

Meeting Date: 10/29/2013

Report Type: Consent

Report ID: 2013-00773

Title: Contract and Agreements: 5th Street/Railyards Boulevard Roadway Project (Reviewed 10/15/2013)(Continued from 10/22/2013)

Location: 5th Street, North of H Street; and Railyards Boulevard from 7th Street to the extension of Bercut Drive, District 3

Issue: The 5th Street/Railyards Boulevard Roadway Project (T15135800) will construct two primary roadways within the Railyards Development. The project construction documents have been prepared and various Council approvals are required for the project to proceed to construction.

Recommendation: 1) Pass a Resolution appropriating \$29,938,000 (Fund 3702) for 5th Street/Railyards Boulevard Roadway Project (T15135800); and 2) pass a Motion a) approving the Plans and Specifications for 5th Street/Railyards Boulevard Roadway Project (T15135800); b) awarding the contract to O.C. Jones & Sons, Inc. in an amount not to exceed \$19,782,616; c) authorizing the City Manager or his designee to execute a professional services agreement for construction management with Vali Cooper & Associates, Inc. in an amount not to exceed \$1,648,015; d) authorizing the City Manager or his designee to execute a cooperative agreement for design and construction with the Sacramento Municipal Utility District in an amount not to exceed \$472,000; e) authorizing the City Manager or his designee to execute a cooperative agreement for design and construction with the Sacramento Municipal Utility District in an amount not to exceed \$68,000; f) authorizing the City Manager or his designee to execute a distribution service and extension agreement with the Pacific Gas and Electric Company in an amount not to exceed \$14,107; and, g) authorizing the City Manager or his designee to execute a distribution service and extension agreement with the Pacific Gas and Electric Company in an amount not to exceed \$7,373.

Contact: Jon Blank, Supervising Engineer, (916) 808-7914; Nicholas Theocharides, Engineering Services Manager, (916) 808-5065, Department of Public Works

Presenter: None

Department: Public Works Department

Division: Construction Inspect & Survey

Dept ID: 15001141

Attachments:

- 01-Description/Analysis
- 02-Background
- 03-Resolution
- 04-Exhibit A - Location Map
- 05-O.C. Jones Agreement
- 06-Vali Cooper CM Agreement
- 07-SMUD Agreement 30464766
- 08-SMUD Agreement 30464911
- 09-PG&E Agreement 7372
- 10-PG&E Agreement 14106.7
- 11-PGE 5th St RailyardsConDwg

City Attorney Review

Approved as to Form
Michael Sparks
10/16/2013 1:39:53 PM

City Treasurer Review

Reviewed for Impact on Cash and Debt
Russell Fehr
10/4/2013 11:33:13 AM

Approvals/Acknowledgements

Department Director or Designee: Fran Halbakken - 10/15/2013 11:58:52 AM

Description/Analysis

Issue Detail: On February 26, 2013, the City Council approved a project delivery agreement (City Agreement No. 2013-0238), in which the City agreed to deliver the 5th Street/Railyards Boulevard Roadway project (Project) on behalf of IA Sacramento Holdings, LLC (IA Holdings). The approval and execution of the 5th Street/Railyards Boulevard Roadway construction contract and related agreements are necessary to meet the City's obligations under the project delivery agreement and to move forward with the Project.

Policy Considerations: The action requested herein is consistent with the Sacramento City Code, Title 3 and with the City of Sacramento General Plan goals of achieving sustainability and neighborhood livability.

This item was reviewed by Council on October 15, 2013, consistent with Resolution 2013-0367, which requires additional posting time for labor agreements and agreements greater than \$1 million.

Economic Impacts: This new infrastructure is expected to create 92 total jobs (52.9 direct jobs and 39.1 jobs through indirect and induced activities) and create \$14,201,005 in total economic output (\$8,952,002 of direct output and another \$5,525,003 of output through indirect and induced activities).

The indicated economic impacts are estimates calculated using a calculation tool developed by the Center for Strategic Economic Research (CSER). CSER utilized the IMPLAN input-output model (2009 coefficients) to quantify the economic impacts of a hypothetical \$1 million of spending in various construction categories within the City of Sacramento in an average one-year period. Actual impacts could differ significantly from the estimates and neither the City of Sacramento nor CSER shall be held responsible for consequences resulting from such differences.

Environmental Considerations:

California Environmental Quality Act (CEQA): The 5th Street/Railyards Boulevard Roadway Project (T15135800) was subject to environmental review as part of the Railyards Specific Plan Environmental Impact Report (RSPEIR), which was certified on December 11, 2007. No new information or changed conditions requires any supplemental environmental review for the proposed actions.

Sustainability Considerations: The 5th Street/Railyards Boulevard Roadway Project (T15135800) will provide access to smart growth, infill, brownfield, transit-oriented development in the Railyards and is related to relocation of the mainline rail tracks. This project will contribute to the development of the Sacramento Intermodal Transportation Facility and improve opportunities for public transit and passenger rail operations.

Other: None.

Commission/Committee Action: None.

Rationale for Recommendation: O.C. Jones & Sons is the lowest responsive and responsible bidder.

Financial Considerations: The 5th Street/Railyards Boulevard Roadway Project (T15135800) is funded by two State Department of Housing and Community Development grants. These include a Proposition 1C Transit-Oriented Development (TOD) grant, which the City assigned to IA Holdings, and a Proposition 1C Infill grant that IA Holdings received directly from the State. The balance of these two grants will be used to fund the construction of the Project. Under the project delivery agreement, IA Holdings will pay the City on a time and materials basis for City's costs to deliver the Project. The construction budget established in the project delivery agreement is \$29,938,000 (Fund 3702), which is sufficient to pay for the Project costs, including the costs of the construction contract, construction management agreement, and agreements with SMUD and PG&E.

As required by the project delivery agreement, IA Holdings has delivered a \$5 million irrevocable letter of credit to the City to ensure payment of all Project costs incurred during any two-month period. If IA Holdings defaults on the project delivery agreement, then the City may stop all work under the Project contracts, and draw on the letter of credit to pay outstanding invoices.

There are no General Funds planned or allocated for this project.

Emerging and Small Business Enterprise (E/SBE): The 5th Street/Railyards Boulevard Roadway Project (T15135800) has State funding and requires conformance with project participation guidelines for the City of Sacramento's Emerging and Small Business Enterprise (E/SBE) Program requirements. O.C. Jones & Sons has pledged a 27.3% ESBE participation, which meets the E/SBE requirement of 20%.

ATTACHMENT 1

Background Information:

The State Department of Housing and Community Development (HCD) awarded two grants to fund the 5th Street Roadway /Railyards Boulevard Project (T15135800) (Project) using Proposition 1C funds. A Transit-Oriented Development (TOD) grant of \$17 million was awarded to the City, and subsequently assigned by the City to IA Sacramento Holdings, L.L.C. (IA Holdings) (the secured lender that owns the majority of the property within the Railyards), to construct the extension of 5th Street from H Street on the south to Stevens Street on the north. An Infill grant of \$30 million was awarded to S. Thomas Enterprises of Sacramento, LLC, and subsequently assigned to IA Holdings, to extend 5th Street to Railyards Boulevard and to construct Railyards Boulevard.

HCD funds have already been used to construct the bridge portion of 5th Street over the relocated mainline tracks and for the design of the roadway connections. The anticipated cost to complete of the 5th Street and Railyards project is \$29,938,000.

IA Holdings asked the City to deliver the Project on its behalf by entering into contracts for construction and construction management, and for the installation of new electric, gas, and communication facilities. On February 26, 2013, the City Council approved a project delivery agreement (City Agreement No. 2013-0238), in which the City agreed to deliver the Project for IA Holdings.

The SMUD agreements provide for the installation of underground electrical wires and transformers by SMUD that will provide power for street lights, traffic signals, landscaping, and future buildings. The PG&E agreements are necessary to install gas lines within the roadway to minimize future street excavations, and to provide gas service to future buildings.

The City had previously advertised the Project May 28, 2013, and bids were received on July 10, 2013. Due to ambiguities in the bid documents and the receipt of a bid protest, bids were rejected by the City Council on August 13, 2013. The Project was re-advertised on August 14, 2013, and bids were opened on September 11, 2013. O.C. Jones was determined to be the lowest responsive and responsible bidder.

Construction Bids

The Project was advertised and a total of six bids were received on September 11, 2013. The bids are summarized below:

Contractor	Bid Amount	ESBE Project Participation	Good Faith Effort
O.C. Jones & Sons	\$ 19,782,615.40	27.4%	n/a
Bay City Paving	\$ 19,796,521.70	31.8%	n/a
RGW Construction	\$ 19,858,631.35	22.6%	n/a
DeSilva Gates	\$ 19,950,000.00	28.8%	n/a
Teichert	\$ 19,993,520.40	20.5%	n/a
Granite	\$ 21,345,493.95	25.0%	n/a

The engineer's estimated construction cost was \$23,000,000. Contract award to O.C. Jones & Sons is recommended as the lowest responsive and responsible bidder. Construction is anticipated to be completed by the end of 2014.

A Request for Proposal (RFP) for construction management services for Track Relocation (including the ramps), 5th Street and 6th Street Bridges and roadways was issued in 2010 and Vali Cooper was selected as the most qualified firm.

RESOLUTION NO.

Adopted by the Sacramento City Council

ESTABLISHING THE CONSTRUCTION BUDGET FOR THE 5TH STREET & RAILYARDS BOULEVARD ROADWAY PROJECT (T15135800)

BACKGROUND

- A. On February 26, 2013, the City Council approved a project delivery agreement (City Agreement No. 2013-0238), in which the City agreed to deliver the 5th Street/Railyards Boulevard Roadway project (Project) on behalf of IA Sacramento Holdings, L.L.C. (IA Holdings).
- B. Under the project delivery agreement, IA Holdings will pay the City on a time and materials basis for City costs to deliver the Project.
- C. The construction budget established in the project delivery agreement is \$29,938,000 (Fund 3702), which is sufficient to pay for the Project costs, including the construction contract, construction management agreement, and agreements with SMUD and PG&E.

BASED ON THE FACTS SET FORTH IN THE BACKGROUND, THE CITY COUNCIL RESOLVES AS FOLLOWS:

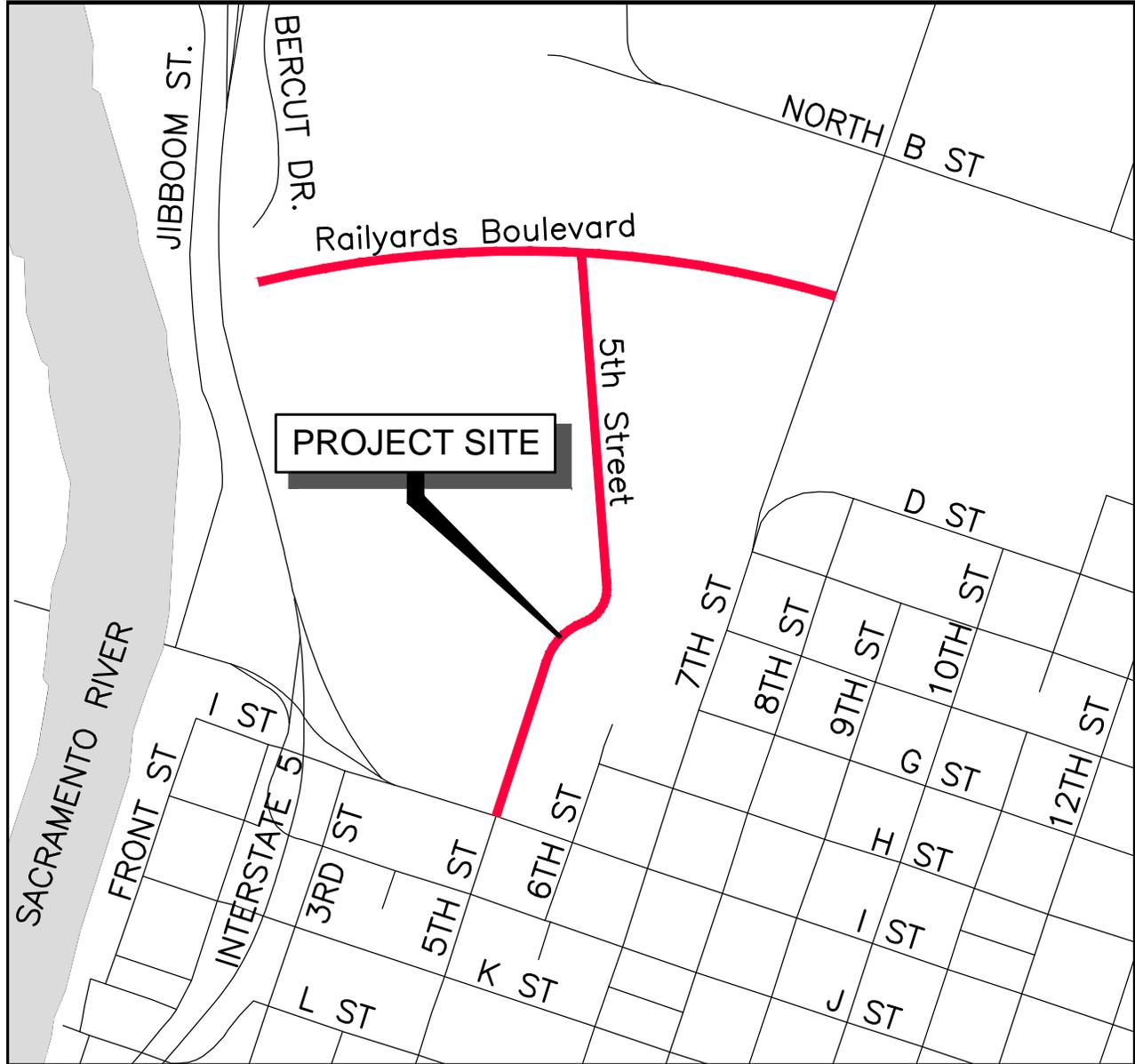
Section 1. The FY13/14 Capital Improvement Program is amended by appropriating \$29,938,000 (Fund 3702) to reflect the construction budget established in the project delivery agreement for the 5th Street/Railyards Boulevard Roadway Project (T15135800).

Section 2. Exhibit A is hereby incorporated as part of this Resolution.

Table of Contents:

Exhibit A: Location Map

Location map for:
**5th Street Roadway/
Railyards Boulevard Project**
PN: T15135800



Date: September 2013



SCALE





DEPARTMENT OF
PUBLIC WORKS

CITY OF SACRAMENTO
CALIFORNIA

915 I ST
RM 2000
SACRAMENTO, CA
95814-2702

ENGINEERING SERVICES
DIVISION

PH 916-808-8300
FAX 916-808-8281

Bid # B14151131003

**CONTRACT SPECIFICATIONS (Volume 1 of 2)
FOR**

**5TH STREET, 5TH STREET VIADUCT AND RAILYARDS BOULEVARD AT SACRAMENTO
RAILYARDS**

(PN: T15135800)

Separate Plans

For Pre-Bid Information Call:
Jon Blank, Project Manager
(916) 808-7914

Bids to be received before
2:00 P.M. September 4, 2013 at:
City Clerk's Office
New City Hall
915 I Street, Suite 1119
Sacramento, CA 95814

Pre-bid meeting:
10:00 A.M. August 22, 2013
New City Hall
3rd Floor, Room CH3114
915 I Street
Sacramento CA 95814

Attendance is highly recommended but not required.

ESBE PROGRAM

For information on meeting the City of Sacramento's Small Business Enterprise (SBE) and Emerging Business Enterprise (EBE) project goals, please contact Noreen James at (916) 808-5470, or visit the City of Sacramento's small business web site at: <http://dev.cityofsacramento.org/econdev/business-open/sub-small-business-certification.cfm>

Estimated Construction Cost: \$23,000,000 Construction Time: 220 Working Days



DEPARTMENT OF CONSUMER AFFAIRS

Contractors State License Board

Contractor's License Detail - License # 759729



DISCLAIMER: A license status check provides information taken from the CSLB license database. Before relying on this information, you should be aware of the following limitations.

CSLB complaint disclosure is restricted by law (B&P 7124.6) If this entity is subject to public complaint disclosure, a link for complaint disclosure will appear below. Click on the link or button to obtain complaint and/or legal action information.

