO CIRCUIT BREAKERS.

20. THE EXACT LOCATION OF ALL ELECTRICAL DEVICES AND EQUIPMENT SHALL BE COORDINATED WITH THE ARCHITECTURAL ELEVATIONS, DETAILS, OR SECTIONS PRIOR TO INSTALLATION. ALL ELECTRICAL DEVICES AND EQUIPMENT SHALL BE RECESSED IN WALLS UNLESS OTHERWISE NOTED. OUTLETS NOT INDICATED ON ARCHITECTURAL ELEVATIONS SHALL BE COORDINATED WITH THE ARCHITECT PRIOR TO ROUGH-IN. UNLESS OTHERWISE NOTED, MOUNT ELECTRICAL DEVICES AT THE FOLLOWING HEIGHTS:

| | | |
|---|---|---|
| WALL SWITCH | +4'-0" | SET VERTICALLY TO TOP OF OUTLET BOX. |
| CONVENIENCE RECEPTACLE | +1'-3" | SET VERTICALLY TO BOTTOM OF OUTLET BOX. |
| TELEPHONE/DATA OUTLETS | +1'-3" | SET VERTICALLY TO BOTTOM OF OUTLET BOX. |
| OUTLETS AT COUNTERS | +6" | ABOVE COUNTERS WITHOUT SPLASHES OR CENTERED IN SPLASH SET HORIZONTALLY |

    REVIEW ARCHITECTURAL ELEVATIONS OF CASEWORK. OUTLETS MOUNTED ABOVE OR BELOW, OR ADJACENT TO CASEWORK SHALL BE COORDINATED WITH THE ARCHITECTURAL DRAWINGS, PRIOR TO FINAL ROUGH-IN. ELECTRICAL DRAWINGS SHALL GOVERN NUMBER AND TYPE OF OUTLETS. HOWEVER, LOCATIONS SHALL BE AS INDICATED ON ARCHITECTURAL ELEVATIONS. PROVIDE CONDUIT, WIRES, AND OUTLETS FOR WORK REQUIRED IN CASEWORK INSTALLATIONS. REFERENCE ARCHITECTURAL DETAILS FOR METHOD OF ROUTING CONDUIT WITHIN CASEWORK CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CUT-OUTS IN TILE OR COUNTER SPLASHES WHERE RECEPTACLES, OUTLETS, ETC., OCCUR. PROVIDE BOX EXTENSIONS THROUGH ALL CASEWORK. FINISH FLUSH WITH FACE OF SPLASH, CABINET, ETC.

    MOUNTING HEIGHTS OF ALL DEVICES AND EQUIPMENT ARE FROM FINISHED FLOOR TO CENTER OF DEVICES AND EQUIPMENT UNLESS OTHERWISE NOTED. BOXES INSTALLED IN LOCATIONS NOT APPROVED BY THE ARCHITECT SHALL BE RELOCATED AS DIRECTED BY THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.

21. DRAWINGS ARE DIAGRAMMATIC ONLY. ROUTING OF RACEWAYS SHALL BE AT THE OPTION OF THE CONTRACTOR UNLESS OTHERWISE NOTED AND SHALL BE COORDINATED WITH OTHER SECTIONS. DO NOT SCALE THE ELECTRICAL DRAWINGS FOR LOCATIONS OF ANY ELECTRICAL, ARCHITECTURAL, STRUCTURAL, CIVIL, OR MECHANICAL ITEMS OR FEATURES.

22. THE EQUIPMENT GROUNDING CONDUCTOR SHOWN ON CONDUIT RUNS SHALL RUN CONTINUOUS FROM PANEL TO LAST OUTLET. THIS WIRE SHALL BE PIGTAILED IN EACH OUTLET FOR CONNECTION TO BOX AND DEVICE SO THAT IF DEVICE IS REMOVED, GROUND WILL NOT BE INTERRUPTED. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL BE INSULATED GREEN CONDUCTORS - ALTERNATE METHODS OF IDENTIFICATION SHALL NOT BE USED. CONTRACTOR SHALL NOTIFY ELECTRICAL ENGINEER TO EXAMINE CONDUCTOR INSTALLATION PRIOR TO INSTALLATION OF DEVICES.

23. THE CONTRACTOR SHALL VISIT THE SITE INCLUDING ALL AREAS INDICATED ON THE DRAWINGS. HE SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH THE EXISTING CONDITIONS AND BY SUBMITTING A BID, ACCEPTS THE CONDITIONS UNDER WHICH HE SHALL BE REQUIRED TO PERFORM HIS WORK.

24. THE WORD "FURNISH" OR "PROVIDE" SHALL MEAN CONTRACTOR TO PROVIDE AND INSTALL ALL MATERIALS REQUIRED ON THE DRAWING.

25. RIGID GALVANIZED STEEL CONDUIT SHALL BE FULL WEIGHT TREADED TYPE ALUMINUM OR STEEL. ELECTRICAL METALLIC TUBING (EMT) MAY BE USED IN WALLS OR CEILING SPACES WHERE NOT SUBJECT TO MECHANICAL DAMAGE. PVC SCHEDULE 40 MAY BE INSTALLED BENEATH SLAB OR BELOW GRADE. FLEXIBLE STEEL CONDUIT MAY BE USED AT FIXTURE AND OUTLET CONNECTIONS WITH NO RUNS LONGER THAN SIX FEET. AN EQUIPMENT GROUNDING CONDUCTOR SHALL BE PROVIDED IN ALL CONDUIT RUNS.

26. RIGID GALVANIZED STEEL CONDUIT FITTINGS SHALL BE THREADED AND THOROUGHLY GALVANIZED. ELECTRICAL METALLIC TUBING (EMT) CONDUIT FITTINGS SHALL BE STEEL, THREADLESS COMPRESSION TYPE. DIE CAST, SET SCREW, OR INDENTER TYPES ARE NOT ACCEPTABLE. FLEXIBLE STEEL CONDUIT FITTINGS SHALL BE MALLEABLE IRON CLAMP, SQUEEZE TYPE OR STEEL TWIST-IN TYPE WITH INSULATED THROAT. SET SCREW TYPE IS NOT ACCEPTABLE.

27. ALL CONDUCTORS SHALL BE COPPER #12 AWG MINIMUM SIZE, TYPE THHN/THWN THERMOPLASTIC, 600 VOLT, 75 DEGREES CELSIUS WET AND 90 DEGREES CELSIUS DRY AND UL LISTED UNLESS NOTED OTHERWISE. CONDUCTORS #12 AWG AND SMALLER SHALL BE SOLID. CONDUCTORS # 10 AWG AND LARGER SHALL BE STRANDED.

28. JUNCTION AND PULL BOXES: FOR INTERIOR DRY LOCATIONS, BOXES SHALL BE GALVANIZED ONE-PIECE, DRAWN STEEL, KNOCKOUT TYPE WITH REMOVABLE MACHINE SCREW SECURED COVERS. FOR OUTSIDE, DAMP, OR SURFACE LOCATIONS, BOXES SHALL BE HEAVY CAST ALUMINUM OR CAST IRON WITH REMOVABLE, GASKETED, NON-FERROUS MACHINE SCREW SECURED COVERS. BOXES SHALL BE SIZED FOR THE NUMBER AND SIZES OF CONDUCTORS AND CONDUIT ENTERING THE BOX AND EQUIPPED WITH PLASTER EXTENSION RINGS WHERE REQUIRED. BOXES SHALL BE LABELED TO INDICATE PANEL AND CIRCUIT NUMBER, OR TYPE OF SIGNAL OR COMMUNICATIONS SYSTEM.

# SYMBOL LIST

- E — EQUIPMENT WITH "E" ADJACENT IS EXISTING TO REMAIN.
- —E— EXISTING CONDUIT RUN TO REMAIN. EXISTING CONDUCTORS TO REMAIN UNLESS NOTED OTHERWISE ON DRAWINGS.
- ——— CONDUIT RUN, CONCEALED IN CEILING, WALLS OR UNDER FLOORS.
- CROSS LINES ON CONDUIT RUNS INDICATE NUMBER OF #12 CURRENT CARRYING CONDUCTORS CONTAINED THEREIN. TWO #12 AND ONE #12 GROUND WIRE ARE INDICATED WHEN CROSS LINES ARE NOT SHOWN. NUMERALS ADJACENT TO CROSS LINES ON CONDUIT RUNS INDICATE SIZE OF CONDUCTORS IN LIEU OF #12. ALL CONDUITS SHALL CONTAIN ONE GROUND WIRE SIZED PER C.E.C. TABLE 250-95, BUT NOT SMALLER THAN #12. USE 3/4"C. (MINIMUM) UNLESS NOTED OTHERWISE.
- B-1,3 — CONDUIT HOMERUN TO PANELBOARD. LETTER AND NUMERALS INDICATE ELECTRICAL PANEL AND CIRCUIT NUMBER.
- SURFACE MOUNTED BRANCH CIRCUIT PANELBOARD.
- P1 — PANEL DESIGNATION.
- J — JUNCTION BOX IN ACCESSIBLE CEILING SPACE OR FLUSH IN WALL WITH BLANK COVER PLATE TO MATCH DEVICE PLATES.
- 3P / 100A — MOLDED CASE CIRCUIT BREAKER. "A" DENOTES AMPERE TRIP RATING. NUMBER OF POLES AS NOTED. SUBSCRIPT DENOTES TYPE.

| | |
|---|---|
| NO SUBSCRIPT | THERMAL MAGNETIC |
| NA | NON-AUTOMATIC |
| NO | MAGNETIC ONLY |
| CL | CURRENT LIMITING |
| ST | SHUNT TRIP |

- GROUND, "GND".
- DUPLEX GROUNDING TYPE RECEPTACLE, 20 AMP, 125 VOLT, 2 POLE, 3 WIRE. MOUNT AT +15 INCHES FROM FINISHED FLOOR TO BOTTOM OF OUTLET BOX UNLESS OTHERWISE NOTED.
- DUPLEX GROUNDING TYPE RECEPTACLE, 20 AMP, 125 VOLT, 2 POLE, 3 WIRE CONNECTED TO EMERGENCY CIRCUIT. MOUNT AT +15 INCHES FROM FINISHED FLOOR TO BOTTOM OF OUTLET BOX UNLESS OTHERWISE NOTED.
- DUPLEX GROUND FAULT INTERRUPTING TYPE RECEPTACLE, 20 AMP, 125 VOLT, 2 POLE, 3 WIRE. MOUNT AT +15 INCHES FROM FINISHED FLOOR TO BOTTOM OF OUTLET BOX UNLESS OTHERWISE NOTED.
- COMBINATION VOICE/DATA OUTLET. MOUNT AT +15 INCHES FROM FINISHED FLOOR TO BOTTOM OF OUTLET BOX UNLESS OTHERWISE NOTED.
- DATA OUTLET. MOUNT AT +15 INCHES FROM FINISHED FLOOR TO BOTTOM OF OUTLET BOX UNLESS OTHERWISE NOTED.
- S3k — SWITCH. LOWER CASE LETTER AT BOTTOM INDICATES OUTLETS CONTROLLED. CAPITAL SUPERSCRIPT INDICATES SWITCH TYPE.

| | |
|---|---|
| NO SUPERSCRIPT | - SINGLE POLE SWITCH |
| 2 | - DOUBLE POLE |
| 3 | - THREE WAY |
| 4 | - FOUR WAY |

- D — LIGHTING DIMMER. REFER TO SPECIFICATIONS.

# ABBREVIATIONS

| | |
|---|---|
| AF | AMPERE FRAME RATING OF CIRCUIT BREAKER OR AMPERE FUSE RATING (FUSE) |
| AFF | ABOVE FINISHED FLOOR |
| AM | AMMETER |
| AMP, A | AMPERES |
| AS | AMPERE SWITCH RATING |
| AT | AMPERE TRIP RATING OF BREAKER |
| AUTO | AUTOMATIC |
| ATS | AUTOMATIC TRANSFER SWITCH |
| AWG | AMERICAN WIRE GAUGE |
| BKR | BREAKER |
| C. | CONDUIT |
| CAB | CABINET |
| CC | CENTER TO CENTER |
| CKT | CIRCUIT |
| C.O. | CONDUIT ONLY |
| COMPR | COMPRESSOR |
| CU | COPPER |
| DISC | DISCONNECT |
| DISTR | DISTRIBUTION |
| DWG | DRAWING |
| ELEV | ELEVATION |
| EMERG | EMERGENCY |
| ENCL | ENCLOSURE |
| EQPT | EQUIPMENT |
| EXH | EXHAUST |
| E | EXISTING |
| FDR | FEEDER |
| FF | FINISHED FLOOR |
| FG | FINISHED GRADE |
| FSD | FIRE SMOKE DAMPER |
| FS | FLOW SWITCH |
| FLEX | FLEXIBLE |
| FLUOR | FLUORESCENT |
| FUT | FUTURE |
| FUP | FUSE, CONTROL POWER TRANSFORMER PRIMARY |
| FUS | FUSE, CONTROL POWER TRANSFORMER SECONDARY |
| GND | GROUND |
| J.B. | JUNCTION BOX |
| K | THOUSAND (KILO) |
| KV | KILOVOLTS |
| KW | KILOWATTS |
| KVA | KILOVOLT AMPERES |
| KCMIL | THOUSAND CIRCULAR MILS |
| LT, LTS, LTG | LIGHT, LIGHTS, LIGHTING |
| MAX | MAXIMUM |
| MCB | MAIN CIRCUIT BREAKER |
| MCC | MOTOR CONTROL CENTER |
| MCM | THOUSAND CIRCULAR MILS |
| MH | MANHOLE |
| MIN | MINUTES, MINIMUM |
| MOV | MOTOR OPERATED VALVE, METAL OXIDE VARISTER |
| MT, MTD, MTG | MOUNT, MOUNTED, MOUNTING |
| NAC | NOTIFICATION APPLIANCE CIRCUIT |
| NO, NOS | NUMBER, NUMBERS |
| NP | NAMEPLATE |
| NTS | NOT TO SCALE |
| OC | ON CENTER |
| OL | OVERLOAD |
| PNL | PANEL |
| PNLBD | PANELBOARD |
| POS | POSITION |
| PRI | PRIMARY |
| PVC | POLYVINYL CHLORIDE |
| PWR | POWER |
| R | REMOVE |
| REC | RECEPTACLE |
| REQD | REQUIRED |
| SCH | SCHEDULE |
| SHLD | SHIELDED |
| SPECS | SPECIFICATIONS |
| ST | SHUNT TRIP |
| STA | STATION |
| STD | STANDARD |
| STL | STEEL |
| SW | SWITCH |
| SYS | SYSTEM |
| SWBD | SWITCHBOARD |
| TEMP | TEMPERATURE |
| TERM | TERMINAL |
| TYP | TYPICAL |
| UNO | UNLESS NOTED OTHERWISE |
| V | VOLT |
| VA | VOLT AMP |
| W | WATTS |
| WP | WEATHERPROOF |
| XFMR | TRANSFORMER |

# APPLICABLE CODES

| | |
|---|---|
| 2013 | **CALIFORNIA ADMINISTRATIVE CODE (CAC)**<br>PART 1, TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR) |
| 2013 | **CALIFORNIA BUILDING CODE (CBC)**<br>PART 2, TITLE 24, CCR<br>BASED ON THE 2012 INTERNATIONAL BUILDING CODE (IBC) |
| 2013 | **CALIFORNIA ELECTRICAL CODE (CEC)**<br>PART 3, TITLE 24, CCR<br>BASED ON THE 2011 NATIONAL ELECTRICAL CODE (NEC) |
| 2013 | **CALIFORNIA MECHANICAL CODE (CMC)**<br>PART 4, TITLE 24, CCR<br>BASED ON THE 2012 UNIFORM MECHANICAL CODE (UMC) |
| 2013 | **CALIFORNIA PLUMBING CODE (CPC)**<br>PART 5, TITLE 24, CCR<br>BASED ON THE 2012 UNIFORM PLUMBING CODE (UPC) |
| 2013 | **CALIFORNIA FIRE CODE (CFC)**<br>PART 9, TITLE 24, CCR<br>BASED ON THE 2012 INTERNATIONAL FIRE CODE (IFC) |

# SHEET INDEX



| | |
|---|---|
| E0.1 | GENERAL NOTES, SYMBOL LIST, ABBREVIATIONS, APPLICABLE CODES AND SHEET INDEX |
| E0.2 | LIGHTING FIXTURE SCHEDULE, SINGLE LINE DIAGRAM, PANEL SCHEDULES, AND DETAIL |
| XE1.0 | POWER DEMOLITION PLAN |
| XE2.0 | LIGHTING DEMOLITION PLAN |
| E1.0 | POWER REMODEL PLAN |
| E2.0 | LIGHTING REMODEL PLAN |
| E3.0 | TITLE 24 COMPLIANCE FORMS |
| E4.0 | TITLE 24 COMPLIANCE FORMS |
| | |



| NO. | DATE | REVISIONS |
|---|---|---|
| 1 | 10/19/2016 | PLAN CHECK |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |
| 6 | | |
| 7 | | |

DESIGNED:
DRAWN: N.H.
CHECKED: V.D.
DATE: 09/14/16
SCALE: AS SHOWN

CONSULTANT ENGINEER:
TTG
STRUCTURAL, MECHANICAL, ELECTRICAL, CIVIL
222 South Harbor Boulevard, Suite 800
Anaheim, California 92805
714.978.2500 Main 714.978.2600 Fax
www.TTGcorp.com
Project No: 021650777.00

PLANS PREPARED BY:
cap architecture
Christopher A. Pollock, Principal
tel 714.292.0337

ARCHITECT:
LICENSE NO. EXP. DATE

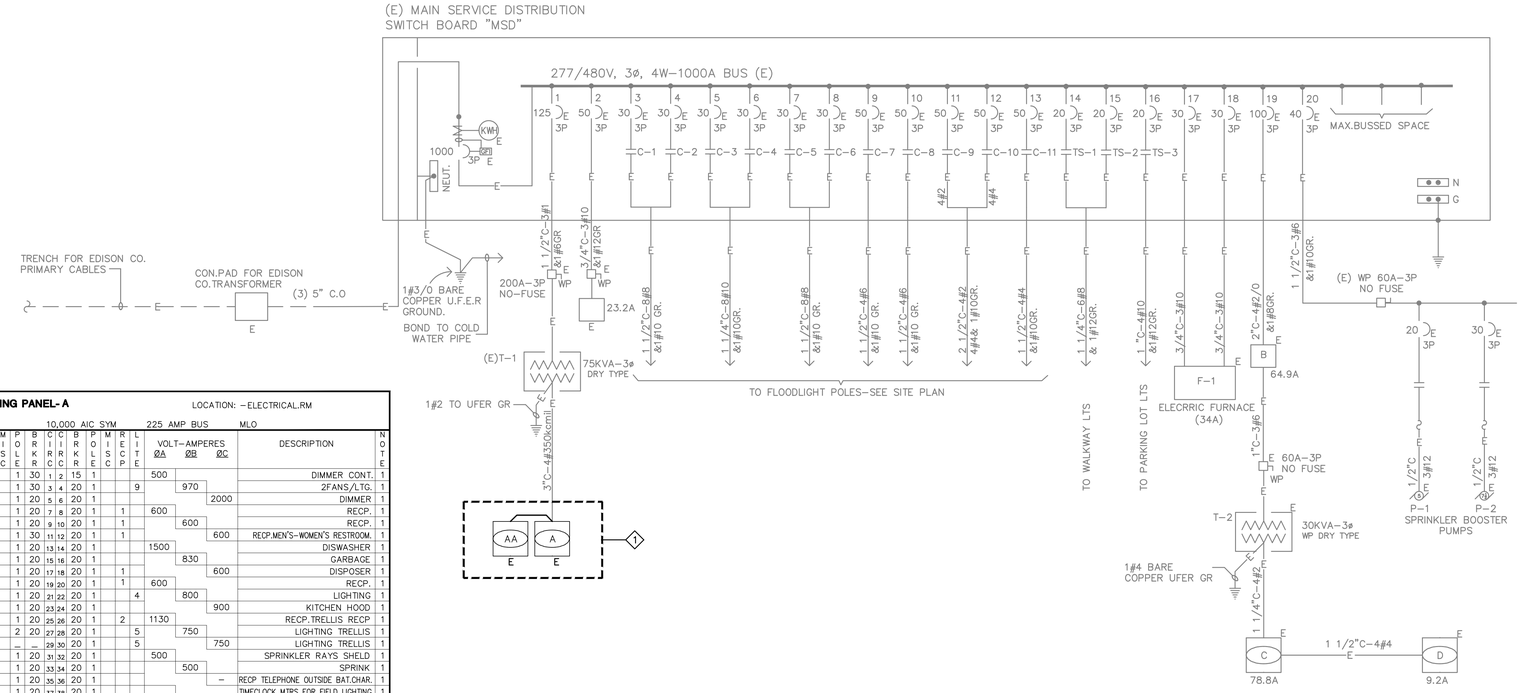
SHEET TITLE:
GENERAL NOTES, SYMBOL LIST, ABBREVIATIONS, APPLICABLE CODES AND SHEET INDEX

CITY OF IRVINE
COMMUNITY DEVELOPMENT DEPARTMENT
Community Center/ Concession Stand/ Field Dugout Refurbishment at Harvard Park

PLAN CHECK :
PERMIT :

E0.1
SHEET: OF


\\tmadfg.com\TTG\WEP\Pasadena\CAD\Tmad Projects\TTG Anaheim\2016\021650777-00-0203_ City Irvine Harvard Park\WP\E0_1.dwg Oct 18, 2016 02:16pm mnatividad