Per B&P 7071.17 , only construction related civil judgments reported to the CSLB are disclosed.

Arbitrations are not listed unless the contractor fails to comply with the terms of the arbitration.

Due to workload, there may be relevant information that has not yet been entered onto the Board's license database.

License Number	759729	Extract Date 9/12/2013
	O C JONES & SONS INC	
Business Information	Business Phone Number: (510) 526-3424	
	1520 FOURTH STREET BERKELEY, CA 94710	
Entity	Corporation	
Issue Date	03/01/1999	
Expire Date	03/31/2015	
License Status	ACTIVE	
	This license is current and active. All information below should be reviewed.	
Classifications	CLASS	DESCRIPTION
	A	<u>GENERAL ENGINEERING CONTRACTOR</u>
Certifications	CERT	DESCRIPTION
	HAZ	<u>HAZARDOUS SUBSTANCES REMOVAL</u>
Bonding	CONTRACTOR'S BOND	
	This license filed a Contractor's Bond with <u>LIBERTY MUTUAL INSURANCE COMPANY.</u>	
	Bond Number: 070000583	
	Bond Amount: \$12,500	
	Effective Date: 01/01/2007	
	<u>Contractor's Bond History</u>	
	BOND OF QUALIFYING INDIVIDUAL	
	1. The Responsible Managing Officer (RMO) PELASCINI ROBERT RANDOLPH certified that he/she owns 10 percent or more of the voting stock/equity of the corporation. A bond of qualifying individual is not required.	
	Effective Date: 03/01/1999	

WORKERS' COMPENSATION

This license has workers compensation insurance with
NATIONAL UNION FIRE INSURANCE COMPANY OF PITTSBURGH, PA

Workers' Compensation

Policy Number: WC03357551

Effective Date: 04/01/2013

Expire Date: 04/01/2014

Workers' Compensation History

Personnel listed on this license (current or disassociated) are listed on other licenses.

Personnel List	Other Licenses
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Division of Labor Standards Enforcement (DLSE)

DLSE debarments

The following contractors are currently barred from bidding on, or accepting or performing any public works contracts, either as a contractor or subcontractor, for the period set forth below:

Note: As part of your due diligence, we suggest that you also check:

- [Debarments made by the Division of Apprenticeship Standards \(DAS\)](#)
- [Contractor status at the Contractors State License Board \(CSLB\)](#)
- [The Federal debarment list at the Excluded Parties List System](#)

For a list of past DLSE debarments of public works contractors, please contact:

Susan Nakagama
 Special Assistant to the Labor Commissioner
 455 Golden Gate Ave., 9th Flr.
 San Francisco, CA 94102
 415-703-4810
 SNakagama@dir.ca.gov

Revised: 5/17/13

Name of contractor	Period of debarment
Ayodejia A. Ogundare, Individual Dba Pacific Engineering Company 6310 Stewart Way, Bakersfield, CA 93308 CSLB#710322 Decision	5/15/2013 through 5/15/2014
Wallcrete Industries, Inc.; Garit David Wallace and Amber Anderson, Individuals 400 Kansas, Redlands, CA 92373 CSLB#834220 Decision	7/29/12 through 7/28/15
FEI Enterprises, Inc Gabriel Fedida, Individual 5749 Venice Blvd., Los Angeles, CA 90019 CSLB#659252 Decision	6/14/12 through 6/13/15
Jeffrey Alan Mott and Michelle Mott, individuals Dda Integrity Landscape 3756 Independence Avenue Sanger, CA 93637 CSLB#774222 Decision	3/29/12 through 3/28/15
Jensen Drywall & Stucco Jeffrey E. Jensen 3714 Lynda Place National City, CA 91950-8121 CSB # 664168 Exp. 2/18/11 (expired) Decision	3/31/11 through 3/30/13
All West Construction, Inc. Donald Kent Russell 495 N. Marks Ave. Fresno, CA 93706 CSB # 592321 Exp. 4/3/12 (suspended) Decision	3/31/11 through 3/30/13
Country Builders, Inc. Weldon Offill, individually 5915 Graham Ct. Livermore, CA 94550 CSB # 699574 Exp. 11/30/12 (active) Decision Addendum	3/1/11 through 2/28/14

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<p>Sutter Foam & Coating, Inc. 909 A. George Washington Yuba City, CA 95993 CSB # 732014 Exp. 1/31/09 (inactive)</p> <p>David Alvin Trexler, an individual 909 A. George Washington Yuba City, CA 95993</p> <p>Kenneth A. Trexler, an individual 2603 Lago Lane Marysville, CA 95901 Decision </p>	<p>7/1/10 through 6/30/13</p> <p>7/1/10 through 6/30/13</p> <p>7/1/10 through 6/30/13</p>
<p>Soo Dong Kim, an individual, dba Soo Kim Electric Company 16224 Ridgeview Lane La Mirada, CA 90638 CSB # 568103 Exp. 8/1/09 (inactive)</p> <p>Hyo Nam Jung, an individual, dba Lucid Electric 18621 Well Street Rowland Heights, CA 91748 CSB # 914692 Exp. 4/3/10 Decision </p>	<p>4/19/10 through 4/18/13</p> <p>4/19/10 through 4/18/13</p>
<p>Southwest Grading, dba Southwest Grading Services, Inc., 22031 Waite Street Wildomar, CA 92595</p> <p>David Walter Cholewinski, an individual 22031 Waite Street Wildomar, A 92595 29970 Technology Drive, Ste. 205 Murrieta, CA 92563 CSB #840416 Exp. 6/30/10 Decision </p>	<p>3/18/10 through 3/17/13</p>
<p>S.J. Cimino Electric, Inc., a California corporation, 3267 Dutton Ave. Santa Rosa, CA 95404 Salvatore Joseph Cimino, RMO, CEO and President of S.J. Cimino Electric, Inc. and sole owner of S.J. Cimino Electric, an individual 5825 Heights Rd. Santa Rosa, CA 95401 CSB #343802 Exp. 2/28/10 CSB #294141 Exp. 9/30/13 (inactive) Decision </p>	<p>10/15/09 through 10/14/12</p>
<p>Cedar Development Corporation Serghon Gabriel Afram, individually 12477 Feather Dr Mira Loma, CA 91752 CSB # 839898 Exp. 6/30/10 (suspended) Decision </p>	<p>8/5/09 through 8/4/12</p>
<p>All Floors Commercial and Residential Flooring, Inc. Salvador Elias Perea, individually 750 E. McGlincy Lane, #103 Campbell, CA 95008 CSB #430969 Exp. 7/31/09 Decision </p>	<p>5/14/09 through 5/13/12</p>
<p>1-AMD Construction, Inc. Alberto Mordoki, individually Mirella Mordoki, individually 5300 Beach Blvd., Suite 110-416 Buena Park, CA 90621 CSB #787533, revoked Decision </p>	<p>3/16/09 through 3/15/12</p>

File a Claim

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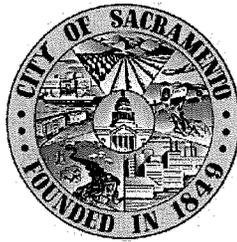
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DEPARTMENT OF
TRANSPORTATION

ENGINEERING SERVICES DIVISION

CITY OF SACRAMENTO
CALIFORNIA

915 I STREET, ROOM 2000
SACRAMENTO, CA
95814-2700

PH. (916) 808-8300
FAX (916) 808-8281

**5th Street, 5th Street Viaduct and Railyards Boulevard at Sacramento Railyards
(PN: T15135800) (rebid)
Addendum No. 1**

August 27, 2013

To all Potential Bidders:

Attached hereto are addenda items, which shall be incorporated into the bid proposal for above noted project. These changes shall be considered as part of the original documents, as if they were originally provided therein, and as such shall be used as contractual documents. All other terms, conditions, and specifications of the bid remain unchanged. Bidders must acknowledge receipt of this addendum prior to the hour and date specified in the bid request, or as amended, by one of the following methods:

- (a) By acknowledging receipt, on the bid proposal form submitted; or
- (b) By separate letter or telegram which includes a reference to the bid request and addendum number.

Failure to acknowledge receipt of this addendum in one of the above methods and cause acknowledgment to be received prior to the hour and date specified for receipt of proposals, **may result in rejection of your offer.** If by virtue of this addendum you decide to change an offer already submitted, such change may be made by telegram or letter, provided such telegram or letter makes reference to the bid request number and this addendum, and is received prior to the opening hour and date specified.

For any questions related to this Addendum, contact the Project Manager, Jon Blank at (916) 808-7914 or JBlank@cityofsacramento.org.

Very truly yours,

Jose R. Ledesma
Contract Services
Enclosure

**5th Street, 5th Street Viaduct and Railyards Boulevard at Sacramento Railyards
(PN: T15135800)(rebid)
Addendum No. 1**

ITEM NO# 1 The price for all work, materials and equipment related to the installation of the SMUD joint trench, including the pipe casing located at 5th Street beneath the light rail tracks, shall be included in the lump sum price bid for Item No. 179 – JOINT UTILITY TRENCH – EXCAVATION, BACKFILL, AND COMPACTION (5TH STREET SOUTH).

Item #2 The joint trench composite plans have been updated. Bids for Railyards Blvd and 5th Street North shall be based on the joint trench composite plans entitled “Railyards Blvd / 5th Street North” revised August 26, 2013 and prepared by Malcolm White Consulting included with this addendum.

Item #3 The sign in sheet from the pre-bid meeting held on 8/23/13 is attached.

Item #4 – Approved equals

Aluminum Bench:

Model W1119C by Urbanscape is an approved equivalent to specified “Plainwell” by Landscape Forms.

Trash Receptacle:

Model TG3D33 by Urbanscape is an approved equivalent to specified “Plainwell” by Landscape Forms.

Tree grates and frames:

Medium Duty, ADA compliant. Cast skirted frame may be approved if structural adequate.

Item #5– Bid Proposal Guarantee date corrected. New form attached.

Sign In

5th St., 5th St. Viaduct: Railyards PNT15135800
Pre Bid Meeting 8/22/13

Brenda Kee City of Saeto (916) 8081923
Hank Doll, Vali Cooper, (916) 826-3038, hank.doll@valicooper.com

Mike Crowley O.C. Jones & Sons 510-809-3424
mcrowley@ocjones.com

Scott Edwards Granite Construction (916) 855-4400
Scott.Edwards@gcinc.com

JUSTIN MILLER INTERUM DATA & FIREL 916 439 4787
MILLER173@PACBEL.NET

Matt Goldsmith Smith Demison Construction (925) 606-4433 x15
M.Goldsmith@smithdemison.com

MARK OLIVEIRA DE SILVA GATES CONST. (925) 829-9220
MOLIVEIRA@DESILVAGATES.COM

CHRIS GORGES MORTON & PITALO SURVEYS (916) 496-8751
E/SBE FIRM cgorges@mpengr.com

KNOW ALL MEN BY THESE PRESENTS,

That we, _____

as Principal and _____

a corporation duly organized under the laws of the State of _____ and duly licensed to become sole surety on bonds required or authorized by the State of California, as Surety, are held and firmly bound unto the City hereinafter called the City, in the penal sum of ten percent (10%) of the (BASE OR LUMP SUM) Proposal of the Principal above named or other amount as set forth in the Invitation to Bidders submitted by said Principal to the City for the Work described below, for the payment of which sum in lawful money of the United States well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH

That whereas the Principal has submitted the above mentioned Proposal to the City, for which Proposals are to be opened in the Historic City hall, 2nd Floor Conference Room, Sacramento, California, on September 4, 2013 at 2:00pm for the Work specifically described as follows:

**5th Street, 5th Street Viaduct and Railyards Boulevard at Sacramento Railyards
(PN: T15135800)**

NOW, THEREFORE, if the aforesaid Principal is awarded the Contract and within the time and manner required under the Contract Documents, enters into a written Contract, in the prescribed form, in accordance with the Proposal, and files two (2) bonds with the City, one to guarantee faithful performance and the other to guarantee payment for labor and materials, and files the required insurance policies with the City, all as required by the Contract Documents or by law, then the obligation shall be null and void; otherwise it shall be and remain in full force and effect.

In the event suit is brought upon this bond by the Obligee and judgment is recovered, the Surety shall pay all costs incurred by the Obligee in such suit, including a reasonable attorney's fee to be fixed by the court, which sums shall be additional to the principal amount of this bond.

IN WITNESS THEREOF We have hereunto set our hands and seal this _____

day of _____, 20_____.

Contractor (Seal)

Surety (Seal)

By _____

By _____

Title _____

Title _____

ORIGINAL APPROVED AS TO FORM:

City Attorney

Agent Name and Address _____

Agent Phone # _____

Surety Phone # _____

California License # _____

JOINT UTILITY TRENCH NOTES

PG&E NOTES

1. MAKE TO DO ALL HOT TIE-IN WORK.
2. MAKE TO PERFORM TRENCH INSPECTION. DEVELOPER TO CONFORM TO P&E INSPECTION REQUIREMENTS.
3. DEVELOPER TO TRENCH AND BACKFILL.
4. SAND INFILL MUST BE REQUIRED. BEDDING & BACKFILL MATERIAL MUST MEET P&E GAS STANDARDS.
5. GAS FACILITIES TO BE INSTALLED BY APPLICANT.
6. TRENCHING AGENT TO MAINTAIN A MINIMUM 5' HORIZONTAL SEPARATION BETWEEN P&E FACILITIES AND ALL NET FACILITIES.
7. TRENCHING AGENT TO PROVIDE A BELL HOLE AT ALL P&E TIE-IN LOCATIONS MINIMUM 4"X4"X12" BELOW EXISTING GAS FACILITIES.
8. APPLICANT TO OBTAIN ALL REQUIRED ENCROACHMENT PERMITS.
9. THE JOINT TRENCH CONFIGURATION FOLLOWS A LOCAL AGREEMENT WITH P&E, SMUD, TELEPHONE COMPANIES AND CABLE COMPANIES. THIS CONFIGURATION MEETS THE REQUIREMENTS OF THE JOINT TRENCH STANDARDS (JTS&S).
10. INSTALL EXISTING MAIN, SERVICE MAINS AND SERVICE TRENCHES TO GAS STANDARDS 401-1403A, 401-2403A, 401-2403B AND 401-2403C.

ALL INFORMATION CONTAINED HEREIN WAS PROVIDED TO MWC BY THE INDIVIDUAL UTILITY COMPANIES AND IS SUBJECT TO CHANGE. CATV PEDESTALS & 17X30" SMUD SVC BOXES ARE NOT SHOWN TO SCALE FOR CLARITY. ALL WORK SHALL BE PERFORMED ACCORDING TO CURRENT UTILITY SPECIFICATIONS.