## SINGLE LINE DIAGRAM

SCALE: NOT TO SCALE

2 / E0.2

**EXISTING PANEL- A**

MOUNTING: SURFACE — LOCATION: –ELECTRICAL.RM

VOLTAGE: 120/208V,3Ø,4W — 10,000 AIC SYM — 225 AMP BUS — MLO

| NOTE | DESCRIPTION | VOLT–AMPERES ØA | ØB | ØC | LITE | RECP | MISC | POLE | BKR | CIRC | CIRC | BKR | POLE | MISC | RECP | LITE | VOLT–AMPERES ØA | ØB | ØC | DESCRIPTION | NOTE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DIMMER | 3000 | | | | | | 1 | 30 | 1 | 2 | 15 | 1 | | | | 500 | | | DIMMER CONT. | 1 |
| 1 | DIMMER | | 3000 | | | | | 1 | 30 | 3 | 4 | 20 | 1 | | | 9 | | 970 | | 2FANS/LTG. | 1 |
| 1 | DIMMER | | | 2000 | | | | 1 | 20 | 5 | 6 | 20 | 1 | | | | | | 2000 | DIMMER | 1 |
| 1 | LIGHTING | 900 | | | 9 | | | 1 | 20 | 7 | 8 | 20 | 1 | | 1 | | 600 | | | RECP. | 1 |
| 1 | LIGHTING | | 900 | | 9 | | | 1 | 20 | 9 | 10 | 20 | 1 | | 1 | | | 600 | | RECP. | 1 |
| 1 | PHONE UPS | | | 600 | | | 1 | 1 | 30 | 11 | 12 | 20 | 1 | | 1 | | | | 600 | RECP.MEN'S–WOMEN'S RESTROOM. | 1 |
| 1 | RECP. MEN'S–WOMEN RESTROOM | 720 | | | | | 4 | 1 | 20 | 13 | 14 | 20 | 1 | | | | 1500 | | | DISWASHER | 1 |
| 1 | WATER COOLER | | 600 | | | | 1 | 1 | 20 | 15 | 16 | 20 | 1 | | | | | 830 | | GARBAGE | 1 |
| 1 | RECP. | | | 900 | | | 5 | 1 | 20 | 17 | 18 | 20 | 1 | | 1 | | | | 600 | DISPOSER | 1 |
| 1 | LIGHTING & RECP FOR VIDEO GAMES | 700 | | | | 3 | | 1 | 20 | 19 | 20 | 20 | 1 | | 1 | | 600 | | | RECP. | 1 |
| 1 | RECP. | | 900 | | | | 5 | 1 | 20 | 21 | 22 | 20 | 1 | | | 4 | | 800 | | LIGHTING | 1 |
| 1 | LIGHTING BUILDING OUTSIDE | | | 1250 | 10 | | | 1 | 20 | 23 | 24 | 20 | 1 | | | | | | 900 | KITCHEN HOOD | 1 |
| 1 | LIGHTING BUILDING OUTSIDE | 975 | | | 7 | | | 1 | 20 | 25 | 26 | 20 | 1 | | 2 | | 1130 | | | RECP.TRELLIS RECP | 1 |
| 1 | WATER HEATER | | 1000 | | | | | 2 | 20 | 27 | 28 | 20 | 1 | | | 5 | | 750 | | LIGHTING TRELLIS | 1 |
| 1 | LIGHTING TRELLIS | | | 1000 | | | | _ | _ | 29 | 30 | 20 | 1 | | | 5 | | | 750 | LIGHTING TRELLIS | 1 |
| 1 | RECP DUGOUT # 2 | | | | | | | 1 | 20 | 31 | 32 | 20 | 1 | | | | 500 | | | SPRINKLER RAYS SHELD | 1 |
| 1 | RECP DUGOUT # 4 | | | | | | | 1 | 20 | 33 | 34 | 20 | 1 | | | | | 500 | | SPRINK | 1 |
| 1 | NORTH | | | | | | | 1 | 20 | 35 | 36 | 20 | 1 | | | | | | – | RECP TELEPHONE OUTSIDE BAT.CHAR. | 1 |
| 1 | DIMMER | | | | | | | 1 | 20 | 37 | 38 | 20 | 1 | | | | | | | TIMECLOCK MTRS FOR FIELD LIGHTING | 1 |
| 1 | TIME CLOCK MTRS FOR FIELD LIGHTING | | | | | | | 1 | 20 | 39 | 40 | 20 | 1 | | | | | | | OUTLET AC FENCE | 1 |
| 1 | DIMMER | | | | | | | 1 | 20 | 41 | 42 | 20 | 1 | | | | | | | SPARE | 1 |
| | DIMMER SUBTOTAL | 6295 | 6400 | 5750 | | | | | | | | | | | | | 4830 | 4450 | 4850 | SUBTOTAL | |
| | | | | | | | | | | | | | | | | | 11125 | 10850 | 10600 | VA PER PHASE | |
| | | | | | | | | | | | | | | | | | | 32575 KVA | | TOTAL CONNECTED LOAD | |

CONTINUOUS LOAD, 12941 VA X 1.25 = ----- VA — LIGHTING OUTLETS
+ OTHER LOAD = ----- VA — MISCELLANEOUS OUTLETS
TOTAL LOAD = ----- VA
3Ø CURRENT = ---- AMPS
HIGH Ø = ---- AMPS

NOTES
1 EXISTING LOAD TO REMAIN

**EXISTING PANEL- AA**

MOUNTING: SURFACE — LOCATION: –ELECTRICAL.RM

VOLTAGE: 120/208V,3Ø,4W — 10,000 AIC SYM — 100 AMP BUS — MLO

| NOTE | DESCRIPTION | VOLT–AMPERES ØA | ØB | ØC | LITE | RECP | MISC | POLE | BKR | CIRC | CIRC | BKR | POLE | MISC | RECP | LITE | VOLT–AMPERES ØA | ØB | ØC | DESCRIPTION | NOTE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | CONDENSATE PUMP | 600 | | | | | | 1 | 20 | 1 | 2 | 20 | 1 | | | | 480 | | | STANLOY DOOR | 1 |
| 1 | SMOKE DETECTOR | | 200 | | | | | 1 | 20 | 3 | 4 | 20 | 1 | | | | | 240 | | SPARE STANLOY DOOR | 1 |
| 1 | KITCHEN | | | 360 | | | | 1 | 20 | 5 | 6 | 20 | 1 | | | | | | 240 | SPARE STANLOY DOOR | 1 |
| 1 | EXIT LITE | 60 | | | 3 | | | 1 | 20 | 7 | 8 | 50 | 2 | | | | 5500 | | | OVEN | 1 |
| 1 | EXIT LITE | | 60 | | 3 | | | 1 | 20 | 9 | 10 | _ | _ | | | | | 5500 | | _ | 1 |
| 1 | RANGE | | | 1000 | | | | 1 | 20 | 11 | 12 | 50 | 2 | | | | | | 5430 | ELECTRIC STOVE | 1 |
| 1 | LITTLE LEAGUE POWER PANEL | | | | | | | 2 | 60 | 13 | 14 | _ | _ | | | | 5430 | | | ELECTRIC STOVE | 1 |
| 1 | _ | | | | | | | _ | _ | 15 | 16 | 20 | 1 | | | | | | | SPARE PARK OUTLET | 1 |
| 1 | IRRIGATION CONTROLLER | | | | | | | 1 | 20 | 17 | 18 | 20 | 1 | | | | | | | SPARE PARK OUTLET | 1 |
| | SUBTOTAL | 660 | 260 | 1360 | | | | | | | | | | | | | 11410 | 5740 | 5670 | SUBTOTAL | |
| | | | | | | | | | | | | | | | | | 12070 | 6000 | 7030 | VA PER PHASE | |
| | | | | | | | | | | | | | | | | | | 25100 KVA | | TOTAL CONNECTED LOAD | |

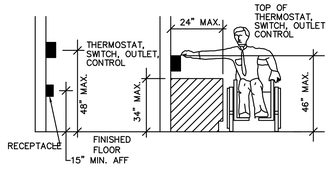
CONTINUOUS LOAD, 12941 VA X 1.25 = ----- VA — LIGHTING OUTLETS
+ OTHER LOAD = ----- VA — MISCELLANEOUS OUTLETS
TOTAL LOAD = ----- VA
3Ø CURRENT = ---- AMPS
HIGH Ø = ---- AMPS

NOTES
1 EXISTING LOAD TO REMAIN

## PANEL SCHEDULES

SCALE: NOT TO SCALE

3 / E0.2




## MOUNTING HEIGHT OVER OBSTRUCTION

SCALE: NOT TO SCALE

4 / E0.2

## LIGHTING FIXTURE SCHEDULE

| TYPE | DESCRIPTION | FINISH | LAMPS | REMARKS | MANUFACTURER AND NO. |
|---|---|---|---|---|---|
| A 35 (3) | 2'X4' LED TROFFER RECESSED | WHITE | 35W LED | | METALUX ATW–SW4–24–G–R–LD4–38–A125.UNV–CD–1–L835. |
| B 35 (4) | 4' PREMIUM WRAPAROUND LED | WHITE | 35W LED | | METALUX 4W5NED–LD4–365L–F–UNV–L835–CD–1. |
| C 34.3 (3) | 4' INDIVIDUAL VANDAL RESISTANT LED | WHITE | 34.3W LED | | FAIL–SAFE HVL8–4–LD4–STD–35–UNV–C–EDD–1–5. |
| D 34.3 (4) | 4' INDIVIDUAL VANDAL RESISTANT LED | WHITE | 34.3W LED | | FAIL–SAFE HVL12–4–LD4–STD–35–UNV–C–EDD–1–5. |
| | | | | | |

## LIGHTING FIXTURE SCHEDULE

SCALE: NOT TO SCALE

1 / E0.2

## KEYNOTES:

1. EXISTING PANEL TO BE USED ON THIS PROJECT.

| NO. | DATE | REVISIONS |
|---|---|---|
| 1 | 10/19/2016 | PLAN CHECK |
| 2 | | |
| 3 | | |
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| 5 | | |
| 6 | | |
| 7 | | |

DESIGNED:
DRAWN: N.H.
CHECKED: V.D.
DATE: 09/14/16
SCALE: AS SHOWN

CONSULTANT ENGINEER:
TTG
STRUCTURAL MECHANICAL ELECTRICAL CIVIL
222 South Harbor Boulevard, Suite 800
Anaheim, California 92805
Phone: 714.520.9595 Fax: 714.520.9595
www.ttgcorp.com
Project No: 0216077.00

PLANS PREPARED BY:
cap architecture
Christopher A. Pollock, AIA
714.970.2650
LICENSE NO. EXP. DATE
ARCHITECT:

SHEET TITLE:
LIGHTING FIXTURE SCHEDULE, SINGLE LINE DIAGRAM, PANEL SCHEDULES, AND DETAIL

CITY OF IRVINE
COMMUNITY DEVELOPMENT DEPARTMENT
Community Center/ Concession Stand/ Field Dugout Refurbishment at Harvard Park

PLAN CHECK :
PERMIT :

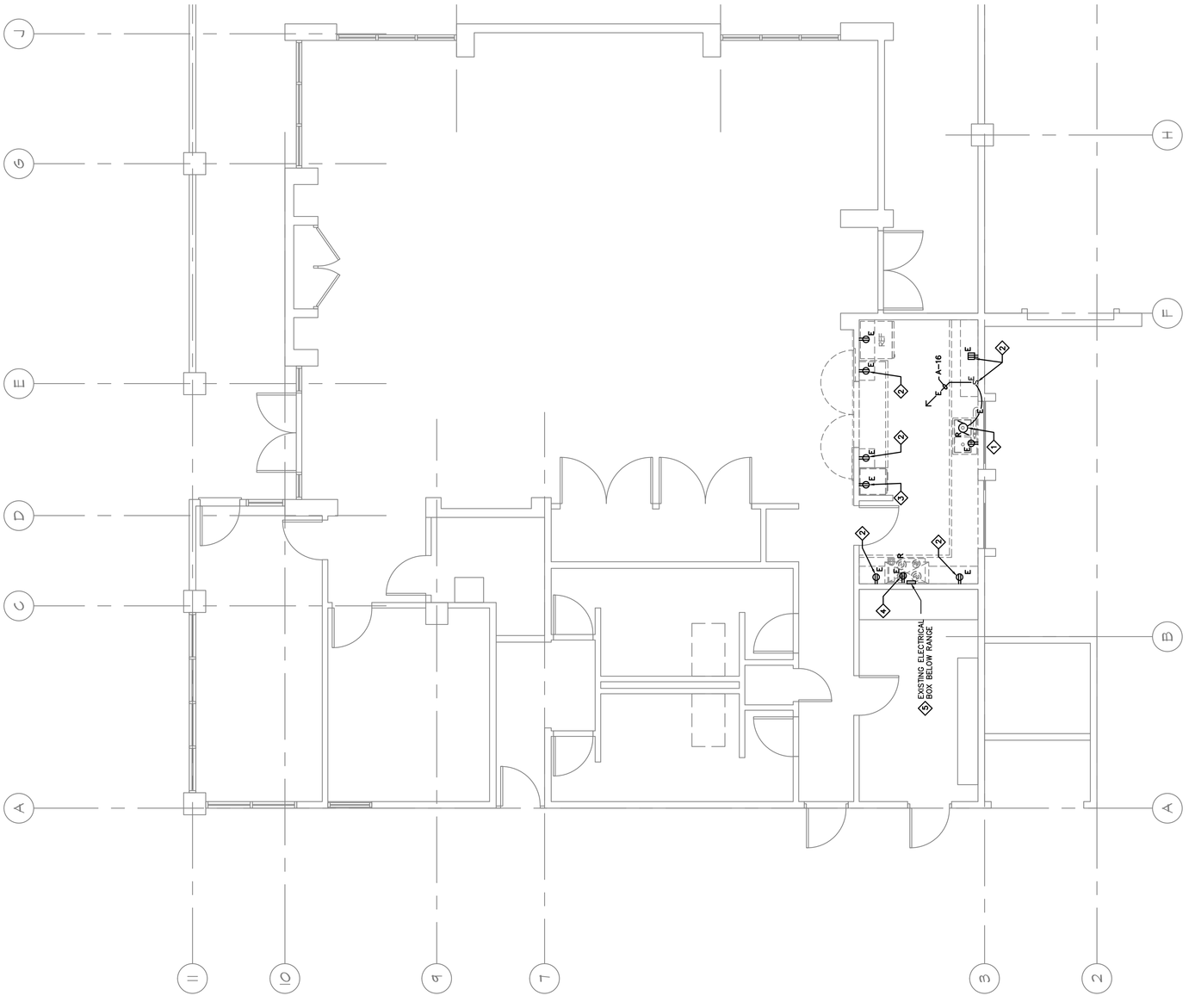
E0.2
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# KEYNOTES:

1. EXISTING GARBAGE DISPOSAL TO BE REMOVED AND REPLACED. DISCONNECT POWER AND RECONNECT TO THE NEW GARBAGE DISPOSAL. REFER TO REMODEL PLAN FOR RELATED WORK.
2. EXISTING COUNTER RECEPTACLE OR SWITCH TO BE REMOVED AND JUNCTION BOX TO BE RELOCATED. EXTEND CONDUITS AND WIRES AS NECESSARY TO NEW LOCATION DURING REMODEL. ABANDON JBOX IN PLACE AND PROVIDE SUITABLE COVER PLATE APPROVED BY OWNER.
3. EXISTING RECEPTACLE A 280' AWAY TO BE REMOVED AND RELOCATED. EXTEND CONDUITS AND WIRES AS NECESSARY TO NEW LOCATION DURING REMODEL. ABANDON JBOX IN PLACE AND PROVIDE SUITABLE COVER PLATE APPROVED BY OWNER.
4. EXISTING RECEPTACLE BEHIND DUCT TO BE REMOVED AND RELOCATED. DISCONNECT AND REMOVE EXISTING WIRES BACK TO NEXT CLOSEST JBOX.
5. FOR RANGE CONNECTION, DISCONNECT OLD RANGE FOR REMOVAL. CIRCUIT TO BE RE-USED FOR NEW RANGE.

NORTH
1/4"=1'-0"
0 2' 4' 8' 12'




POWER DEMOLITION PLAN
SCALE: 1/4"=1'-0"


CONSULTANT ENGINEER:
TTG
STRUCTURAL . MECHANICAL . ELECTRICAL . CIVIL
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Anaheim . California . 92805
Phone: 714.490.5555 Fax: 714.490.5560
www.ttgcorp.com Project No. 02165077.00

PLANS PREPARED BY:
cap architecture
1733 Ocean Front Walk # . Redondo Beach . California 90278
714.315.2500 fax . 714.240.3227

ARCHITECT:
LICENSE NO. EXP. DATE


SHEET TITLE: POWER DEMOLITION PLAN

CITY OF IRVINE
COMMUNITY DEVELOPMENT DEPARTMENT
Community Center/ Concession Stand/ Field Dugout Refurbishment at Harvard Park

PLAN CHECK:
PERMIT:

XE1.0

SHEET: OF PLAN CHECK

218

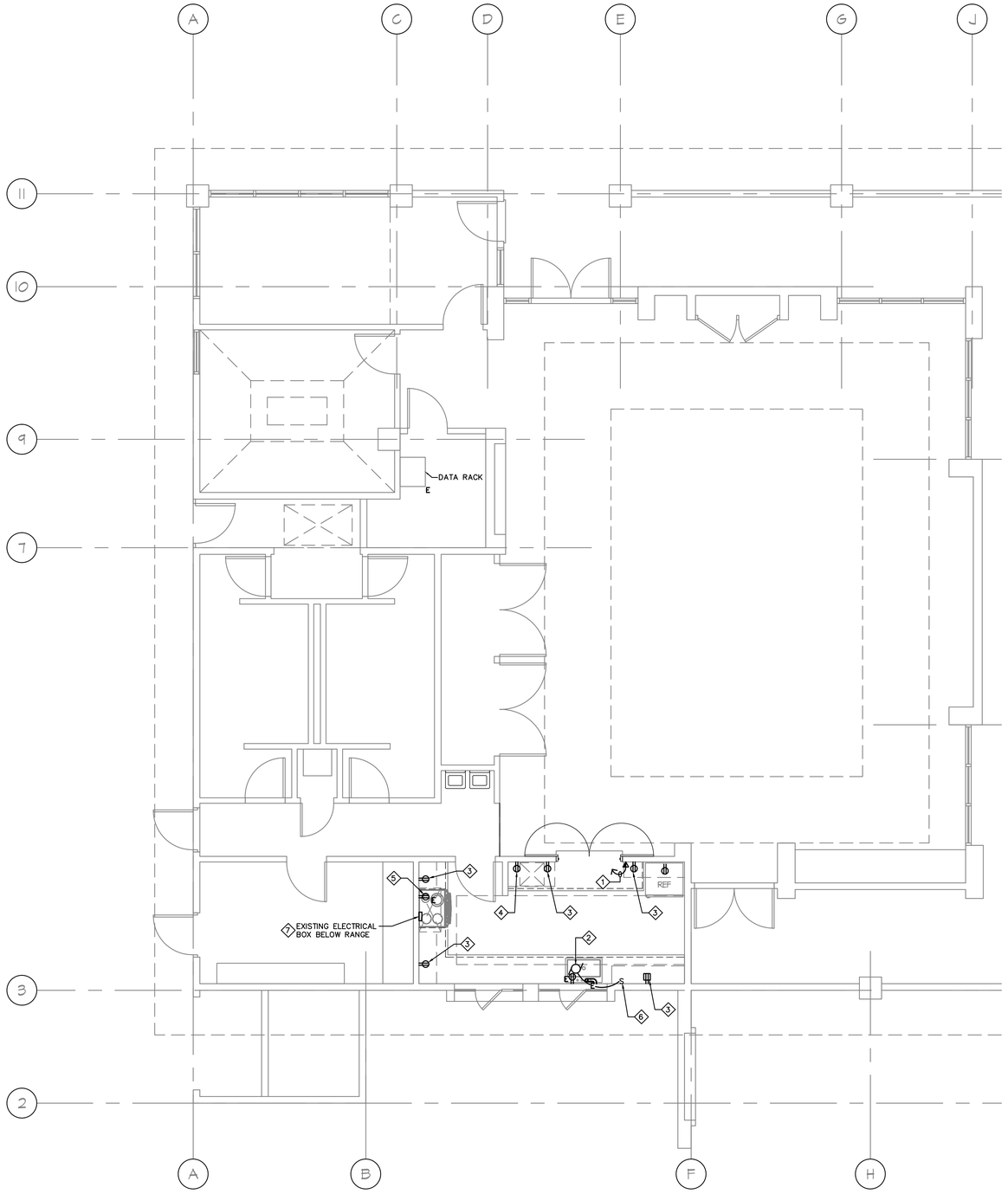
| NO. | DATE | REVISIONS |
|---|---|---|
| 1 | 10 / 19 / 2016 | PLAN CHECK |
| 2 | | |
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| 7 | | |