SMUD NOTES:

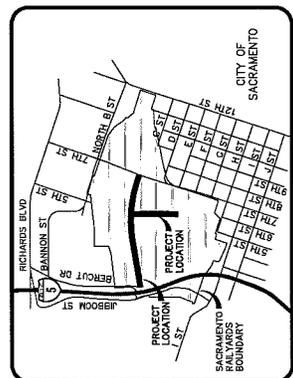
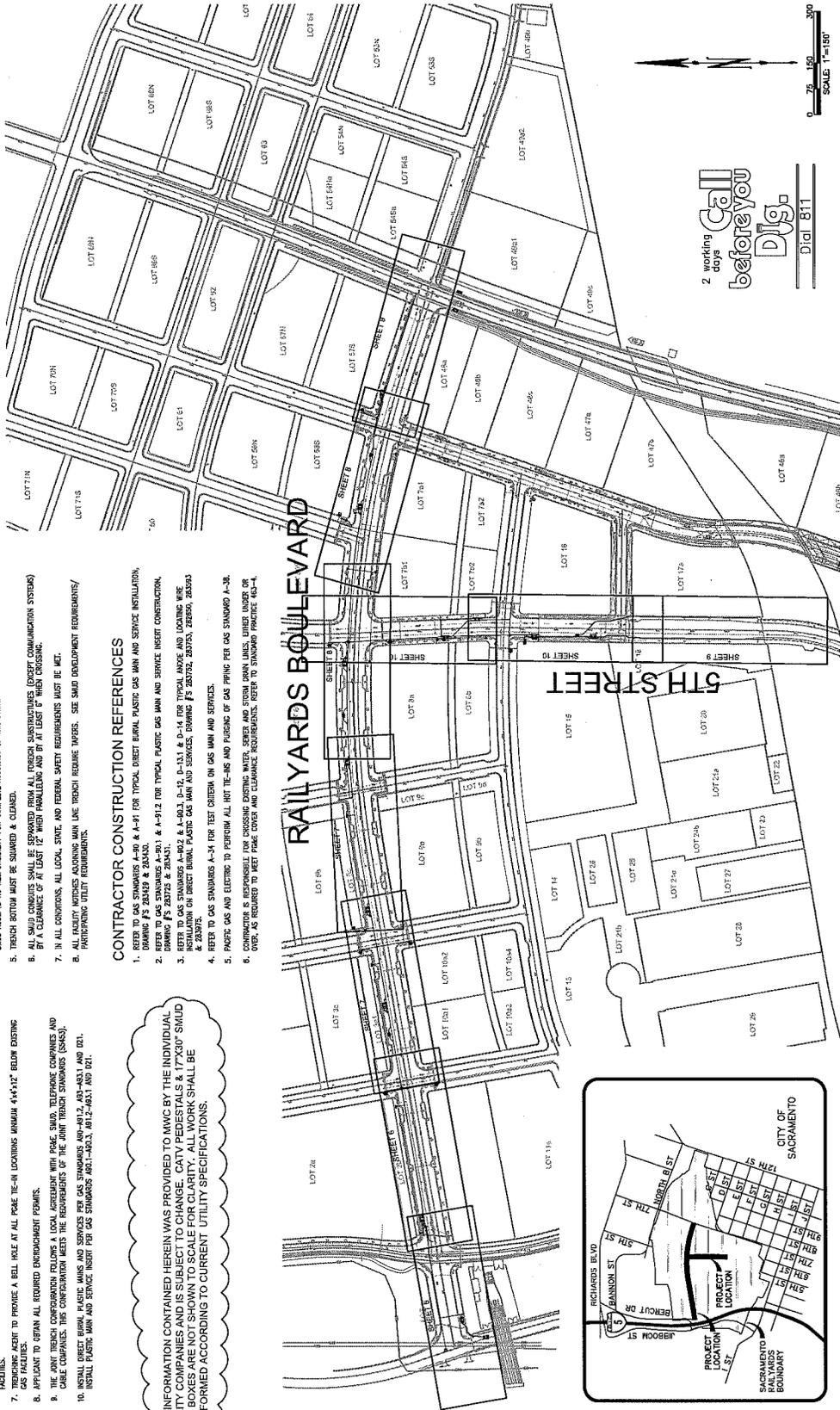
1. WHEN DIGGING IN ANY AREA THAT CONTAINS COBLES OR BRICKELL MATERIAL LARGER THAN 3", APPROVED BACKFILL SHALL BE USED. THE CONTRACTOR SHALL BE RESPONSIBLE TO CHECK EXISTING UTILITY RECORDS AT THE PRE-CONSTRUCTION MEETING.
2. ALL TRENCHES & CONDUITS SHALL BE EXCAVATED AND PLACED PER SMUD STANDARDS & SHALL BE COMPACTED TO MEET TRENCHING AGENT'S REQUIREMENTS.
3. CALL USA, BEFORE DIGGING (1-800-442-2444) 48 HOURS PRIOR TO TRENCHING.
4. MEASUREMENTS AND SCALE ARE APPROXIMATE. THE CONTRACTOR SHALL LOCATE PRESENTLY TO AVOID DAMAGE. SMUD ACCEPTS NO RESPONSIBILITY FOR COMPLETE ACCURACY OF THIS PRINT.
5. TRENCH BOTTOM MUST BE SQUARED & CLEANED.
6. ALL SMUD CONDUITS SHALL BE SEPARATED FROM ALL FOREIGN SUBSTRUCTURES (EXCEPT COMMUNICATION SYSTEMS) BY A MINIMUM OF 12" CLEARANCE. ALL LOCAL, STATE AND FEDERAL SAFETY REQUIREMENTS MUST BE MET.
7. IN ALL CONDITIONS, ALL LOCAL, STATE AND FEDERAL SAFETY REQUIREMENTS MUST BE MET.
8. PARTICIPATING UTILITY REQUIREMENTS.

CONTRACTOR CONSTRUCTION REFERENCES

1. REFER TO GAS STANDARDS A-80 & A-81 FOR TYPICAL DIRECT BURIAL PLASTIC GAS MAIN AND SERVICE INSTALLATION.
2. REFER TO GAS STANDARDS A-801 & A-912 FOR TYPICAL PLASTIC GAS MAIN AND SERVICE BURNER CONSTRUCTION.
3. REFER TO GAS STANDARDS A-802 & A-903, D-12, D-13, & D-14 FOR TYPICAL ANODE AND COATING WIRE CONSTRUCTION.
4. REFER TO GAS STANDARDS A-24 FOR TEST CRITERIA ON GAS MAIN AND SERVICES.
5. REFER TO GAS STANDARDS A-24 FOR TEST CRITERIA ON GAS MAIN AND SERVICES.
6. CONTRACTOR IS RESPONSIBLE FOR CROSSING EXISTING WATER, SEWER AND STORM DRAIN LINES, UNDER, UNDER OR OVER, AS REQUIRED TO MEET P&E COVER AND CLEARANCE REQUIREMENTS. REFER TO STANDARD FORMS, P&E-1.

MINIMUM COVER AND CLEARANCES						
	C	T	S	P	C	COVER
GAS	12"	12"	6"	12"	24"	30" STREET
TELE	12"	12"	12"	12"	24"	30" STREET
CONV	12"	12"	12"	12"	24"	30" STREET
ELEC. SER.	6"	12"	12"	12"	30"	30" STREET
ELEC. PRE.	12"	12"	12"	12"	30"	30" STREET

UTILITY CONTACTS			
UTILITY	CONTACT	PHONE #	JOB #
SMUD	RM HALLER	916-702-5814	3000272
PG&E GAS	DEBORAH WILLIAMS	916-388-5013	3000569
AT&T	MIKE LUDDS	916-403-7128	3001249
COMCAST	MARK DURY	916-433-7943	872945

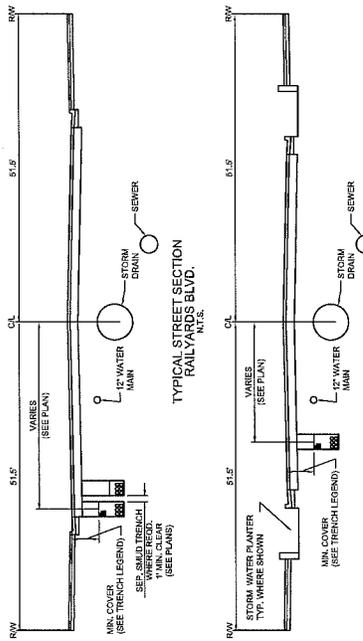


MALCOLM WHITE CONSULTING
1306 NORWICH COURT
ROSEVILLE, CA 95661
PH (916) 705-4910

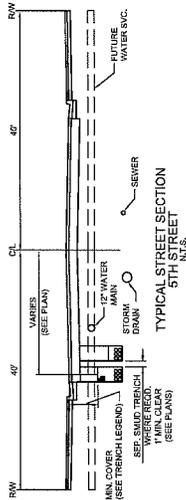
JOINT TRENCH COMPOSITE
RAILYARDS BLVD. / 5TH STREET NORTH
SACRAMENTO RAILYARDS

NO.	REVISION	DATE	APPROVED
1	REV. CALL OUT FOR ATT PITS 3560 SUB BOX	08/27/13	
2	REV. JOINT TRENCH NOTE	08/27/13	
3	REV. P&E GAS RIB	08/27/13	
4	REV. TRENCH SECTIONS - SEE SHEET 3	08/27/13	

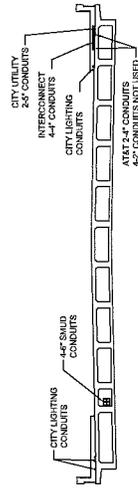
SCALE AS NOTED
DATE 10/03/12
DRAWN HW
JOB NO. 09767003
SHEET 1
OF 10 SHEETS



TYPICAL STREET SECTION
RAILYARDS BLVD. (ST. WITH PLNTR.)
N.T.S.

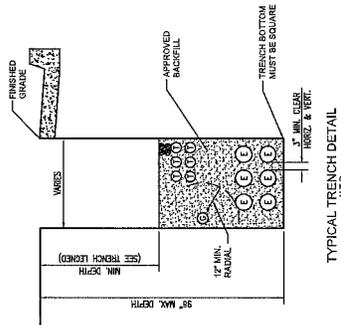


TYPICAL STREET SECTION
5TH STREET
N.T.S.

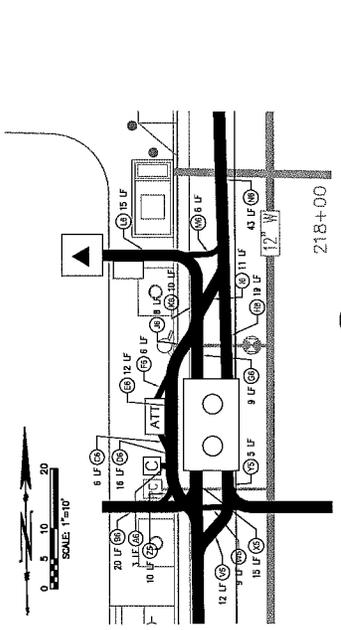


TYPICAL BRIDGE SECTION
5TH STREET VIADUCT
N.T.S.

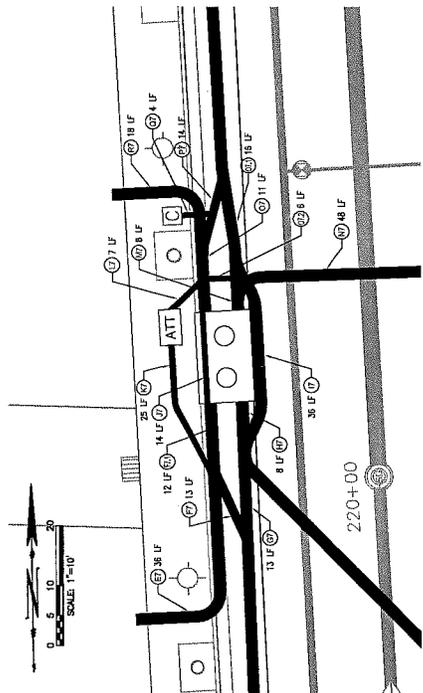
SYMBOL LEGEND	
[Symbol]	ALERT FTS 3660
[Symbol]	ALERT FTS 65
[Symbol]	CONCRETE 16\"/>



TYPICAL TRENCH DETAIL
N.T.S.



DETAIL 1
1\"/>

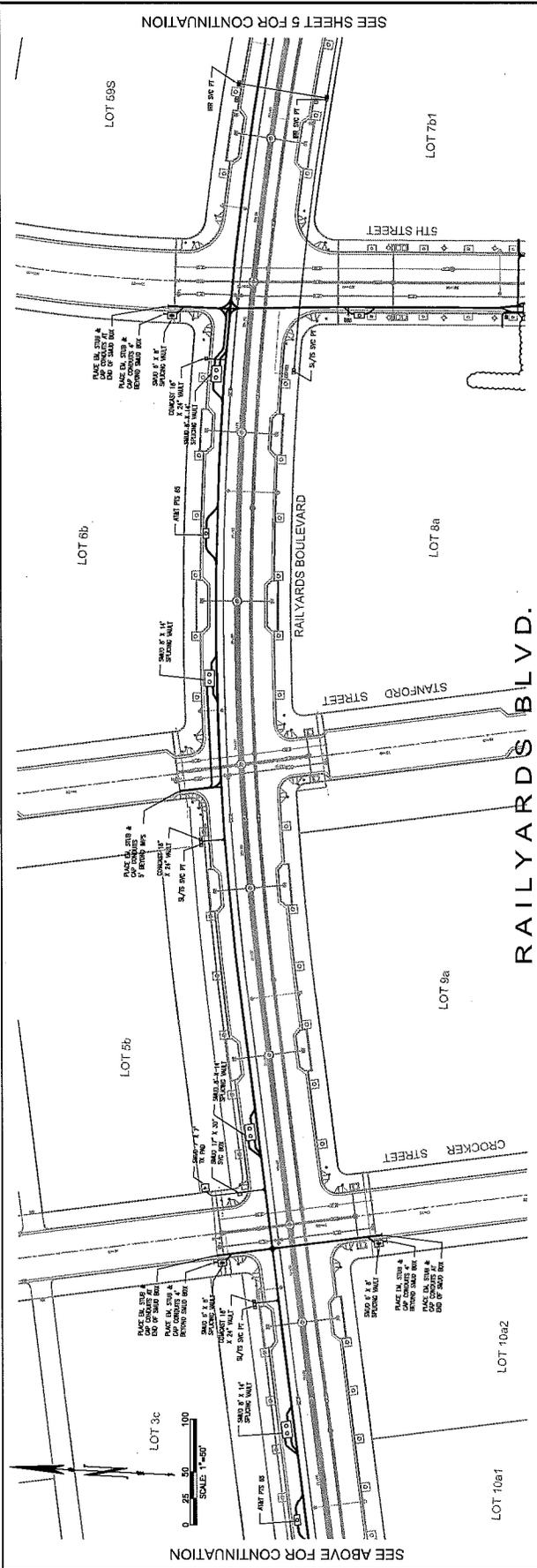
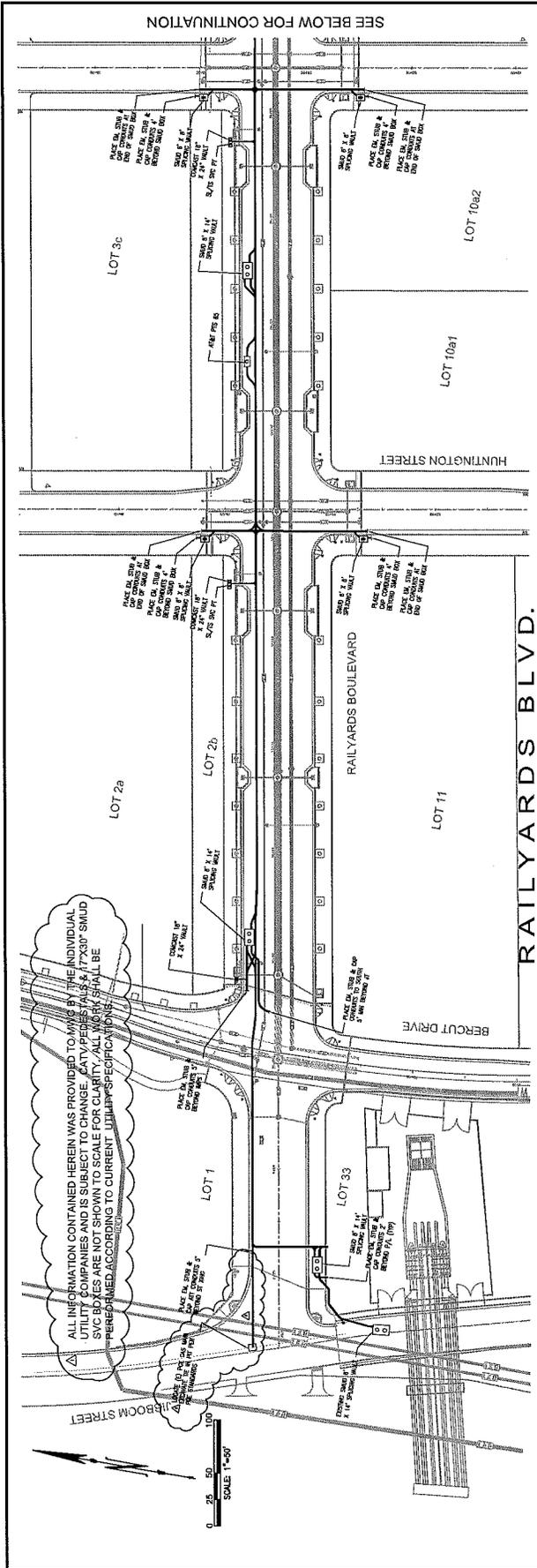