DESIGNED:
DRAWN: N.H.
CHECKED: V.D.
DATE: 09/14/16
SCALE: AS SHOWN


REGISTERED PROFESSIONAL ENGINEER
No. E16622
Exp. 06/30/18
ELECTRICAL
STATE OF CALIFORNIA

## KEYNOTES:

1. HOMERUN (2) COPPER CABLES TO (E) DATA PACK. COORDINATE REQUIRED COPPER CABLE TYPE WITH OWNER.
2. GARBAGE DISPOSAL TO BE RECONNECTED TO EXISTING DEDICATED CIRCUIT.
3. RELOCATED EXISTING JBOX, PROVIDE RECEPTACLE. MOUNT ABOVE NEW TILE SPLASH BUT, MOUNT AT +46" AFF MAX. REFERENCE DETAIL 4/E0.2 COORDINATE LOCATION WITH NEW TILE SPLASH. RECONNECT TO EXISTING CIRCUIT.
4. PROVIDE RECEPTACLE AND JBOX. MOUNT AT +62" AFF. COORDINATE LOCATION WITH NEW BUILT-IN MICROWAVE. RECONNECT TO EXISTING CIRCUIT VIA OLD JBOX.
5. RELOCATED EXISTING RECEPTACLE WITHIN CABINET. EXTEND EXISTING CONDUIT TO NEW LOCATION. PULL NEW WIRES AND RECONNECT TO EXISTING CIRCUIT. PROVIDE WIRES MATCHING REMOVED WIRES. COORDINATE RECEPTACLE LOCATION WITH NEW RANGE HOOD DUCT AS THE RECEPTACLE CAN NOT BE BEHIND THE DUCT.
6. RELOCATED EXISTING JBOX, PROVIDE A 20A, 1P, TOGGLE SWITCH. MOUNT ABOVE NEW TILE SPLASH BUT, MOUNT AT +46" AFF MAX. REFERENCE DETAIL 4/E0.2 COORDINATE LOCATION WITH NEW TILE SPLASH. RECONNECT TO EXISTING CIRCUIT.
7. CONNECT NEW RANGE TO EXISTING CIRCUIT. CONTRACTOR TO VERIFY RATING OF RANGE COINCIDES WITH SIZE OF WIRE AND BRANCH BREAKER. REPORT DISCREPANCIES TO ENGINEER.




POWER REMODEL PLAN
SCALE: 1/4"=1'-0"

E1.0

NORTH
1/4"=1'-0" 0 2' 4' 8' 12'

| NO. | DATE | REVISIONS |
|---|---|---|
| 1 | 10/19/2016 | PLAN CHECK |
| 2 | | |
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| 6 | | |
| 7 | | |

DESIGNED:
DRAWN: N.H.
CHECKED: V.D.
DATE: 09/14/16
SCALE: AS SHOWN

CONSULTANT ENGINEER:
TTG
STRUCTURAL, MECHANICAL, ELECTRICAL, CIVIL
222 South Harbor Boulevard, Suite 800
Anaheim, California 92805
Phone: 714.520.9595 Project No: 02165077.00
www.ttgcorp.com

PLANS PREPARED BY:
cap architecture
2531 Main Street, Suite F Irvine, CA 92614
714.478.2680 fax 714.240.0337

ARCHITECT: LICENSE NO. EXP. DATE

CITY OF IRVINE
COMMUNITY DEVELOPMENT DEPARTMENT
Community Center/ Concession Stand/ Field Dugout Refurbishment at Harvard Park

SHEET TITLE: POWER REMODEL PLAN

PLAN CHECK :
PERMIT :

E1.0
SHEET: OF

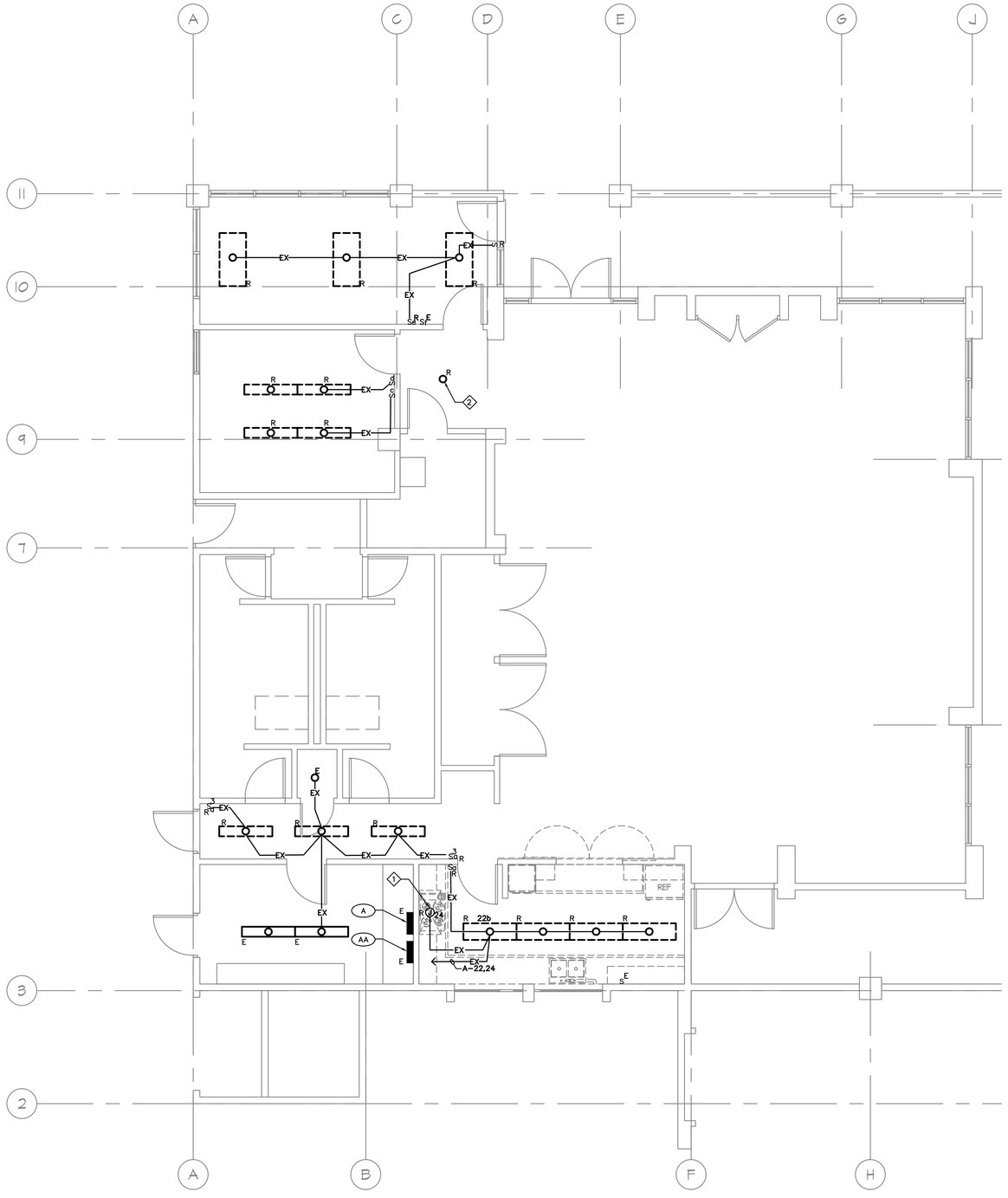
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PLAN CHECK

## KEYNOTES:

1. EXISTING RANGE HOOD TO BE REMOVED AND REPLACED. DISCONNECT POWER AND RECONNECT TO THE NEW RANGE HOOD. REFER TO REMODEL PLAN FOR RELATED WORK.
2. REMOVE EXISTING 100W INCANDESCENT LIGHT BULB AND REPLACE WITH LED.




LIGHTING DEMOLITION PLAN
SCALE: 1/4"=1'-0"

XE2.0

NORTH
1/4"=1'-0" 0 2' 4' 8' 12'

| NO. | DATE | REVISIONS |
|---|---|---|
| 1 | 10 / 19 / 2016 | PLAN CHECK |
| 2 | | |
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| 7 | | |

DESIGNED:
DRAWN: N.H.
CHECKED: V.D.
DATE: 09/14/16
SCALE: AS SHOWN

REGISTERED PROFESSIONAL ENGINEER — No. E18622 — Exp. 06/30/17 — MECHANICAL — STATE OF CALIFORNIA

CONSULTANT ENGINEER:
TTG
STRUCTURAL, MECHANICAL, ELECTRICAL, CIVIL
222 South Harbor Boulevard, Suite 800
Anaheim, California 92805
Phone: 714.520.9595 Fax: 714.520.9595
www.ttgcorp.com
Project No: 02165077.00

PLANS PREPARED BY:
cap architecture
2355 Main Street, Suite 210 Irvine, CA 92614
714.870.2050 Fax 714.260.0337
ARCHITECT: LICENSE NO. EXP. DATE