DETAIL 2
1\"/>

ALL INFORMATION CONTAINED HEREIN WAS PROVIDED TO MMC BY THE INDIVIDUAL UTILITY COMPANIES AND IS SUBJECT TO CHANGE. CATV PEDESTALS & 17\"/>

JOINT TRENCH COMPOSITE		SCALE AS NOTED	
RAILYARDS BLVD. / 5TH STREET NORTH		DATE	10/03/12
SACRAMENTO RAILYARDS		DRAWN	MFF
MALCOLM WHITE CONSULTING		JOB NO.	08767003
1306 NORWICH COURT		SHEET	2
ROSEVILLE, CA 95661		OF	10 SHEETS
PH (916) 705-4910			
MWC			
NO.	DESCRIPTION	DATE	APPROVED
1	REV. JOINT TRENCH NOTE	06/12/13	
2	REV. JOINT TRENCH NOTE	06/12/13	
3	REV. JOINT TRENCH NOTE	06/12/13	
4	REV. JOINT TRENCH NOTE	06/12/13	
5	REV. JOINT TRENCH NOTE	06/12/13	
6	REV. JOINT TRENCH NOTE	06/12/13	
7	REV. JOINT TRENCH NOTE	06/12/13	
8	REV. JOINT TRENCH NOTE	06/12/13	
9	REV. JOINT TRENCH NOTE	06/12/13	
10	REV. JOINT TRENCH NOTE	06/12/13	
11	REV. JOINT TRENCH NOTE	06/12/13	
12	REV. JOINT TRENCH NOTE	06/12/13	
13	REV. JOINT TRENCH NOTE	06/12/13	
14	REV. JOINT TRENCH NOTE	06/12/13	
15	REV. JOINT TRENCH NOTE	06/12/13	
16	REV. JOINT TRENCH NOTE	06/12/13	
17	REV. JOINT TRENCH NOTE	06/12/13	
18	REV. JOINT TRENCH NOTE	06/12/13	
19	REV. JOINT TRENCH NOTE	06/12/13	
20	REV. JOINT TRENCH NOTE	06/12/13	
21	REV. JOINT TRENCH NOTE	06/12/13	
22	REV. JOINT TRENCH NOTE	06/12/13	
23	REV. JOINT TRENCH NOTE	06/12/13	
24	REV. JOINT TRENCH NOTE	06/12/13	
25	REV. JOINT TRENCH NOTE	06/12/13	
26	REV. JOINT TRENCH NOTE	06/12/13	
27	REV. JOINT TRENCH NOTE	06/12/13	
28	REV. JOINT TRENCH NOTE	06/12/13	
29	REV. JOINT TRENCH NOTE	06/12/13	
30	REV. JOINT TRENCH NOTE	06/12/13	
31	REV. JOINT TRENCH NOTE	06/12/13	
32	REV. JOINT TRENCH NOTE	06/12/13	
33	REV. JOINT TRENCH NOTE	06/12/13	
34	REV. JOINT TRENCH NOTE	06/12/13	
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42	REV. JOINT TRENCH NOTE	06/12/13	
43	REV. JOINT TRENCH NOTE	06/12/13	
44	REV. JOINT TRENCH NOTE	06/12/13	
45	REV. JOINT TRENCH NOTE	06/12/13	
46	REV. JOINT TRENCH NOTE	06/12/13	
47	REV. JOINT TRENCH NOTE	06/12/13	
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75	REV. JOINT TRENCH NOTE	06/12/13	
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78	REV. JOINT TRENCH NOTE	06/12/13	
79	REV. JOINT TRENCH NOTE	06/12/13	
80	REV. JOINT TRENCH NOTE	06/12/13	
81	REV. JOINT TRENCH NOTE	06/12/13	
82	REV. JOINT TRENCH NOTE	06/12/13	
83	REV. JOINT TRENCH NOTE	06/12/13	
84	REV. JOINT TRENCH NOTE	06/12/13	
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86	REV. JOINT TRENCH NOTE	06/12/13	
87	REV. JOINT TRENCH NOTE	06/12/13	
88	REV. JOINT TRENCH NOTE	06/12/13	
89	REV. JOINT TRENCH NOTE	06/12/13	
90	REV. JOINT TRENCH NOTE	06/12/13	
91	REV. JOINT TRENCH NOTE	06/12/13	
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93	REV. JOINT TRENCH NOTE	06/12/13	
94	REV. JOINT TRENCH NOTE	06/12/13	
95	REV. JOINT TRENCH NOTE	06/12/13	
96	REV. JOINT TRENCH NOTE	06/12/13	
97	REV. JOINT TRENCH NOTE	06/12/13	
98	REV. JOINT TRENCH NOTE	06/12/13	
99	REV. JOINT TRENCH NOTE	06/12/13	
100	REV. JOINT TRENCH NOTE	06/12/13	

KEY	SMUD	AT&T	PG&E GAS	COMCAST	INTER-CONNECT	MIN. COVER	LENGTH
A1	4-5/7-1-4					48"	34 LF
B1	1-5"					48"	51 LF
C1	3-5/7-1-4					48"	30 LF
D1	2-5/7-1-4					48"	15 LF
E1	5-5"					48"	10 LF
F1	4-5/7-1-4					48"	13 LF
G1	3-5/7-1-4					48"	10 LF
H1	4-5"					48"	74 LF
I1	4-5"					36"	51 LF
J1	4-5/7-1-4					36"	288 LF
K1	4-5/7-1-4					36"	11 LF
L1	4-5/7-1-4					36"	25 LF
M1	4-5/7-1-4					48"	50 LF
N1	4-5/7-1-4					48"	32 LF
O1	4-5/7-1-4					48"	17 LF
P1	4-5/7-1-4					36"	40 LF
Q1	2-5"					48"	18 LF
R1	4-5/7-1-4					48"	25 LF
S1	1-4"					36"	333 LF
T1	4-5/7-1-4					36"	25 LF
U1	4-5/7-1-4					36"	46 LF
V1	4-5/7-1-4					48"	41 LF
W1	4-5/7-1-4					48"	81 LF
X1	4-5/7-1-4					36"	44 LF
Y1	4-5/7-1-4					36"	14 LF
Z1	4-5/7-1-4					48"	14 LF
AA	4-5/7-1-4					48"	81 LF
AB	4-5/7-1-4					48"	41 LF
AC	4-5/7-1-4					48"	138 LF
AD	4-5/7-1-4					36"	25 LF
AE	4-5/7-1-4					36"	50 LF
AF	4-5/7-1-4					36"	25 LF
AG	4-5/7-1-4					36"	37 LF
AH	4-5/7-1-4					48"	17 LF
AI	4-5/7-1-4					48"	22 LF
AJ	4-5/7-1-4					48"	41 LF
AK	4-5/7-1-4					48"	91 LF
AL	4-5/7-1-4					36"	43 LF
AM	4-5/7-1-4					36"	14 LF
AN	4-5/7-1-4					36"	38 LF
AO	4-5/7-1-4					36"	38 LF
AP	4-5/7-1-4					36"	14 LF
AQ	4-5/7-1-4					48"	81 LF
AR	4-5/7-1-4					48"	41 LF
AS	4-5/7-1-4					48"	41 LF
AT	4-5/7-1-4					48"	41 LF
AU	4-5/7-1-4					48"	41 LF
AV	4-5/7-1-4					48"	41 LF
AW	4-5/7-1-4					48"	41 LF
AX	4-5/7-1-4					48"	41 LF
AY	4-5/7-1-4					48"	41 LF
AZ	4-5/7-1-4					48"	41 LF
BA	4-5/7-1-4					48"	41 LF
BB	4-5/7-1-4					48"	41 LF
BC	4-5/7-1-4					48"	41 LF
BD	4-5/7-1-4					48"	41 LF
BE	4-5/7-1-4					48"	41 LF
BF	4-5/7-1-4					48"	41 LF
BG	4-5/7-1-4					48"	41 LF
BH	4-5/7-1-4					48"	41 LF
BI	4-5/7-1-4					48"	41 LF
BJ	4-5/7-1-4					48"	41 LF
BK	4-5/7-1-4					48"	41 LF
BL	4-5/7-1-4					48"	41 LF
BM	4-5/7-1-4					48"	41 LF
BN	4-5/7-1-4					48"	41 LF
BO	4-5/7-1-4					48"	41 LF
BP	4-5/7-1-4					48"	41 LF
BQ	4-5/7-1-4					48"	41 LF
BR	4-5/7-1-4					48"	41 LF
BS	4-5/7-1-4					48"	41 LF
BT	4-5/7-1-4					48"	41 LF
BU	4-5/7-1-4					48"	41 LF
BV	4-5/7-1-4					48"	41 LF
BW	4-5/7-1-4					48"	41 LF
BX	4-5/7-1-4					48"	41 LF
BY	4-5/7-1-4					48"	41 LF
BZ	4-5/7-1-4					48"	41 LF
CA	4-5/7-1-4					48"	41 LF
CB	4-5/7-1-4					48"	41 LF
CC	4-5/7-1-4					48"	41 LF
CD	4-5/7-1-4					48"	41 LF
CE	4-5/7-1-4					48"	41 LF
CF	4-5/7-1-4					48"	41 LF
CG	4-5/7-1-4					48"	41 LF
CH	4-5/7-1-4					48"	41 LF
CI	4-5/7-1-4					48"	41 LF
CJ	4-5/7-1-4					48"	41 LF
CK	4-5/7-1-4					48"	41 LF
CL	4-5/7-1-4					48"	41 LF
CM	4-5/7-1-4					48"	41 LF
CN	4-5/7-1-4					48"	41 LF
CO	4-5/7-1-4					48"	41 LF
CP	4-5/7-1-4					48"	41 LF
CQ	4-5/7-1-4					48"	41 LF
CR	4-5/7-1-4					48"	41 LF
CS	4-5/7-1-4					48"	41 LF
CT	4-5/7-1-4					48"	41 LF
CU	4-5/7-1-4					48"	41 LF
CV	4-5/7-1-4					48"	41 LF
CW	4-5/7-1-4					48"	41 LF
CX	4-5/7-1-4					48"	41 LF
CY	4-5/7-1-4					48"	41 LF
CZ	4-5/7-1-4					48"	41 LF
DA	4-5/7-1-4					48"	41 LF
DB	4-5/7-1-4					48"	41 LF
DC	4-5/7-1-4					48"	41 LF
DD	4-5/7-1-4					48"	41 LF
DE	4-5/7-1-4					48"	41 LF
DF	4-5/7-1-4					48"	41 LF
DG	4-5/7-1-4					48"	41 LF
DH	4-5/7-1-4					48"	41 LF
DI	4-5/7-1-4					48"	41 LF
DJ	4-5/7-1-4					48"	41 LF
DK	4-5/7-1-4					48"	41 LF
DL	4-5/7-1-4					48"	41 LF
DM	4-5/7-1-4					48"	41 LF
DN	4-5/7-1-4					48"	41 LF
DO	4-5/7-1-4					48"	41 LF
DP	4-5/7-1-4					48"	41 LF
DQ	4-5/7-1-4					48"	41 LF
DR	4-5/7-1-4					48"	41 LF
DS	4-5/7-1-4					48"	41 LF
DT	4-5/7-1-4					48"	41 LF
DU	4-5/7-1-4					48"	41 LF
DV	4-5/7-1-4					48"	41 LF
DW	4-5/7-1-4					48"	41 LF
DX	4-5/7-1-4					48"	41 LF
DY	4-5/7-1-4					48"	41 LF
DZ	4-5/7-1-4					48"	41 LF
EA	4-5/7-1-4					48"	41 LF
EB	4-5/7-1-4					48"	41 LF
EC	4-5/7-1-4					48"	41 LF
ED	4-5/7-1-4					48"	41 LF
EE	4-5/7-1-4					48"	41 LF
EF	4-5/7-1-4					48"	41 LF
EG	4-5/7-1-4					48"	41 LF
EH	4-5/7-1-4					48"	41 LF
EI	4-5/7-1-4					48"	41 LF
EJ	4-5/7-1-4					48"	41 LF
EK	4-5/7-1-4					48"	41 LF
EL	4-5/7-1-4					48"	41 LF
EM	4-5/7-1-4					48"	41 LF
EN	4-5/7-1-4					48"	41 LF
EO	4-5/7-1-4					48"	41 LF
EP	4-5/7-1-4					48"	41 LF
EQ	4-5/7-1-4					48"	41 LF
ER	4-5/7-1-4					48"	41 LF
ES	4-5/7-1-4					48"	41 LF
ET	4-5/7-1-4					48"	41 LF
EU	4-5/7-1-4					48"	41 LF
EV	4-5/7-1-4					48"	41 LF
EW	4-5/7-1-4					48"	41 LF
EX	4-5/7-1-4					48"	41 LF
EY	4-5/7-1-4					48"	41 LF
EZ	4-5/7-1-4					48"	41 LF
FA	4-5/7-1-4					48"	41 LF
FB	4-5/7-1-4					48"	41 LF
FC	4-5/7-1-4					48"	41 LF
FD	4-5/7-1-4					48"	41 LF
FE	4-5/7-1-4					48"	41 LF
FF	4-5/7-1-4					48"	41 LF
FG	4-5/7-1-4					48"	41 LF
FH	4-5/7-1-4					48"	41 LF
FI	4-5/7-1-4					48"	41 LF
FJ	4-5/7-1-4					48"	41 LF
FK	4-5/7-1-4					48"	41 LF
FL	4-5/7-1-4					48"	41 LF
FM	4-5/7-1-4					48"	41 LF
FN	4-5/7-1-4					48"	41 LF
FO	4-5/7-1-4					48"	41 LF
FP	4-5/7-1-4					48"	41 LF
FQ	4-5/7-1-4					48"	41 LF
FR	4-5/7-1-4					48"	41 LF
FS	4-5/7-1-4					48"	41 LF
FT	4-5/7-1-4					48"	41 LF
FU	4-5/7-1-4					48"	41 LF
FV	4-5/7-1-4					48"	41 LF
FW	4-5/7-1-4					48"	41 LF
FX	4-5/7-1-4					48"	41 LF
FY	4-5/7-1-4					48"	41 LF
FZ	4-5/7-1-4					48"	41 LF
GA	4-5/7-1-4					48"	41 LF
GB	4-5/7-1-4					48"	41 LF
GC	4-5/7-1-4					48"	41 LF
GD	4-5/7-1-4					48"	41 LF
GE	4-5/7-1-4					48"	41 LF
GF	4-5/7-1-4					48"	41 LF
GG	4-5/7-1-4					48"	41 LF
GH	4-5/7-1-4					48"	41 LF
GI	4-5/7-1-4					48"	41 LF
GJ	4-5/7-1-4					48"	41 LF
GK	4-5/7-1-4					48"	41 LF
GL	4-5/7-1-4					48"	41 LF
GM	4-5/7-1-4					48"	41 LF
GN	4-5/7-1-4					48"	41 LF
GO	4-5/7-1-4					48"	41 LF
GP	4-5/7-1-4					48"	41 LF
GQ	4-5/7-1-4					48"	41 LF
GR	4-5/7-1-4					48"	41 LF
GS	4-5/7-1-4					48"	41 LF
GT	4-5/7-1-4					48"	41 LF
GU	4-5/7-1-4					48"	41 LF
GV	4-5/7-1-4					48"	41 LF
GW	4-5/7-1-4					48"	41 LF
GX	4-5/7-1-4					48"	41 LF
GY	4-5/7-1-4					48"	41 LF
GZ	4-5/7-1-4					48"	41 LF
HA	4-5/7-1-4					48"	41 LF
HB	4-5/7-1-4					48"	41 LF
HC	4-5/7-1-4					48"	41 LF
HD	4-5/7-1-4					48"	41 LF
HE	4-5/7-1-4					48"	41 LF
HF	4-5/7-1-4					48"	41 LF
HG	4-5/7-1-4					48"	41 LF
HH	4-5/7-1-4					48"	41 LF
HI	4-5/7-1-4					48"	41 LF
HJ	4-5/7-1-4					48"	41 LF
HK	4-5/7-1-4		</				