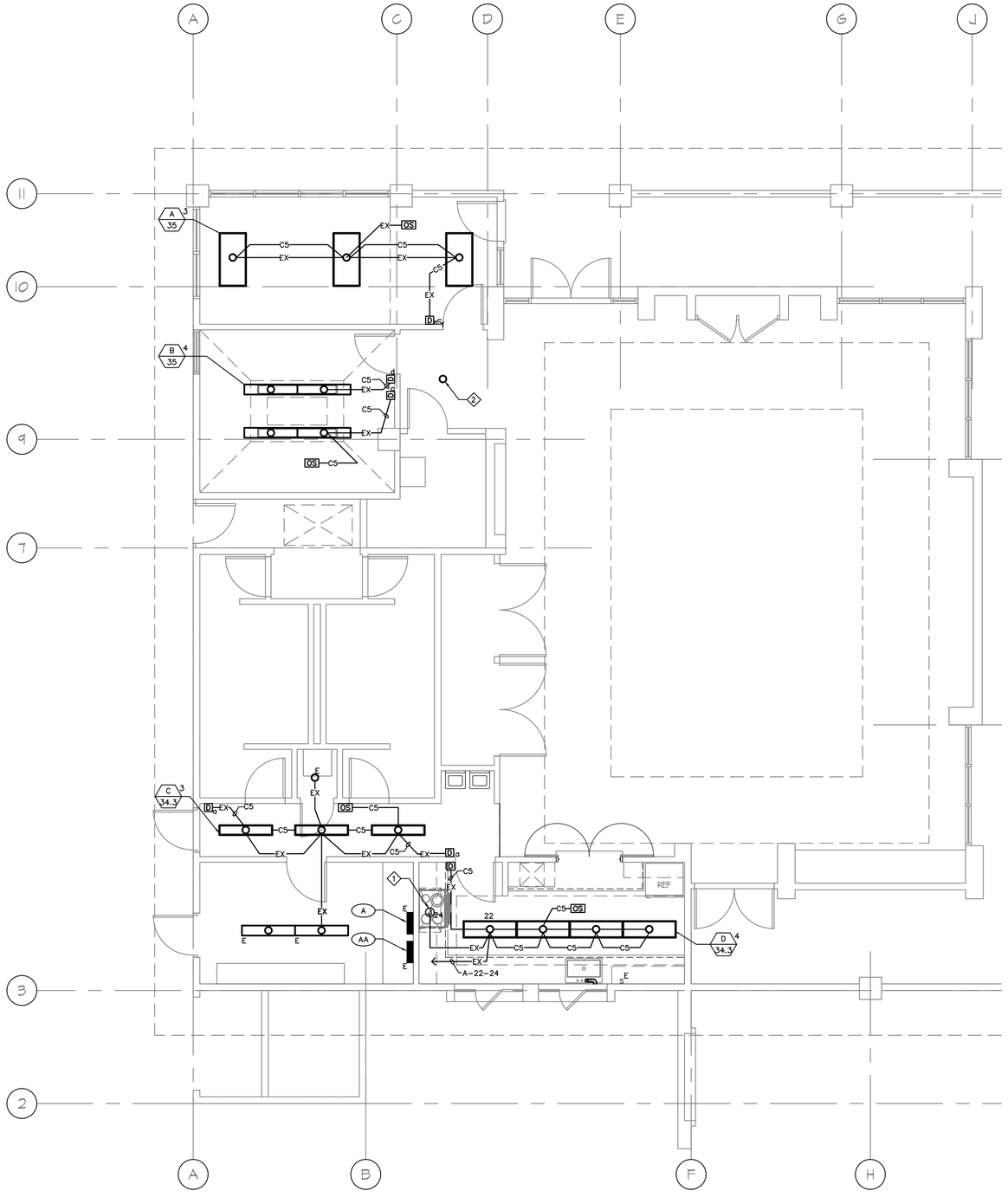
SHEET TITLE: LIGHTING DEMOLITION PLAN

# CITY OF IRVINE
COMMUNITY DEVELOPMENT DEPARTMENT
Community Center/ Concession Stand/ Field Dugout Refurbishment at Harvard Park

PLAN CHECK :
PERMIT :

XE2.0
SHEET: OF

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LIGHTING REMODEL PLAN
SCALE: 1/4"=1'-0"

XE2.0

## KEYNOTES:

1. ENERGY STAR HOOD TO BE RECONNECTED TO EXISTING CIRCUIT.
2. PROVIDE 14W LED LIGHT BULB TO REPLACE EXISTING INCANDESCENT BULB.

NORTH

1/4"=1'-0" 0 2' 4' 8' 12'

| NO. | DATE | REVISIONS |
|---|---|---|
| 1 | 10/19/2016 | PLAN CHECK |
| 2 | | |
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| 7 | | |

DESIGNED:
DRAWN: N.H.
CHECKED: V.D.
DATE: 09/14/16
SCALE: AS SHOWN

CONSULTANT ENGINEER:
TTG
STRUCTURAL, MECHANICAL, ELECTRICAL, CIVIL
222 South Harbor Boulevard, Suite 800
Anaheim, California 92805
Phone: 714.939.1030 Fax: 714.939.1050
www.ttgcorp.com
Project No: 021650077.00

REGISTERED PROFESSIONAL ENGINEER
No. E18622
Exp. 06/30/17
ELECTRICAL
STATE OF CALIFORNIA

PLANS PREPARED BY:
cap architecture
Christopher Allen Pollock Architect
714.979.2500 fax 714.363.0327

ARCHITECT: LICENSE NO. EXP. DATE

SHEET TITLE: LIGHTING REMODEL PLAN

# CITY OF IRVINE
COMMUNITY DEVELOPMENT DEPARTMENT
Community Center/ Concession Stand/ Field Dugout Refurbishment at Harvard Park

PLAN CHECK :
PERMIT :

E2.0
SHEET: OF

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STATE OF CALIFORNIA
**INDOOR LIGHTING**
CEC-NRCC-LTI-01-E (Revised 08/15) CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | NRCC-LTI-01-E |
|---|---|
| Indoor Lighting | (Page 1 of 6) |
| Project Name: City Of Irvine | Date Prepared: 10/13/2016 |

**A. General Information**

| Climate Zone: | Conditioned Floor Area : 619 | | | | | |
|---|---|---|---|---|---|---|
| 9 | Unconditioned Floor Area : 0 | | | | | |
| Building Type: | ☑ Nonresidential | ☐ High-Rise Residential | ☐ Hotel/Motel | | | |
| ☐ Schools | ☐ Relocatable Public Schools | ☑ Conditioned Spaces | ☐ Unconditioned Spaces | | | |
| Phase of Construction: | ☐ New Construction | ☐ Addition | ☑ Alteration | | | |
| Method of Compliance: | ☐ Complete Building | ☑ Area Category | ☐ Tailored | | | |
| Project Address: 1 Civic Center Plaza | | | | | | |

**B. Lighting Compliance Documents (select yes for each document included)**

*For detailed instructions on the use of this and all Energy Efficiency Standards compliance documents, refer to the Nonresidential Manual published by the California Energy Commission.*

| YES | NO | FORM | TITLE |
|---|---|---|---|
| ✓ | | NRCC-LTI-01-E | Certificate of Compliance. All Pages required on plans for all submittals. |
| ✓ | | NRCC-LTI-02-E | Lighting Controls, Certificate of Compliance, and PAF Calculation. All Pages required on plans for all submittals. |
| ✓ | | NRCC-LTI-03-E | Indoor Lighting Power Allowance |
| | ✓ | NRCC-LTI-04-E | Tailored Method Worksheets |
| | ✓ | NRCC-LTI-05-E | Line Voltage Track Lighting Worksheets |



STATE OF CALIFORNIA
**INDOOR LIGHTING**
CEC-NRCC-LTI-01-E (Revised 08/15) CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | NRCC-LTI-01-E |
|---|---|
| Indoor Lighting | (Page 2 of 6) |
| Project Name: City Of Irvine | Date Prepared: 10/13/2016 |

**C. Summary of Allowed Lighting Power**

Conditioned and Unconditioned space Lighting must not be combined for compliance

| | Indoor Lighting Power for Conditioned Spaces | | Watts | Indoor Lighting Power for Unconditioned Spaces | | Watts |
|---|---|---|---|---|---|---|
| 1. | **Installed** Lighting NRCC-LTI-01-E, page 4 | + | 348 | **Installed** Lighting NRCC-LTI-01-E, page 4 | + | 0 |
| 2. | PORTABLE ONLY FOR OFFICES NRCC-LTI-01-E, page 3 | + | | | | |
| 3. | Minus Lighting Control Credits NRCC-LTI-02-E, page 2 | - | 0 | Minus Lighting Control Credits NRCC-LTI-02-E, page 2 | - | 0 |
| 4. | Adjusted **Installed** Lighting Power (row 1 plus row 2 minus row 3) | = | 348 | Adjusted **Installed** Lighting Power (row 1 minus row 3) | = | 0 |
| 5. | Complies ONLY if **Installed** ≤ **Allowed** | | | Complies ONLY if **Installed** ≤ **Allowed** | | |
| 6. | **Allowed** Lighting Power Conditioned NRCC-LTI-03-E, page 1 | | 737 | **Allowed** Lighting Power Unconditioned NRCC-LTI-03-E, page 1 | | 0 |

**D. Declaration of Required Installation Certificates**

Declare by selecting yes for all Installation Certificates that will be submitted. (Retain copies and verify forms are completed and signed.)

| YES | NO | Form/Title | |
|---|---|---|---|
| ✓ | | NRCI-LTI-01-E - Must be submitted for all buildings | ☐ Field Inspector |
| | ✓ | NRCI-LTI-02-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance. | ☐ Field Inspector |
| | ✓ | NRCI-LTI-03-E - Must be submitted for a line-voltage track lighting integral current limiter, or for a supplementary overcurrent protection panel used to energize only line-voltage track lighting, to be recognized for compliance. | ☐ Field Inspector |
| | ✓ | NRCI-LTI-04-E - Must be submitted for two interlocked systems serving an auditorium, a convention center, a conference room, a multipurpose room, or a theater to be recognized for compliance. | ☐ Field Inspector |
| | ✓ | NRCI-LTI-05-E - Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance. | ☐ Field Inspector |
| | ✓ | NRCI-LTI-06-E - Must be submitted for additional wattage installed in a video conferencing studio to be recognized for compliance. | ☐ Field Inspector |



STATE OF CALIFORNIA
**INDOOR LIGHTING**
CEC-NRCC-LTI-01-E (Revised 08/15) CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | NRCC-LTI-01-E |
|---|---|
| Indoor Lighting | (Page 3 of 6) |
| Project Name: City Of Irvine | Date Prepared: 10/13/2016 |

**E. Declaration of Required Certificates of Acceptance**

Declare by checking all of the Certificates of Acceptance that will be submitted. (Retain copies and verify forms are completed and signed.)

| YES | NO | Form/Title | |
|---|---|---|---|
| | ✓ | NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls. | ☐ Field Inspector |
| | ✓ | NRCA-LTI-03-A - Must be submitted for automatic daylight controls. | ☐ Field Inspector |
| | ✓ | NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls. | ☐ Field Inspector |

*A separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for:*
☐ **CONDITIONED SPACE** ☐ **UNCONDITIONED SPACE**

**F. Indoor Lighting Schedule and Field Inspection Energy Checklist**

☐ The actual indoor lighting power listed on this page and on the next page includes all installed permanent and planned portable lighting systems.
☐ When Complete Building Method is used for compliance, list each different type of luminaire on separate lines.
☐ When Area Category Method or Tailored Method is used for compliance, list each different type of luminaire by each different function area on separate lines
☐ Also include track lighting in schedule, and submit the track lighting compliance form (NRCC-LTI-05-E) when line-voltage track lighting is installed.