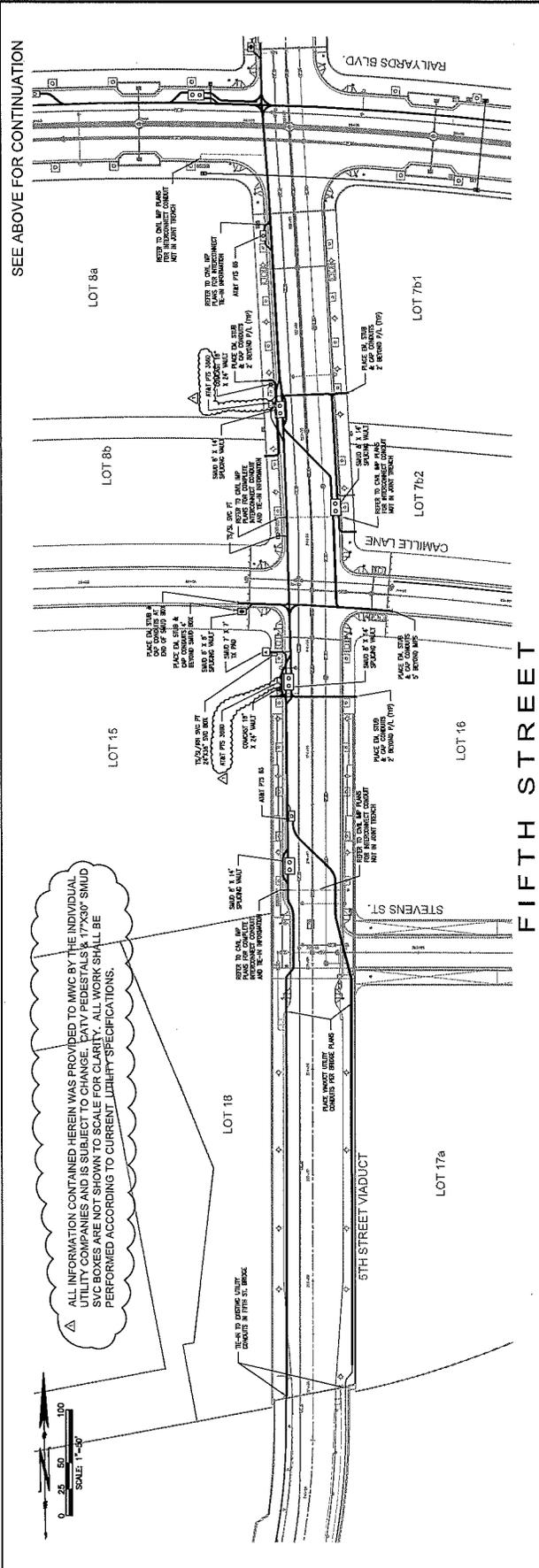
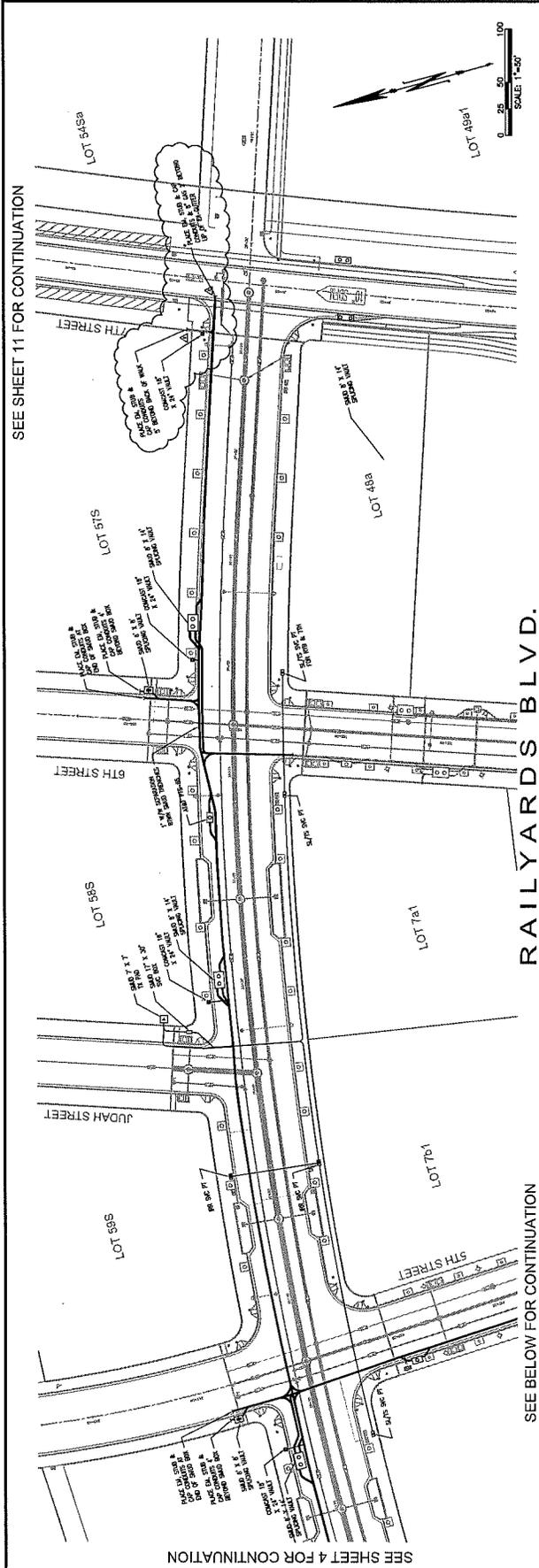
NO.	REVISION	DATE	APPROVED
1	REV. QUIL FOR ATT FITS 3560 SUD BOX	06/23/2013	
2	REV. JOINT TRENCH NOTE	06/23/2013	
3	REV. PADS GAS RIG	06/23/2013	
4	REV. CHECK SLOPES-SEE SHEET 3	06/23/2013	

MALCOLM WHITE CONSULTING
 1306 NORWICH COURT
 ROSEVILLE, CA 95661
 PH (916) 705-4910



SCALE	1" = 50'
DATE	10/03/12
DRAWN	MW
JOB NO.	097E7003
SHEET	4
OF 10 SHEETS	

JOINT TRENCH COMPOSITE
 RAILYARDS BLVD. / 5TH STREET NORTH
 SACRAMENTO RAILYARDS



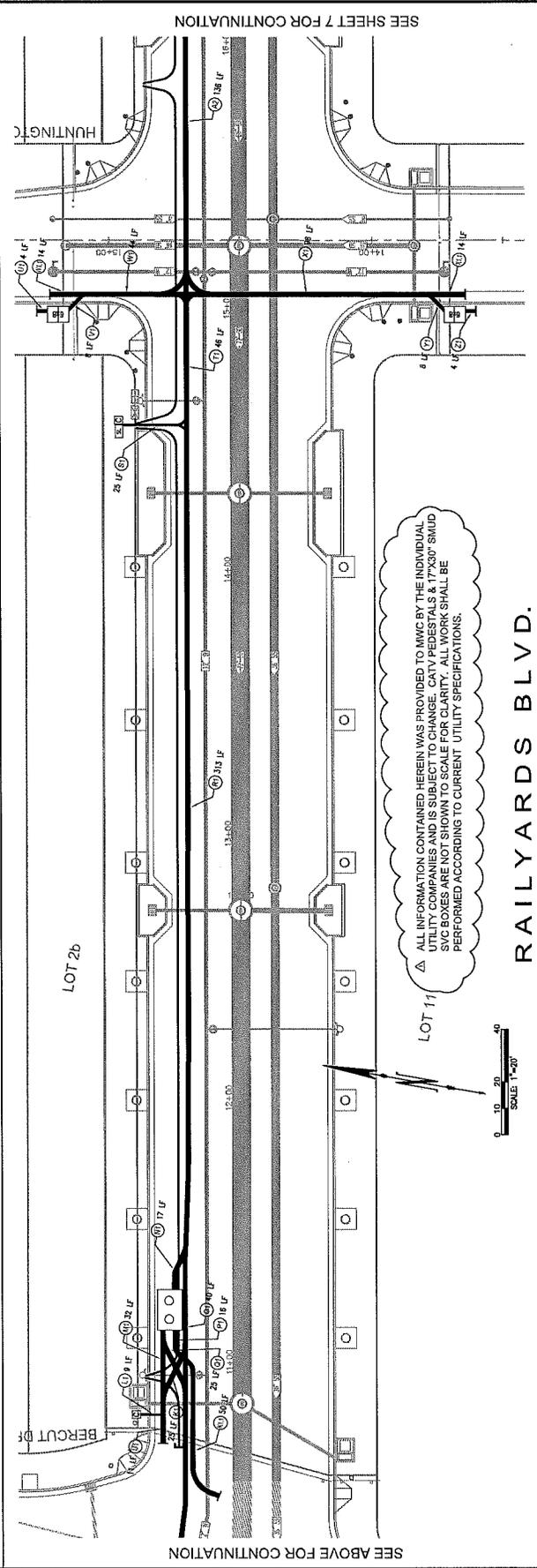
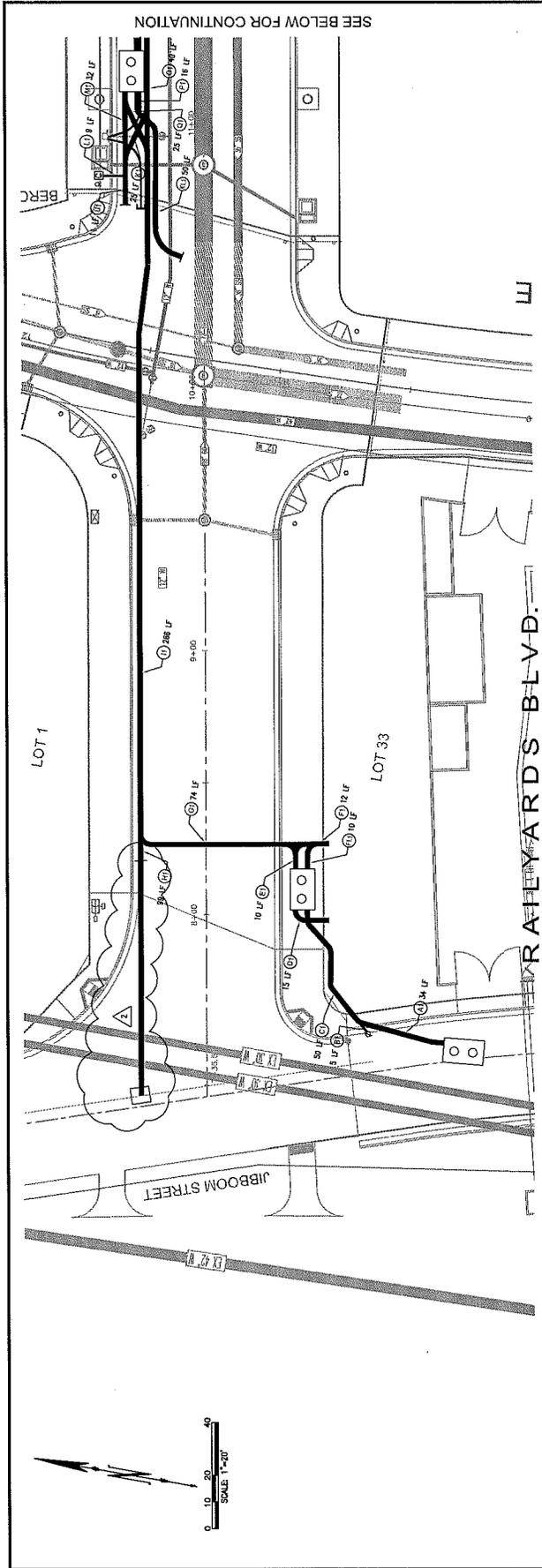
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NO.	DATE	APPROVED
1	08/27/13	
2	09/12/13	
3	09/12/13	
4	09/12/13	
5	09/12/13	
6	09/12/13	
7	09/12/13	
8	09/12/13	
9	09/12/13	
10	09/12/13	

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 ROSEVILLE, CA 95661
 PH (916) 705-4910



JOINT TRENCH COMPOSITE
 RAILYARDS BLVD. / 5TH STREET NORTH
 SACRAMENTO RAILYARDS
 SCALE: 1" = 50'
 DATE: 10/03/12
 DRAWN: MWF
 JOB NO.: 09767003
 SHEET: 5
 OF 10 SHEETS



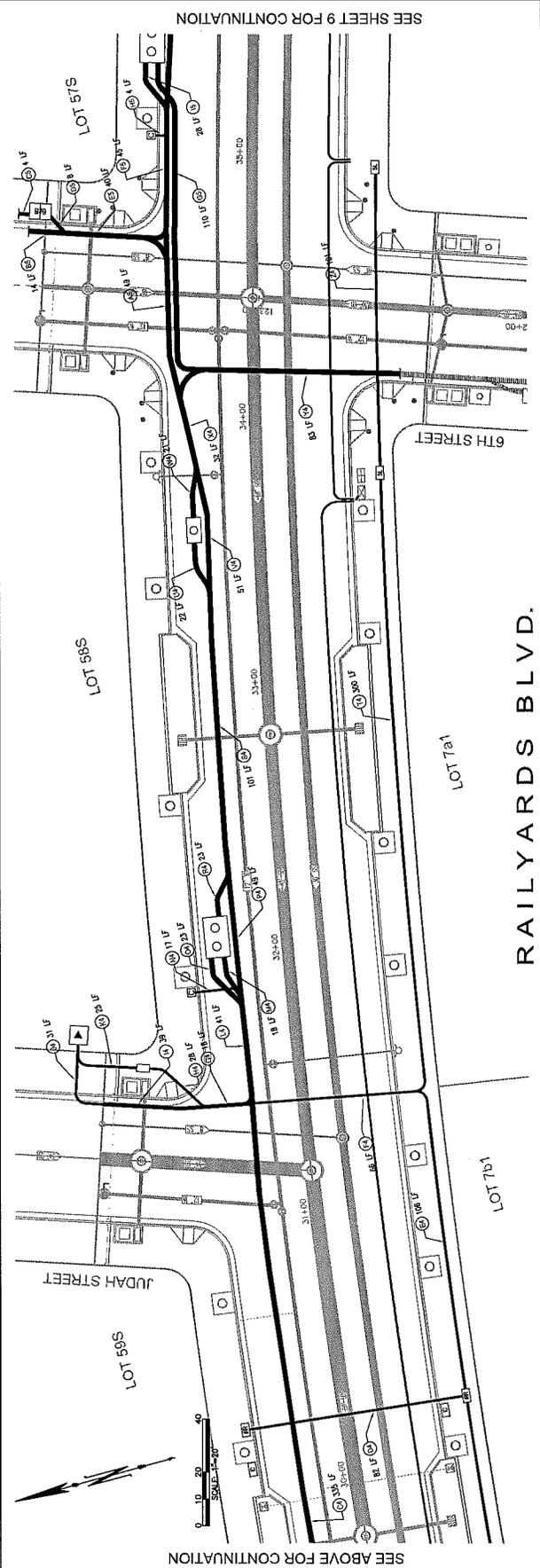
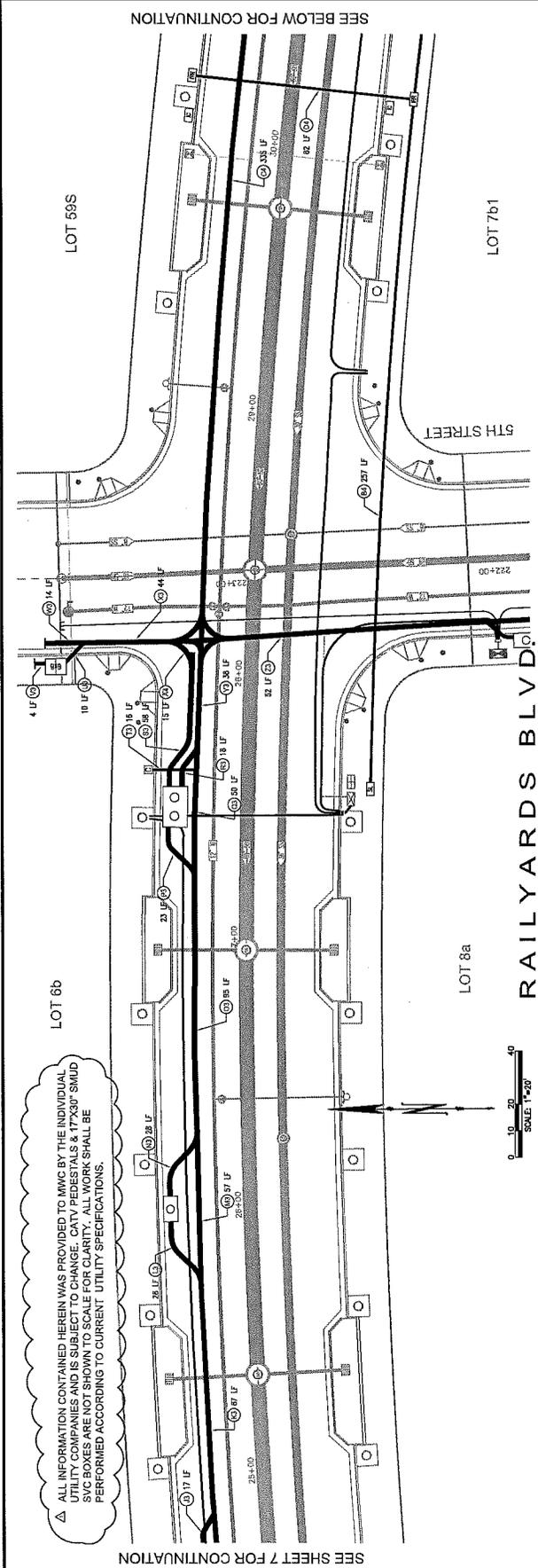
NO.	REVISION	DATE	APPROVED
1	REV. QUL. OUT FOR ATT. FITS 5563 SIS BOX	04/12/2013	
2	REV. JOINT TRENCH NOTE	04/12/2013	
3	REV. POLE GAS RB	02/20/2013	
4	REV. TRENCH SECTIONS-SEE SHEET 3	02/20/2013	

MALCOLM WHITE CONSULTING
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 PH (916) 705-4910



JOINT TRENCH COMPOSITE
 RAILYARDS BLVD. / 5TH STREET NORTH
 SACRAMENTO RAILYARDS
 SCALE 1" = 20'
 DATE 10/03/12
 DRAWN MW
 JOB NO. 08727003
 SHEET 6
 OF 10 SHEETS

ADDENDUM No. 1 8-27-13

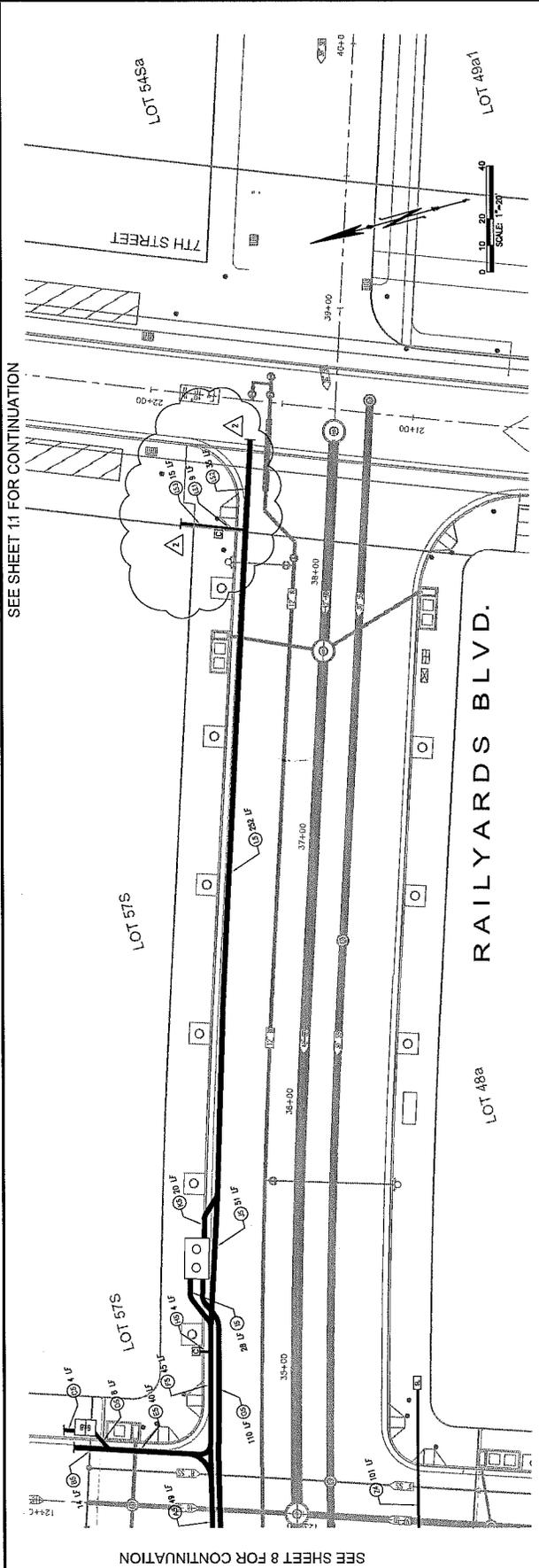


NO.	REVISION	DATE	APPROVED
1	REV. CALL OUT FOR ATT PDS 2500 SIB BOX	04/25/2013	
2	REV. JOINT TRENCH NOTE	06/26/2013	
3	REV. POLE GAS PMS	06/26/2013	
4	REV. TRENCH SECTIONS - SEE SHEET 3	06/26/2013	

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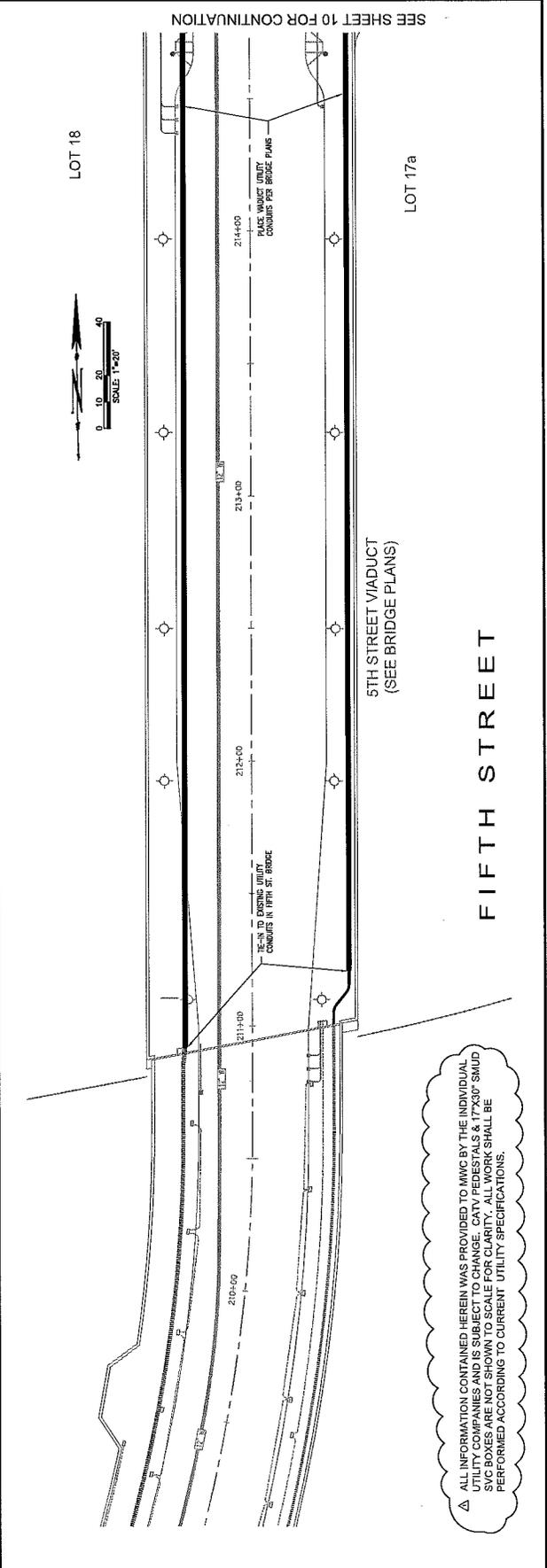

JOINT TRENCH COMPOSITE RAILYARDS BLVD. / 5TH STREET NORTH SACRAMENTO RAILYARDS	SCALE 1" = 20' DATE 10/03/12 DRAWN MWM DESIGNED MWM SHEET NO. 09/27/2013	26 10 SHEETS
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8
 SHEET



SEE SHEET 1.1 FOR CONTINUATION

SEE SHEET 8 FOR CONTINUATION



LOT 18

LOT 17a

5TH STREET VIADUCT
(SEE BRIDGE PLANS)

FIFTH STREET

ALL INFORMATION CONTAINED HEREIN WAS PROVIDED TO MMC BY THE INDIVIDUAL UTILITY COMPANIES AND IS SUBJECT TO CHANGE. CATV FEDESTALS & 17"x30" SMUD SVC BOXES ARE NOT SHOWN TO SCALE FOR CLARITY. ALL WORK SHALL BE PERFORMED ACCORDING TO CURRENT UTILITY SPECIFICATIONS.

NO.	REVISION	DATE	APPROVED
1	REV. JOINT TRENCH NOTE	08/28/13	
2	REV. JOINT TRENCH NOTE	08/28/13	
3	REV. JOINT TRENCH NOTE	08/28/13	
4	REV. JOINT TRENCH NOTE	08/28/13	
5	REV. JOINT TRENCH NOTE	08/28/13	
6	REV. JOINT TRENCH NOTE	08/28/13	
7	REV. JOINT TRENCH NOTE	08/28/13	
8	REV. JOINT TRENCH NOTE	08/28/13	
9	REV. JOINT TRENCH NOTE	08/28/13	
10	REV. JOINT TRENCH NOTE	08/28/13	

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 1306 NORWICH COURT
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JOINT TRENCH COMPOSITE
 SACRAMENTO RAILYARDS
RAILYARDS BLVD. / 5TH STREET NORTH
 SCALE 1" = 20'
 DATE 10/03/12
 DRAWN MW
 JOB NO. 09767003
9
 OF 10 SHEETS



DEPARTMENT OF
TRANSPORTATION

ENGINEERING SERVICES DIVISION

CITY OF SACRAMENTO
CALIFORNIA

915 I STREET, ROOM 2000
SACRAMENTO, CA
95814-2700

PH. (916) 808-8300
FAX (916) 808-8281

**5th Street, 5th Street Viaduct and Railyards Boulevard at Sacramento Railyards
(PN: T15135800) (rebid)
Addendum No. 2**

September 4, 2013

To all Potential Bidders:

Attached hereto are addenda items, which shall be incorporated into the bid proposal for above noted project. These changes shall be considered as part of the original documents, as if they were originally provided therein, and as such shall be used as contractual documents. All other terms, conditions, and specifications of the bid remain unchanged. Bidders must acknowledge receipt of this addendum prior to the hour and date specified in the bid request, or as amended, by one of the following methods:

- (a) By acknowledging receipt, on the bid proposal form submitted; or
- (b) By separate letter or telegram which includes a reference to the bid request and addendum number.

Failure to acknowledge receipt of this addendum in one of the above methods and cause acknowledgment to be received prior to the hour and date specified for receipt of proposals, **may result in rejection of your offer.** If by virtue of this addendum you decide to change an offer already submitted, such change may be made by e-mail or letter, provided such e-mail or letter makes reference to the bid request number and this addendum, and is received prior to the opening hour and date specified.

For any questions related to this Addendum, contact the Project Manager, Jon Blank at (916) 808-7914 or JBlank@cityofsacramento.org.

Very truly yours,

Jose R. Ledesma
Contract Services
Enclosure

**5th Street, 5th Street Viaduct and Railyards Boulevard at Sacramento Railyards
(PN: T15135800)(rebid)
Addendum No. 2**

ITEM NO# 1 The bid opening for this project has been changed. The bids for this project are now due on **September 11, 2013**. The time and location remain unchanged.



DEPARTMENT OF
TRANSPORTATION

ENGINEERING SERVICES DIVISION

CITY OF SACRAMENTO
CALIFORNIA

915 I STREET, ROOM 2000
SACRAMENTO, CA
95814-2700

PH. (916) 808-8300
FAX (916) 808-8281

**5th Street, 5th Street Viaduct and Railyards Boulevard at Sacramento Railyards
(PN: T15135800) (rebid)
Addendum No. 3**

September 6, 2013

To all Potential Bidders:

Attached hereto are addenda items, which shall be incorporated into the bid proposal for above noted project. These changes shall be considered as part of the original documents, as if they were originally provided therein, and as such shall be used as contractual documents. All other terms, conditions, and specifications of the bid remain unchanged. Bidders must acknowledge receipt of this addendum prior to the hour and date specified in the bid request, or as amended, by one of the following methods:

- (a) By acknowledging receipt, on the bid proposal form submitted; or
- (b) By separate letter or telegram which includes a reference to the bid request and addendum number.

Failure to acknowledge receipt of this addendum in one of the above methods and cause acknowledgment to be received prior to the hour and date specified for receipt of proposals, **may result in rejection of your offer.** If by virtue of this addendum you decide to change an offer already submitted, such change may be made by e-mail or letter, provided such e-mail or letter makes reference to the bid request number and this addendum, and is received prior to the opening hour and date specified.

For any questions related to this Addendum, contact the Project Manager, Jon Blank at (916) 808-7914 or JBlank@cityofsacramento.org.

CONTRACT SERVICES
Enclosure

**5th Street, 5th Street Viaduct and Railyards Boulevard at Sacramento Railyards
(PN: T15135800)(rebid)
Addendum No. 3**

ITEM NO# 1 The ESBE Requirements have been revised for this project. Items C & E of Section III have been modified as noted below.

III. DETERMINATION OF ESBE PARTICIPATION LEVEL

- A. **ESBE Participation:** The percent of ESBE participation shall be determined based on the dollar value of the work to be performed or supplies to be furnished by certified ESBEs designated in the bidder's Subcontractor and ESBE Participation Verification Form, relative to the total dollar amount of the bid.
- B. **Participation Credit:** To receive credit for participation:(1) an ESBE subcontractor must be responsible for the execution of a distinct element of the work, must possess any license or certification required for the work, and must carry its responsibility by actually performing, managing, or supervising the work without subcontracting or otherwise shifting any portion of the work to another subcontractor; and (2) an ESBE supplier must be furnishing materials, equipment, or supplies that the supplier sells as a recurring, although not necessarily primary, part of its business, and that are necessary for performance of the work.
- C. **ESBE Bidders:** The dollar value listed for an ESBE bidder on the bidder's Subcontractor and ESBE Participation Verification Form shall include only the amount of work, equipment, supplies and materials directly related to the contract bid items of work to be performed by the ESBE bidder. The specific contract bid items must be indicated on the form.
- D. **Suppliers:** Credit for an ESBE supplier of materials, equipment, or supplies is counted as one hundred (100) percent of the amount paid to the supplier for the material, equipment, or supplies. To receive this credit, ESBE suppliers must be listed on the bidder's Subcontractor and ESBE Participation Verification Form.
- E. **Subcontractors** (including truckers): To receive credit for an ESBE subcontractor, the subcontractor must be listed on the bidder's Subcontractor and ESBE Participation Verification Form. The dollar value listed for an ESBE subcontractor on the bidder's Subcontractor and ESBE Participation Verification Form shall include only the amount of work, and the equipment, supplies and materials required for the contract bid items of work, to be performed by the ESBE subcontractor. The specific contract bid items must be indicated on the form.
- F. **Truckers:** Credit for an ESBE trucker is counted as one hundred (100) percent of the amount paid to the trucker for trucking services, not including any amount paid to the trucker for the cost of any materials, equipment, or supplies being transported by the trucker.

ITEM NO# 2 A revised sub-contractor participation sheet is attached.

ITEM NO# 3 The bid item breakdown from the first bid is attached as a reference.

ITEM NO# 4 Bid Proposal Guarantee date corrected. New form attached.