STATE OF CALIFORNIA
**INDOOR LIGHTING**
CEC-NRCC-LTI-01-E (Revised 08/15) CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | NRCC-LTI-01-E |
|---|---|
| Indoor Lighting | (Page 4 of 6) |
| Project Name: City Of Irvine | Date Prepared: 10/13/2016 |

**G. Installed Portable Luminaires in Offices – Exception to Section 140.6(a)**

☐ This section shall be filled out ONLY for portable luminaires in offices (As defined in §100.1). All other planned portable luminaires shall be documented on next page of this compliance form.
☐ This section is used to determine if greater than 0.3 watts of portable lighting is planned for any office
☐ Fill out a separate line for each different office. Small offices that are typical (having the same general and portable lighting) may be grouped together. This allowance shall not be traded between offices having different lighting systems.

| Office Portable Luminaire Schedule | Office Installed Portable Luminaire Watts Per Square Foot | | | | | | | Office Location | Field Inspector | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| Complete Luminaire Description (i.e., LED, under cabinet, furniture mounted direct/indirect) | Watts per Luminaire | Number of Luminaires | Installed portable luminaire watts in this office (G02 x G03) | Square feet of this office | Watts per square foot (G04 / G05) | If F ≤ 0.3, enter zero; if G06 > 0.3, (G06-0.3) | G05 x G07 | Identify Office area in which these portable luminaires are installed | Pass | Fail |
| | | | | | | | | | ☐ | ☐ |
| | | | | | | | | | ☐ | ☐ |
| | | | | | | | | | ☐ | ☐ |
| | | | | | | | | | ☐ | ☐ |
| | | | | | | | | | ☐ | ☐ |
| Total installed portable luminaire watts that are greater than 0.3 watts per square foot per office: | | | | | | | | Enter sum total of all pages into NRCC-LTI-01-E; Page 1 | | |



STATE OF CALIFORNIA
**INDOOR LIGHTING**
CEC-NRCC-LTI-01-E (Revised 08/15) CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | NRCC-LTI-01-E |
|---|---|
| Indoor Lighting | (Page 5 of 6) |
| Project Name: City Of Irvine | Date Prepared: 10/13/2016 |

*A separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for:*
☑ **CONDITIONED SPACE** ☐ **UNCONDITIONED SPACE**

**H. INDOOR LIGHTING SCHEDULE and FIELD INSPECTION ENERGY CHECKLIST**

| Luminaire Schedule | | | Installed Watts | | | | Location | Field Inspector [1] | |
|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | | E | F | G | H | |
| Name or Item Tag | Complete Luminaire Description (i.e., 3 lamp fluorescent troffer, F32T8, one dimmable electronic ballast) | Watts per Luminaire | How wattage was determined: CEC Default from NAB | How wattage was determined: Assuming its §130.0(c) | Number Luminaires | Total Installed Watts (Watts x Units) (WSF x HSF) | Primary Function area in which these luminaires are installed | Pass | Fail |
| A | 35w LED | 35.0 | ☐ | ☑ | 3 | 105 | Office <= 250 sqft | ☐ | ☐ |
| B | 35w LED | 35.0 | ☐ | ☑ | 4 | 140 | Office <= 250 sqft | ☐ | ☐ |
| D | 34.3w LED | 34.3 | ☐ | ☑ | 3 | 103 | Kitchen, Food Preparation | ☐ | ☐ |
| | | | ☐ | ☐ | | | | ☐ | ☐ |
| | | | ☐ | ☐ | | | | ☐ | ☐ |
| | | | ☐ | ☐ | | | | ☐ | ☐ |
| | | | ☐ | ☐ | | | | ☐ | ☐ |
| | | | ☐ | ☐ | | | | ☐ | ☐ |
| | | | ☐ | ☐ | | | | ☐ | ☐ |
| | | | ☐ | ☐ | | | | ☐ | ☐ |
| INSTALLED WATTS PAGE TOTAL: | | | | | | 348 | Enter sum total of all pages into NRCC-LTI-01-E; Page 2 | | |



STATE OF CALIFORNIA
**INDOOR LIGHTING**
CEC-NRCC-LTI-01-E (Revised 08/15) CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | NRCC-LTI-01-E |
|---|---|
| Indoor Lighting | (Page 6 of 6) |
| Project Name: City Of Irvine | Date Prepared: 10/13/2016 |

**DOCUMENTATION AUTHOR'S DECLARATION STATEMENT**

1. I certify that this Certificate of Compliance documentation is accurate and complete.

| Documentation Author Name: Rey Sangueza | Documentation Author Signature: |
|---|---|
| Company: | Signature Date: 10/13/2016 |
| Address: 222 S. Harbor Boulevard Suite 800 | CEA Certification Identification (if applicable): E16622 |
| City/State/Zip: Anaheim, CA 92805 | Phone: 714.490.5555 |

**RESPONSIBLE PERSON'S DECLARATION STATEMENT**

I certify the following under penalty of perjury, under the laws of the State of California:
1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
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4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

| Responsible Designer Name: Rey Sangueza | Responsible Designer Signature: |
|---|---|
| Company: TTG Engineers | Date Signed: |
| Address: 222 S. Harbor Boulevard Suite 800 | License: E16622 |
| City/State/Zip: Anaheim, CA 92805 | Phone: 714.490.5555 |



STATE OF CALIFORNIA
**INDOOR LIGHTING – LIGHTING CONTROLS**
CEC-NRCC-LTI-02-E (Revised 05/15) CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | NRCC-LTI-02-E |
|---|---|
| Indoor Lighting - Lighting Controls | (Page 1 of 3) |
| Project Name: City Of Irvine | Date Prepared: 10/13/2016 |

The NRCC-LTI-02-E shall be used to document all mandatory and prescriptive lighting controls that are applicable to the project.

**Mandatory Lighting Control Declaration Statements** (Indicate if the measure applies by checking yes or no below.)

| YES | NO | Control Requirements |
|---|---|---|
| | ✓ | Lighting shall be controlled by self-contained lighting control devices which are certified to the Energy Commission according to the Title 20 Appliance Efficiency Regulations in accordance with Section 110.9. |
| | ✓ | Lighting shall be controlled by a lighting control a system or energy management control system in accordance with §110.9. An Installation Certificate shall be submitted in accordance with Section 130.4(b). |
| | ✓ | One or more Track Lighting Integral Current Limiters shall be installed which have been certified to the Energy Commission in accordance with §110.9 and §130.0. Additionally, an Installation Certificate shall be submitted in accordance with Section 130.4(b). |
| | ✓ | A Track Lighting Supplementary Overcurrent Protection Panel shall be installed in accordance with Section 110.9 and Section 130.0. Additionally, an Installation Certificate shall be submitted in accordance with Section 130.4(b). |
| ✓ | | All lighting controls and equipment shall comply with the applicable requirements in §110.9 and shall be installed in accordance with the manufacturer's instructions in accordance with Section 130.1. |
| | ✓ | All luminaires shall be functionally controlled with manually switched ON and OFF lighting controls in accordance with Section 130.1(a). |
| ✓ | | General lighting shall be separately controlled from all other lighting systems in an area. Floor and wall display, window display, case display, ornamental, and special effects lighting shall each be separately controlled on circuits that are 20 amps or less. When track lighting is used, general, display, ornamental, and special effects lighting shall each be separately controlled; in accordance with Section 130.1(a)4. |
| | ✓ | The general lighting of any enclosed area 100 square feet or larger, with a connected lighting load that exceeds 0.5 watts per square foot shall meet the multi-level lighting control requirements in accordance with Section 130.1(b). |
| | ✓ | All installed indoor lighting shall be equipped with controls that meet the applicable Shut-OFF control requirements in Section 130.1(c). |
| | ✓ | Lighting in all Daylit Zones shall be controlled in accordance with the requirements in Section 130.1(d) and daylit zones are shown on the plans. |
| | ✓ | Lighting power in buildings larger than 10,000 square feet shall be capable of being automatically reduced in response to a Demand Responsive Signal in accordance with Section 130.1(e). |
| ✓ | | Before an occupancy permit is granted for a newly constructed building or area, or a new lighting system serving a building, area, or site is operated for normal use, indoor lighting controls serving the building, area, or site shall be certified as meeting the Acceptance Requirements for Code Compliance in accordance with Section 130.4.(a). The controls required to meet the Acceptance Requirements include automatic daylight controls, automatic shut-OFF controls, and demand responsive controls. |



STATE OF CALIFORNIA
**INDOOR LIGHTING – LIGHTING CONTROLS**
CEC-NRCC-LTI-02-E (Revised 05/15) CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | NRCC-LTI-02-E |
|---|---|
| Indoor Lighting - Lighting Controls | (Page 2 of 3) |
| Project Name: City Of Irvine | Date Prepared: 10/13/2016 |

A separate document must be filled out for Conditioned and Unconditioned Spaces. This page is used only for the following:
☑ CONDITIONED SPACES ☐ UNCONDITIONED SPACES

**MANDATORY AND PRESCRIPTIVE INDOOR LIGHTING CONTROL SCHEDULE, PAF CALCULATION, and FIELD INSPECTION CHECKLIST**

| Lighting Control Schedule | | | Standards Complying With [1] (✓ all that apply, or enter 'E' if Exempted) | | | | | | | PAF Credit Calculation [2] | | | ✓ If Acceptance Test Required | Field Inspector | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Complete Indoor Lighting | Watts per SF | PAF (K x L) | Control Credit | Pass | Fail |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | |
| Location in Building | Type/ Description of Lighting Control (i.e.: occupancy sensor, automatic time switch, dimmer, automatic daylight, etc..) | # of Units | §130.1(a) | §130.1(b) | §130.1(c) | §130.1(d) | §130.1(e) | §140.6(a)2 | §140.6(d) | | | | | | |
| | | | | | | | | | | | | | | ☐ | ☐ |
| | | | | | | | | | | | | | | ☐ | ☐ |
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| | | | | | | | | | | | | | | ☐ | ☐ |
| | | | | | | | | | | | | | | ☐ | ☐ |
| Control Credit PAGE TOTAL (Sum of Column M): | | | | | | | | | | | | 0 | | | |
| IF MULTIPLE PAGES ARE USED, ENTER SUM TOTAL OF Control Credit for all pages HERE (Sum of all Column M): | | | | | | | | | | | | 0 | | | |
| | | | | | | | | | | | | Enter Control Credit total into NRCC-LTI-01-E; Page 1. | | | |

*1. §130.1(a) = Manual area controls; §130.0(b) = Multi Level; §130.1(c) = Auto Shut-Off; §130.1(d) = Mandatory Daylight; §130.1(e) = Demand Responsive; §140.6(d) = Additional lighting controls installed to earn a PAF; §140.6(d) = Prescriptive Secondary Sidelit Daylight Controls.*
*2. Check Table 140.6-A for correct Factor. PAFs shall not be traded between conditioned and unconditioned spaces. As a condition to earn a PAF, an Installation Certificate is also required to be filled out, signed, and submitted.*



STATE OF CALIFORNIA
**INDOOR LIGHTING – LIGHTING CONTROLS**
CEC-NRCC-LTI-02-E (Revised 05/15) CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | NRCC-LTI-02-E |
|---|---|
| Indoor Lighting - Lighting Controls | (Page 3 of 3) |
| Project Name: City Of Irvine | Date Prepared: 10/13/2016 |

**DOCUMENTATION AUTHOR'S DECLARATION STATEMENT**

1. I certify that this Certificate of Compliance documentation is accurate and complete.

| Documentation Author Name: Rey Sangueza | Documentation Author Signature: |
|---|---|
| Company: | Signature Date: 10/13/2016 |
| Address: 222 S. Harbor Boulevard Suite 800 | CEA Certification Identification (if applicable): E16622 |
| City/State/Zip: Anaheim, CA 92805 | Phone: 714.490.5555 |