Bid Item Detail -

49	LF	48" RGRCP STORM DRAIN PIPE	\$180.00	\$59,400.00	\$140.00	\$46,200.00	\$175.00	\$57,750.00	\$190.85	\$62,880.50	\$186.00	\$64,600.00
50	LF	54" RGRCP STORM DRAIN PIPE	\$250.00	\$20,000.00	\$180.00	\$15,000.00	\$200.00	\$17,200.00	\$276.10	\$22,088.00	\$242.00	\$19,360.00
51	LF	60" RGRCP STORM DRAIN PIPE	\$275.00	\$322,025.00	\$225.00	\$263,475.00	\$231.00	\$270,501.00	\$322,551.95	\$276.00	\$323,196.00	
52	LF	66" RCP STORM DRAIN PIPE	\$280.00	\$118,160.00	\$240.00	\$101,280.00	\$265.00	\$99,170.00	\$134,871.20	\$339.00	\$121,114.00	
53	LF	72" RCP STORM DRAIN PIPE	\$300.00	\$138,600.00	\$280.00	\$129,360.00	\$280.00	\$122,430.00	\$359.60	\$168,135.20	\$385.00	\$154,710.00
192	LF	8" PVC SDR35 STORM DRAIN PIPE	\$53.00	\$10,176.00	\$40.00	\$7,980.00	\$35.00	\$6,720.00	\$59.00	\$11,328.00	\$63.00	\$12,096.00
55	LF	6" PVC SDR35 STORM DRAIN PIPE	\$36.00	\$10,008.00	\$30.00	\$8,064.00	\$35.00	\$6,720.00	\$47.65	\$14,437.95	\$45.00	\$13,635.00
303	EA	8" STORM DRAIN CLEAN OUT	\$750.00	\$3,000.00	\$800.00	\$3,200.00	\$500.00	\$2,000.00	\$3,232.00	\$12,928.00	\$476.00	\$1,904.00
4	EA	48" DIAMETER STANDARD MANHOLE NO. 3A (STORM DRAIN)	\$4,800.00	\$19,200.00	\$5,000.00	\$20,000.00	\$4,000.00	\$22,000.00	\$8,010.00	\$32,440.00	\$7,100.00	\$28,400.00
58	EA	48" DIAMETER STANDARD MANHOLE NO. 3 (STORM DRAIN)	\$4,300.00	\$17,200.00	\$5,000.00	\$20,000.00	\$4,000.00	\$24,000.00	\$4,861.00	\$18,644.00	\$5,200.00	\$20,800.00
59	EA	48" DIAMETER STANDARD MANHOLE NO. 3 WITH SLOTTED COVER (STORM DRAIN)	\$4,200.00	\$16,800.00	\$5,000.00	\$20,000.00	\$4,000.00	\$24,000.00	\$4,425.00	\$17,700.00	\$5,400.00	\$21,600.00
60	EA	60" DIAMETER STANDARD MANHOLE NO. 4 (STORM DRAIN)	\$6,000.00	\$30,000.00	\$5,000.00	\$25,000.00	\$8,000.00	\$40,000.00	\$8,154.00	\$40,770.00	\$6,700.00	\$33,500.00
61	EA	60" DIAMETER STANDARD SADDLE TYPE MANHOLE (STORM DRAIN)	\$5,300.00	\$26,500.00	\$5,000.00	\$25,000.00	\$8,500.00	\$42,500.00	\$7,256.00	\$36,280.00	\$7,300.00	\$36,500.00
62	EA	96" DIAMETER MANHOLE (STORM DRAIN)	\$14,100.00	\$197,600.00	\$13,000.00	\$182,000.00	\$10,500.00	\$147,000.00	\$17,115.00	\$239,310.00	\$16,000.00	\$224,000.00
63	EA	6.5' X 7' CONCRETE JUNCTION BOX	\$26,000.00	\$26,000.00	\$20,000.00	\$10,000.00	\$20,000.00	\$20,000.00	\$11,283.00	\$14,500.00	\$14,500.00	
64	EA	DROP INLET WITH GRATED TOP	\$1,600.00	\$32,000.00	\$1,500.00	\$15,000.00	\$2,000.00	\$40,000.00	\$1,330.00	\$26,600.00	\$1,800.00	\$36,000.00
65	EA	STORMWATER QUALITY INLET (6' X 8')	\$23,000.00	\$184,000.00	\$22,000.00	\$176,000.00	\$30,000.00	\$240,000.00	\$18,041.00	\$240,000.00	\$23,000.00	\$180,000.00
66	EA	STORMWATER QUALITY INLET (6' X 10')	\$25,000.00	\$75,000.00	\$25,000.00	\$75,000.00	\$30,000.00	\$90,000.00	\$24,545.00	\$59,454.00	\$23,000.00	\$69,000.00
67	EA	STORMWATER QUALITY INLET (6' X 12')	\$37,000.00	\$74,000.00	\$30,000.00	\$60,000.00	\$38,000.00	\$76,000.00	\$24,545.00	\$49,116.00	\$35,000.00	\$70,000.00
68	EA	STORMWATER QUALITY INLET (6' X 15')	\$39,000.00	\$117,600.00	\$35,000.00	\$105,000.00	\$45,000.00	\$135,000.00	\$29,637.00	\$89,081.00	\$35,000.00	\$105,000.00
2	EA	TYPE 'B' DRAIN INLET	\$2,000.00	\$4,000.00	\$2,000.00	\$4,000.00	\$2,000.00	\$4,000.00	\$2,000.00	\$4,000.00	\$2,000.00	\$4,000.00
70	EA	STORMWATER QUALITY VAULT (4-CARTRIDGE)	\$40,000.00	\$40,000.00	\$35,000.00	\$35,000.00	\$40,000.00	\$40,000.00	\$38,525.00	\$38,525.00	\$40,000.00	\$40,000.00
71	EA	STORMWATER QUALITY VAULT (8X8)	\$48,000.00	\$48,000.00	\$45,000.00	\$45,000.00	\$40,000.00	\$55,000.00	\$38,010.00	\$38,010.00	\$42,000.00	\$42,000.00
72	CY	6' PERIMETER WALL (STORMWATER QUALITY PLANTER)	\$1,400.00	\$165,600.00	\$3,000.00	\$36,000.00	\$50.00	\$2,000.00	\$236,000.00	\$2,719.00	\$9,500.00	\$396,000.00
240	CY	12' SEAT WALL (STORMWATER QUALITY PLANTER)	\$68.00	\$10,080.00	\$1,000.00	\$10,000.00	\$80.00	\$4,800.00	\$1,423.02	\$28,448.00	\$1,300.00	\$52,000.00
2,092	SY	7' FILTER FABRIC (STORMWATER QUALITY PLANTER)	\$8.00	\$10,880.00	\$1.50	\$1,350.00	\$2.00	\$7,320.00	\$3.54	\$14,844.00	\$1.00	\$8,000.00
175	CY	TOPSOIL (STORMWATER QUALITY PLANTER)	\$43.00	\$7,875.00	\$110.00	\$19,200.00	\$30.00	\$11,725.00	\$67.00	\$17,150.00	\$85.00	\$11,375.00
76	CY	BIORETENTION SOIL (STORMWATER QUALITY PLANTER)	\$50.00	\$26,150.00	\$100.00	\$52,000.00	\$96.00	\$50,208.00	\$64.25	\$48,282.75	\$84.00	\$49,182.00
262	CY	CRUSHED ROCK (STORMWATER QUALITY PLANTER)	\$43.00	\$17,265.00	\$120.00	\$51,440.00	\$50.00	\$19,650.00	\$75.00	\$29,686.00	\$78.00	\$30,438.00
782	EA	8" SUBDRAIN (STORMWATER QUALITY PLANTER)	\$71.00	\$16,422.00	\$40.00	\$16,400.00	\$20.00	\$8,200.00	\$20.85	\$16,382.80	\$20.00	\$15,840.00
40	EA	8" CLEANOUT (STORMWATER QUALITY PLANTER)	\$190.00	\$7,600.00	\$400.00	\$16,000.00	\$625.00	\$25,000.00	\$635.00	\$25,400.00	\$290.00	\$11,600.00
10,166	EA	LINE NORTH BASIN	\$12.00	\$122,880.00	\$13.00	\$132,165.00	\$15.00	\$152,475.00	\$9.65	\$99,092.25	\$6.00	\$61,320.00
1,350	EA	NORTH BASIN HEADWALL	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$9,235.00	\$9,235.00	\$11,000.00	\$11,000.00	
82	EA	6" AB ACCESS ROAD	\$14.00	\$18,900.00	\$16.00	\$21,600.00	\$13.50	\$18,225.00	\$14.10	\$19,035.00	\$29.00	\$39,150.00
16,200	SY	HYDROSEED NORTH BASIN	\$1.15	\$18,630.00	\$1.50	\$24,300.00	\$1.30	\$21,060.00	\$1.15	\$16,830.00	\$0.80	\$12,960.00
14,250	LF	8" DIA WATER PIPE	\$0.68	\$9,765.00	\$0.70	\$9,975.00	\$0.65	\$9,262.50	\$0.68	\$9,690.00	\$0.70	\$9,975.00
3,911	LF	6" GATE VALVES	\$72.00	\$425,592.00	\$70.00	\$49,700.00	\$85.00	\$384,215.00	\$87.00	\$51,257.00	\$78.00	\$461,058.00
2	EA	6" GATE VALVES	\$1,900.00	\$3,800.00	\$1,500.00	\$3,000.00	\$2,500.00	\$5,000.00	\$1,866.00	\$3,832.00	\$1,600.00	\$3,200.00
53	EA	2" BLOW-OUT ASSEMBLY	\$2,000.00	\$70,000.00	\$3,000.00	\$105,000.00	\$3,000.00	\$105,000.00	\$2,150.00	\$76,250.00	\$2,700.00	\$84,000.00
14	EA	12" BALL JOINT ASSEMBLY	\$1,600.00	\$22,400.00	\$3,500.00	\$49,000.00	\$1,600.00	\$22,400.00	\$2,894.00	\$37,716.00	\$1,900.00	\$26,800.00
1	EA	4" FIBERGLASS BALANCED FLEX-TEND	\$4,300.00	\$4,300.00	\$5,000.00	\$5,000.00	\$6,000.00	\$6,000.00	\$4,265.00	\$4,265.00	\$4,800.00	\$4,800.00
1	EA	4" FIBERGLASS BALANCED FLEX-TEND	\$26,500.00	\$26,500.00	\$30,000.00	\$30,000.00	\$20,000.00	\$15,000.00	\$25,175.00	\$15,000.00	\$31,000.00	
19	EA	24" STEEL CASING PIPE	\$6,100.00	\$115,900.00	\$6,500.00	\$129,200.00	\$6,500.00	\$133,500.00	\$145,141.00	\$145,141.00	\$7,000.00	\$133,000.00
1	EA	24" STEEL CASING PIPE	\$80,000.00	\$80,000.00	\$25,000.00	\$25,000.00	\$55,000.00	\$75,000.00	\$24,827.00	\$50,000.00	\$50,000.00	
1	EA	INSTALL CUT IN TEE	\$6,800.00	\$6,800.00	\$7,000.00	\$7,000.00	\$10,000.00	\$10,000.00	\$7,248.00	\$7,248.00	\$13,000.00	
8,609	TON	CONCRETE BASE PAVEMENT, TYPE A	\$63.00	\$554,967.00	\$85.00	\$731,147.00	\$90.00	\$810,000.00	\$69.30	\$610,463.70	\$70.00	\$616,600.00
15,569	SY	CONCRETE BASE CLASS 2	\$42.00	\$77,158.00	\$40.00	\$55,960.00	\$35.00	\$55,960.00	\$23.50	\$319,576.50	\$20.00	\$271,900.00
10,382	SY	CONCRETE BASE CLASS 2	\$5.00	\$502,810.00	\$5.50	\$55,591.00	\$6.50	\$65,305.00	\$6.25	\$53,606.70	\$6.25	\$53,606.70
7,064	LF	VERTICAL CURB AND GUTTER NO. 2	\$22.00	\$167,288.00	\$25.00	\$190,100.00	\$22.00	\$167,288.00	\$22.85	\$173,151.40	\$24.00	\$182,496.00
173	LF	VERTICAL CURB AND GUTTER NO. 2 - REINFORCED	\$31.00	\$3,363.00	\$35.00	\$3,850.00	\$25.00	\$2,625.00	\$34.85	\$3,629.05	\$37.00	\$4,001.00
9	EA	CONCRETE SURVEY MONUMENT	\$380.00	\$3,800.00	\$400.00	\$4,000.00	\$500.00	\$5,000.00	\$4,500.00	\$4,500.00	\$1,400.00	\$12,600.00
48	EA	SINGLE FLARE CURB RAMP WITH TRUNCATED DOMES	\$80.00	\$3,840.00	\$40.00	\$3,200.00	\$75.00	\$3,000.00	\$85.00	\$42,960.00	\$1,800.00	\$86,400.00
5	EA	DOUBLE FLARE CURB RAMP WITH TRUNCATED DOMES	\$1,300.00	\$6,500.00	\$1,100.00	\$5,500.00	\$1,250.00	\$4,125.00	\$1,515.00	\$7,575.00	\$2,100.00	\$10,500.00