**RESPONSIBLE PERSON'S DECLARATION STATEMENT**

I certify the following under penalty of perjury, under the laws of the State of California:
1. The information provided on this Certificate of Compliance is true and correct.
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5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

| Responsible Designer Name: Rey Sangueza | Responsible Designer Signature: |
|---|---|
| Company: TTG Engineers | Date Signed: |
| Address: 222 S. Harbor Boulevard Suite 800 | License: E16622 |
| City/State/Zip: Anaheim, CA 92805 | Phone: 714.490.5555 |



| NO. | DATE | REVISIONS |
|---|---|---|
| 7 | | |
| 6 | | |
| 5 | | |
| 4 | | |
| 3 | | |
| 2 | 10 / 19 / 2016 | PLAN CHECK |
| 1 | | |

DESIGNED:
DRAWN: N.H.
CHECKED: V.D.
DATE: 09/14/16
SCALE: AS SHOWN

REGISTERED PROFESSIONAL ENGINEER — REY M. SANGUEZA — No. E16622 — CIVIL — STATE OF CALIFORNIA

CONSULTANT/ENGINEER:
TTG
STRUCTURAL, MECHANICAL, ELECTRICAL, CIVIL
222 South Harbor Boulevard, Suite 800
Anaheim, California 92805
714.490.5555 www.ttgcorp.com Project No: 021650T-00

PLANS PREPARED BY:
cab architecture
2151 Alton Parkway, Suite B Irvine, California 92606 714.979.2050 fax 714.583.0337

ARCHITECT: LICENSE NO. EXP. DATE:

SHEET TITLE: TITLE 24 COMPLIANCE FORMS

CITY OF IRVINE
COMMUNITY DEVELOPMENT DEPARTMENT
Community Center/ Concession Stand/ Field Dugout Refurbishment at Harvard Park

PLAN CHECK :
PERMIT :

SHEET: E3.0 OF

\\tmodtg.com\TTG\WEP\Pasadena\CAD\Tmod Projects\TTG Anaheim\2016\021650T77-00-0203_ City Irvine Harvard Park\WPE\E3_0.dwg Oct 18, 2016 02:17pm mnatividad

STATE OF CALIFORNIA
**INDOOR LIGHTING POWER ALLOWANCE**
CEC-NRCC-LTI-03-E (Revised 05/15) CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | NRCC-LTI-03-E |
|---|---|
| Certificate of Compliance - Indoor Lighting Power Allowance | (Page 1 of 4) |
| Project Name: City Of Irvine | Date Prepared: 10/13/2016 |

A separate page must be filled out for Conditioned and Unconditioned Spaces. This page is only for:
☑ CONDITIONED spaces ☐ UNCONDITIONED spaces

**A. SUMMARY TOTALS OF LIGHTING POWER ALLOWANCES**

☐ If using Complete Building Method for compliance, use only the total in column (a) as total allowed building watts.
☐ If using Area Category Method, Tailored Method, or a combination of Area Category and Tailored Method for compliance, use only the total in column (b) as the total allowed building watts

| | (a) | | (b) |
|---|---|---|---|
| 1. Complete Building Method Allowed Watts. Documented in section B of NRCC-LTI-03-E (below on this page) | | | |
| 2. Area Category Method Allowed Watts. Documented in section C-1 of NRCC-LTI-03-E (below on this page) | | | 737 |
| 3. Tailored Method Allowed Watts. Documented in section A of NRCC-LTI-04-E | | | 0 |
| **TOTAL ALLOWED BUILDING WATTS. Enter number into correct cell on NRCC-LTI-01, Page 2, Row 1** | | | 737 |

☐ Check here if building contains both conditioned and unconditioned areas.

**B. COMPLETE BUILDING METHOD LIGHTING POWER ALLOWANCE**

| 1 | 2 | | 3 | | 4 |
|---|---|---|---|---|---|
| TYPE OF BUILDING (From §140.6 Table 140.6-B) | WATTS PER ($ft^2$) | X | COMPLETE BLDG. AREA | = | ALLOWED WATTS |
| | | | | | |
| Total Area: | | | | | |
| Total Watts. Enter Total Watts into section A, row 1 (Above on this page) | | | | | |

**C-1 AREA CATEGORY METHOD TOTAL LIGHTING POWER ALLOWANCES (D plus E)**

| | Watts |
|---|---|
| Total from section C-2 | 737 |
| Total from section C-3 | 0 |
| Total Watts. Enter Total Watts into section A, row 2 (Above on this page) | 737 |



STATE OF CALIFORNIA
**INDOOR LIGHTING POWER ALLOWANCE**
CEC-NRCC-LTI-03-E (Revised 05/15) CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | NRCC-LTI-03-E |
|---|---|
| Certificate of Compliance - Indoor Lighting Power Allowance | (Page 2 of 4) |
| Project Name: City Of Irvine | Date Prepared: 10/13/2016 |

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☑ CONDITIONED spaces ☐ UNCONDITIONED spaces

**C -2 AREA CATEGORY METHOD GENERAL LIGHTING POWER ALLOWANCE**

☐ Do not include portable lighting for offices. Portable lighting for offices shall be documented only in section B of NRCC-LTI-01-E.
☐ Separately list lighting for each primary function area as defined in §100.1 of the Standards.

| A | | B | | C | | D |
|---|---|---|---|---|---|---|
| AREA CATEGORY (From §140.6 Table 140.6-C) | | WATTS | | | | ALLOWED |
| Location in Building | Primary Function Area per Table 140.6-C | PER ($ft^2$) | X | AREA ($ft^2$) | = | WATTS |
| Office | Office <= 250 sqft | 1.00 | | 423 | | 423 |
| Kitchen | Kitchen, Food Preparation | 1.60 | | 196 | | 314 |
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| | | | | TOTALS | | |
| Enter sum total Area Category allowed watts into section C-1 of NRCC-LTI-03-E (this compliance form) | | | | | | 737 |
| | | | | | | WATTS |



STATE OF CALIFORNIA
**INDOOR LIGHTING POWER ALLOWANCE**
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|---|---|
| Certificate of Compliance - Indoor Lighting Power Allowance | (Page 3 of 4) |
| Project Name: City Of Irvine | Date Prepared: 10/13/2016 |

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☑ CONDITIONED spaces ☐ UNCONDITIONED spaces

**C-3 AREA CATEGORY METHOD ADDITIONAL LIGHTING WATTAGE ALLOWANCE (from Table 140.6-C Footnotes)**

| A | B | C [2] | D | E | F | G |
|---|---|---|---|---|---|---|
| Primary Function | Sq Ft or linear ft [1] | Additional Watts Allowed | Wattage Allowance (B x C) | Description(s) and Quantity of Special Luminaire Types in each Primary Function Area | Total Design Watts [3] | ALLOWED WATTS Smaller of D or F |
| | | | | | | |
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| | | | | TOTALS – Enter into TOTAL AREA CATEGORY METHOD ADDITIONAL ALLOWANCES – Section C-1 | | 0 |

1. Use linear feet only for additional allowance for white board or chalk board. All other additional Area Category allowances shall use watts per square foot.
2. Additional watts are available only when allowed according to the footnotes on bottom of Table 146-C, which include: Specialized task work; Ornamental lighting; Precision commercial and industrial work; Per linear foot of white board or chalk board; Accent, display and feature lighting; and Videoconferencing Studio lighting..
3. Luminaire classification and wattage shall be determined in accordance with §130.0(c) of the Standards.



STATE OF CALIFORNIA
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CEC-NRCC-LTI-03-E (Revised 05/15) CALIFORNIA ENERGY COMMISSION

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|---|---|
| Certificate of Compliance - Indoor Lighting Power Allowance | (Page 4 of 4) |
| Project Name: City Of Irvine | Date Prepared: 10/13/2016 |

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| | |
|---|---|
| Responsible Designer Name: Rey Sangueza | Responsible Designer Signature: |
| Company : TTG Engineers | Date Signed: |
| Address: 222 S. Harbor Boulevard Suite 800 | License: E16622 |
| City/State/Zip: Anaheim, CA 92805 | Phone: 714.490.5555 |



REVISIONS

| NO. | DATE | |
|---|---|---|
| 1 | 10 / 19 / 2016 | PLAN CHECK |
| 2 | | |
| 3 | | |
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| 6 | | |
| 7 | | |

DESIGNED:
DRAWN: N.H.
CHECKED: V.D.
DATE: 09/14/16
SCALE: AS SHOWN

CONSULTANT ENGINEER:
TTG
STRUCTURAL, MECHANICAL, ELECTRICAL, CIVIL
222 South Harbor Boulevard, Suite 800
Anaheim, California 92805
714.490.5555 www.ttgcorp.com
Project No: 02165077.00

PLANS PREPARED BY:
cap architecture
2211 East Katella, Suite F Anaheim, CA 92806
714.978.2000 fax 714.280.0337
ARCHITECT: LICENSE NO. EXP. DATE:

SHEET TITLE: TITLE 24 COMPLIANCE FORMS

CITY OF IRVINE
COMMUNITY DEVELOPMENT DEPARTMENT
Community Center/ Concession Stand/ Field Dugout Refurbishment at Harvard Park

PLAN CHECK :
PERMIT :

E4.0
SHEET: OF



\\tmadtg.com\TTG\MEP\Pasadena\CAD\tmad Projects\TTG Anaheim\2016\02165077--00--0203_ City irvine Harvard Park\MPE\E4_0.dwg Oct 18, 2016 02:17pm mnatividad

# Project Funding Summary

Harvard Park Facility Improvements

CIP 361702

DECEMBER 13, 2016

| Project Expenditures | |
|---|---|
| Design Engineering | $ 39,000 |
| Construction Contract (Engineers Estimate) | $ 239,000 |
| Bid Alternative – Fire System (Engineers Estimate) | $ 20,000 |
| Construction Engineering | $ 58,000 |
| Construction Contingency | $ 47,800 |
| **Total Estimated Project Cost** | **$ 403,800** |

| Project Funding | |
|---|---|
| CIP 361702 Harvard Park Facility Improvements (State Grant Funds) | $ 417,000 |
| **Total Funding Available** | **$ 417,000** |

ATTACHMENT 3

2.12

RECEIVED
CITY OF IRVINE
CITY CLERK'S OFFICE

2016 NOV 23 PM 2:31

RECEIVED

NOV 23 2016

CITY OF IRVINE
CITY MANAGER'S OFFICE

# Memo

To: Sean Joyce, City Manager

From: Christina Shea, Councilwoman

Date: November 22, 2016

Re: **Community Partnership Fund Grant Nomination**

---

In accordance with City Council Resolution No. 08-42, I am requesting the City Council approve a $500 community partnership grant award to The Raise Foundation in support of program costs.

The Raise Foundation is dedicated to preventing and stopping the cycle of child abuse and neglect through education, advocacy, community collaboration, and comprehensive services for families and children.

Should the City Council approve this request, The Raise Foundation will enter into a Funding Agreement with the City that specifies the use of grant funds, reporting requirements and regulatory compliance.

I would like to place this item on the December 13 City Council agenda to approve this community partnership grant award and authorize the City Manager to prepare and execute a Funding Agreement.

cc: Irvine City Council
Molly McLaughlin, City Clerk