Bid Item Detail -

102	EA	3	\$1,100.00	\$3,300.00	\$1,200.00	\$3,600.00	\$2,500.00	\$7,500.00	\$800.00	\$2,400.00	\$1,548.00	\$4,644.00	\$1,700.00	\$5,100.00
103	EA	2	\$2,500.00	\$5,000.00	\$1,900.00	\$3,800.00	\$2,500.00	\$5,000.00	\$825.00	\$1,650.00	\$2,367.00	\$4,734.00	\$2,200.00	\$4,400.00
104	LF	1041	\$31.00	\$327.00	\$70.00	\$720.00	\$70.00	\$720.00	\$69.00	\$71,829.00	\$72.45	\$75,420.45	\$20.00	\$20,820.00
105	LF	23	\$67.00	\$1,541.00	\$40.00	\$820.00	\$70.00	\$1,610.00	\$66.00	\$1,518.00	\$69.30	\$1,593.90	\$65.00	\$1,495.00
106	LS	1	\$106,000.00	\$106,000.00	\$100,000.00	\$100,000.00	\$125,000.00	\$105,000.00	\$105,000.00	\$105,000.00	\$107,000.00	\$107,000.00	\$125,000.00	\$125,000.00
107	LS	1	\$92,000.00	\$92,000.00	\$80,000.00	\$80,000.00	\$100,000.00	\$89,925.00	\$89,925.00	\$89,925.00	\$92,000.00	\$92,000.00	\$109,000.00	\$109,000.00
108	LS	1	\$114,000.00	\$114,000.00	\$100,000.00	\$100,000.00	\$125,000.00	\$121,997.00	\$121,997.00	\$121,997.00	\$115,000.00	\$115,000.00	\$130,000.00	\$130,000.00
109	LS	1	\$348,000.00	\$348,000.00	\$300,000.00	\$300,000.00	\$375,000.00	\$375,000.00	\$340,000.00	\$340,000.00	\$351,000.00	\$351,000.00	\$340,000.00	\$340,000.00
110	LS	1	\$17,000.00	\$17,000.00	\$17,000.00	\$17,000.00	\$15,000.00	\$15,000.00	\$16,370.00	\$16,370.00	\$17,190.00	\$17,190.00	\$27,000.00	\$27,000.00
111	LS	1	\$12,000.00	\$12,000.00	\$12,000.00	\$12,000.00	\$10,000.00	\$10,000.00	\$11,890.00	\$11,890.00	\$12,485.00	\$12,485.00	\$18,000.00	\$18,000.00
112	LS	1	\$48,000.00	\$48,000.00	\$35,000.00	\$35,000.00	\$50,000.00	\$46,815.00	\$46,815.00	\$49,156.00	\$49,156.00	\$49,156.00	\$40,000.00	\$40,000.00
113	LS	1	\$11,000.00	\$11,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$9,500.00	\$9,500.00	\$11,000.00	\$11,000.00	\$11,000.00	\$7,600.00	\$7,600.00
114	LS	1	\$190,000.00	\$190,000.00	\$175,000.00	\$175,000.00	\$200,000.00	\$200,000.00	\$200,588.00	\$200,588.00	\$191,000.00	\$191,000.00	\$175,000.00	\$175,000.00
115	LS	1	\$187,000.00	\$187,000.00	\$175,000.00	\$175,000.00	\$200,000.00	\$193,553.00	\$193,553.00	\$180,000.00	\$180,000.00	\$180,000.00	\$165,000.00	\$165,000.00
116	LS	1	\$189,000.00	\$189,000.00	\$175,000.00	\$175,000.00	\$200,000.00	\$185,000.00	\$185,000.00	\$190,000.00	\$190,000.00	\$190,000.00	\$185,000.00	\$185,000.00
117	LS	1	\$212,000.00	\$212,000.00	\$200,000.00	\$200,000.00	\$200,000.00	\$200,000.00	\$206,000.00	\$206,000.00	\$213,000.00	\$213,000.00	\$200,000.00	\$200,000.00
118	LS	1	\$193,000.00	\$193,000.00	\$175,000.00	\$175,000.00	\$200,000.00	\$197,060.00	\$197,060.00	\$195,000.00	\$195,000.00	\$195,000.00	\$175,000.00	\$175,000.00
119	LS	1	\$180,000.00	\$180,000.00	\$170,000.00	\$170,000.00	\$200,000.00	\$175,000.00	\$175,000.00	\$182,000.00	\$182,000.00	\$182,000.00	\$180,000.00	\$180,000.00
120	LS	1	\$136,000.00	\$136,000.00	\$125,000.00	\$125,000.00	\$150,000.00	\$150,000.00	\$175,600.00	\$175,600.00	\$137,000.00	\$137,000.00	\$113,000.00	\$113,000.00
121	LS	1	\$177,000.00	\$177,000.00	\$165,000.00	\$165,000.00	\$150,000.00	\$150,000.00	\$173,000.00	\$173,000.00	\$179,000.00	\$179,000.00	\$160,000.00	\$160,000.00
122	LS	1	\$188,000.00	\$188,000.00	\$175,000.00	\$175,000.00	\$150,000.00	\$150,000.00	\$180,000.00	\$180,000.00	\$190,000.00	\$190,000.00	\$145,000.00	\$145,000.00
123	LS	1	\$189,000.00	\$189,000.00	\$175,000.00	\$175,000.00	\$200,000.00	\$200,000.00	\$185,000.00	\$185,000.00	\$191,000.00	\$191,000.00	\$180,000.00	\$180,000.00
124	LS	1	\$103,000.00	\$103,000.00	\$60,000.00	\$60,000.00	\$75,000.00	\$75,000.00	\$77,500.00	\$77,500.00	\$103,000.00	\$103,000.00	\$60,000.00	\$60,000.00
125	LS	1	\$25,000.00	\$25,000.00	\$20,000.00	\$20,000.00	\$100,000.00	\$94,000.00	\$94,000.00	\$84,000.00	\$84,000.00	\$25,000.00	\$100,000.00	\$100,000.00
126	LS	1	\$132,000.00	\$132,000.00	\$125,000.00	\$125,000.00	\$125,000.00	\$125,000.00	\$96,200.00	\$96,200.00	\$113,000.00	\$113,000.00	\$133,000.00	\$133,000.00
127	LS	1	\$80,000.00	\$80,000.00	\$75,000.00	\$75,000.00	\$150,000.00	\$128,000.00	\$128,000.00	\$128,000.00	\$80,000.00	\$80,000.00	\$150,000.00	\$150,000.00
128	LF	3,968	\$10.25	\$40,877.00	\$5.50	\$21,834.00	\$10.00	\$39,880.00	\$7.00	\$23,130.40	\$5.88	\$23,130.40	\$10.00	\$39,880.00
129	LS	1	\$26,500.00	\$26,500.00	\$13,000.00	\$13,000.00	\$25,000.00	\$25,000.00	\$41,434.00	\$41,434.00	\$66,150.00	\$66,150.00	\$26,000.00	\$26,000.00
130	LS	1	\$70,000.00	\$70,000.00	\$25,000.00	\$25,000.00	\$25,000.00	\$45,885.00	\$45,885.00	\$56,700.00	\$56,700.00	\$56,700.00	\$25,000.00	\$25,000.00
131	LS	1	\$170,000.00	\$170,000.00	\$140,000.00	\$140,000.00	\$175,000.00	\$165,000.00	\$165,000.00	\$165,000.00	\$185,000.00	\$185,000.00	\$166,000.00	\$166,000.00
132	EA	1	\$9.00	\$9,126.00	\$9.00	\$9,126.00	\$10.00	\$10,140.00	\$9.00	\$9,126.00	\$9.45	\$9,582.30	\$9.00	\$9,126.00
133	EA	26	\$82.00	\$2,284.00	\$110.00	\$3,060.00	\$80.00	\$2,240.00	\$125.00	\$16,900.00	\$115.50	\$3,234.00	\$80.00	\$2,240.00
134	EA	52	\$77.00	\$4,014.00	\$325.00	\$10,625.00	\$275.00	\$14,300.00	\$325.00	\$16,900.00	\$341.25	\$17,745.00	\$270.00	\$14,040.00
135	EA	46	\$7.00	\$320.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
136	EA	72	\$9.00	\$648.00	\$325.00	\$1,065.00	\$275.00	\$1,065.00	\$325.00	\$3,420.00	\$341.25	\$24,570.00	\$270.00	\$19,440.00
137	EA	9	\$30,000.00	\$30,000.00	\$9,500.00	\$9,500.00	\$8,000.00	\$11,500.00	\$103,500.00	\$103,500.00	\$7,969.00	\$71,721.00	\$7,500.00	\$67,500.00
138	CY	400	\$66.00	\$26,400.00	\$60.00	\$24,000.00	\$75.00	\$30,000.00	\$67.00	\$26,800.00	\$115.50	\$46,200.00	\$110.00	\$44,000.00
139	EA	66	\$55.00	\$3,630.00	\$60.00	\$3,960.00	\$50.00	\$3,300.00	\$75.00	\$4,550.00	\$63.00	\$4,158.00	\$54.00	\$3,584.00
140	EA	47	\$2,800.00	\$131,600.00	\$1,300.00	\$3,900.00	\$3,000.00	\$141,300.00	\$2,800.00	\$136,300.00	\$2,606.00	\$122,482.00	\$2,600.00	\$120,200.00
141	EA	48	\$2,800.00	\$134,400.00	\$1,200.00	\$3,600.00	\$2,000.00	\$95,000.00	\$2,100.00	\$100,600.00	\$1,687.00	\$90,576.00	\$2,000.00	\$95,000.00
142	EA	52	\$4,500.00	\$234,000.00	\$5,000.00	\$250,000.00	\$5,000.00	\$260,000.00	\$2,300.00	\$119,600.00	\$3,309.00	\$172,068.00	\$4,400.00	\$228,800.00
143	EA	72	\$5,500.00	\$396,000.00	\$5,000.00	\$250,000.00	\$5,500.00	\$395,000.00	\$2,300.00	\$165,600.00	\$4,238.00	\$305,136.00	\$5,300.00	\$381,600.00

Bid Item Detail -

144	EA	1,200.00	\$148,800.00	\$975.00	\$108,500.00	\$1,500.00	\$198,000.00	\$800.00	\$111,600.00	\$720.00	\$89,280.00	\$1,200.00	\$148,800.00
145	EA	\$650.00	\$36,000.00	\$600.00	\$35,000.00	\$750.00	\$42,000.00	\$2,100.00	\$117,600.00	\$670.00	\$34,160.00	\$800.00	\$44,800.00
146	EA	\$8,000.00	\$8,000.00	\$35,000.00	\$35,000.00	\$15,000.00	\$15,000.00	\$29,000.00	\$29,000.00	\$23,585.00	\$23,585.00	\$30,000.00	\$30,000.00
147	EA	\$10,500.00	\$21,000.00	\$2,500.00	\$5,000.00	\$3,000.00	\$6,000.00	\$3,000.00	\$6,000.00	\$5,543.00	\$11,086.00	\$7,300.00	\$14,600.00
148	EA	\$11,000.00	\$44,000.00	\$3,000.00	\$12,000.00	\$4,000.00	\$16,000.00	\$4,000.00	\$16,000.00	\$6,312.00	\$25,248.00	\$7,100.00	\$28,400.00
149	SY	\$25.00	\$7,500.00	\$30.00	\$9,000.00	\$30.00	\$9,000.00	\$85.00	\$19,500.00	\$19.75	\$14,322.00	\$55.00	\$16,500.00
150	EA	\$315.00	\$13,860.00	\$370.00	\$16,280.00	\$200.00	\$8,000.00	\$300.00	\$13,200.00	\$325.50	\$14,322.00	\$150.00	\$6,600.00
151	EA	\$140.00	\$5,600.00	\$50.00	\$2,000.00	\$30.00	\$1,200.00	\$50.00	\$2,000.00	\$15.00	\$600.00	\$23.00	\$920.00
152	LF	\$6.75	\$23,334.75	\$4.00	\$13,828.00	\$3.00	\$10,371.00	\$5.70	\$19,704.90	\$6.00	\$20,742.00	\$3.00	\$10,371.00
153	SF	\$4.50	\$11,520.00	\$6.00	\$15,360.00	\$5.00	\$12,000.00	\$3.48	\$8,908.80	\$4.15	\$10,624.00	\$6.00	\$15,840.00
154	LF	\$3.65	\$2,970.00	\$6.00	\$4,800.00	\$4.00	\$3,200.00	\$3.54	\$2,800.00	\$3.75	\$3,000.00	\$7.00	\$5,600.00
155	SY	\$0.68	\$12,036.00	\$0.70	\$12,390.00	\$0.63	\$10,620.00	\$0.67	\$11,859.00	\$0.70	\$12,390.00	\$0.70	\$12,390.00
156	LF	\$14.00	\$92,960.00	\$14.00	\$92,960.00	\$16.00	\$106,240.00	\$13.50	\$89,640.00	\$14.10	\$93,624.00	\$14.00	\$92,960.00
157	EA	\$1,250.00	\$1,250.00	\$1,600.00	\$1,600.00	\$1,500.00	\$1,500.00	\$1,200.00	\$1,200.00	\$1,260.00	\$1,260.00	\$1,600.00	\$1,600.00
158	EA	\$3,000.00	\$3,000.00	\$10,000.00	\$10,000.00	\$5,000.00	\$5,000.00	\$5,250.00	\$5,250.00	\$10,500.00	\$10,500.00	\$50,000.00	\$50,000.00
159	CY	\$35.00	\$11,410.00	\$30.00	\$18,300.00	\$50.00	\$18,300.00	\$25.00	\$8,150.00	\$28.00	\$18,908.00	\$300.00	\$97,800.00
160	CY	\$40.00	\$14,800.00	\$30.00	\$11,100.00	\$50.00	\$11,100.00	\$30.00	\$11,100.00	\$79.00	\$29,230.00	\$200.00	\$74,000.00
161	LF	\$55.00	\$466,345.00	\$55.00	\$466,345.00	\$55.00	\$466,345.00	\$85.00	\$551,135.00	\$54.00	\$457,866.00	\$57.00	\$483,303.00
162	EA	\$2,250.00	\$8,000.00	\$1,700.00	\$7,200.00	\$1,750.00	\$7,500.00	\$1,800.00	\$7,500.00	\$4,725.00	\$35,910.00	\$4,000.00	\$30,400.00
163	EA	\$63,000.00	\$83,000.00	\$90,000.00	\$90,000.00	\$90,000.00	\$90,000.00	\$100,000.00	\$100,000.00	\$99,750.00	\$99,750.00	\$80,000.00	\$80,000.00
164	CY	\$425.00	\$74,800.00	\$375.00	\$66,000.00	\$400.00	\$70,000.00	\$400.00	\$70,000.00	\$578.00	\$101,728.00	\$1,000.00	\$176,000.00
165	CY	\$833.00	\$1,703,485.00	\$700.00	\$1,431,500.00	\$700.00	\$1,431,500.00	\$780.00	\$1,595,100.00	\$460.00	\$940,700.00	\$900.00	\$1,840,500.00
166	CY	\$850.00	\$19,000.00	\$900.00	\$18,000.00	\$700.00	\$14,000.00	\$670.00	\$13,400.00	\$1,260.00	\$25,200.00	\$870.00	\$17,400.00
167	EA	\$35.00	\$27,125.00	\$15.00	\$11,625.00	\$15.00	\$11,625.00	\$15.00	\$11,625.00	\$52.50	\$40,687.50	\$10.00	\$7,750.00
168	LF	\$60.00	\$4,800.00	\$80.00	\$6,400.00	\$100.00	\$8,000.00	\$108.00	\$8,640.00	\$84.00	\$6,720.00	\$200.00	\$16,000.00
169	LF	\$1,200.00	\$4,800.00	\$1,400.00	\$6,300.00	\$1,400.00	\$6,300.00	\$53,000.00	\$63,000.00	\$1,260.00	\$56,700.00	\$1,300.00	\$58,500.00
170	LF	\$125.00	\$3,625.00	\$550.00	\$15,950.00	\$550.00	\$15,950.00	\$550.00	\$15,950.00	\$540.00	\$24,360.00	\$345.00	\$10,050.00
171	LBS	\$1.00	\$538,589.00	\$1.00	\$538,589.00	\$1.00	\$538,589.00	\$1.00	\$538,589.00	\$1.15	\$619,368.85	\$1.00	\$538,589.00
172	LBS	\$2.00	\$5,604.00	\$2.00	\$5,604.00	\$2.00	\$5,604.00	\$2.00	\$5,604.00	\$2.65	\$7,425.30	\$2.00	\$5,604.00
173	SF	\$1.50	\$1,550.00	\$5.00	\$3,875.00	\$10.00	\$10,000.00	\$10.00	\$10,000.00	\$2.10	\$1,627.50	\$1.00	\$775.00
174	LBS	\$12.00	\$40,500.00	\$6.00	\$24,300.00	\$10.00	\$40,500.00	\$8.00	\$36,450.00	\$12.60	\$51,030.00	\$7.00	\$28,350.00
175	LF	\$200.00	\$169,600.00	\$370.00	\$795,260.00	\$300.00	\$239,400.00	\$325.00	\$259,350.00	\$420.00	\$335,160.00	\$402.00	\$320,796.00
176	LF	\$45,000.00	\$45,000.00	\$50,000.00	\$50,000.00	\$30,000.00	\$30,000.00	\$55,000.00	\$55,000.00	\$108,150.00	\$108,150.00	\$55,000.00	\$55,000.00
177	LF	\$203.00	\$79,982.00	\$200.00	\$78,800.00	\$165.00	\$65,000.00	\$120.00	\$47,280.00	\$210.00	\$82,740.00	\$130.00	\$51,220.00
178	LF	\$30,000.00	\$30,000.00	\$60,000.00	\$60,000.00	\$25,000.00	\$25,000.00	\$40,000.00	\$40,000.00	\$43,995.00	\$43,995.00	\$55,000.00	\$55,000.00
179	LS	\$83,000.00	\$83,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$82,400.00	\$82,400.00	\$52,500.00	\$52,500.00	\$52,000.00	\$52,000.00
180	LS	\$181,000.00	\$181,000.00	\$175,000.00	\$175,000.00	\$175,000.00	\$175,000.00	\$210,000.00	\$210,000.00	\$183,750.00	\$183,750.00	\$180,000.00	\$180,000.00
181	LS	\$42,000.00	\$42,000.00	\$50,000.00	\$50,000.00	\$40,000.00	\$40,000.00	\$54,300.00	\$54,300.00	\$42,000.00	\$42,000.00	\$42,000.00	\$42,000.00
182	EA	\$225,000.00	\$225,000.00	\$200,000.00	\$200,000.00	\$200,000.00	\$200,000.00	\$330,000.00	\$330,000.00	\$227,850.00	\$227,850.00	\$250,000.00	\$250,000.00
183	EA	\$500.00	\$6,000.00	\$500.00	\$6,000.00	\$500.00	\$6,000.00	\$1,100.00	\$13,200.00	\$525.00	\$6,300.00	\$520.00	\$6,240.00
184	EA	\$750.00	\$7,500.00	\$700.00	\$7,000.00	\$700.00	\$7,000.00	\$1,600.00	\$16,000.00	\$735.00	\$7,350.00	\$720.00	\$7,200.00
185	EA	\$8,500.00	\$81,000.00	\$8,500.00	\$81,000.00	\$8,500.00	\$81,000.00	\$5,500.00	\$46,500.00	\$8,925.00	\$81,000.00	\$8,800.00	\$81,000.00
186	EA	\$48,500.00	\$48,500.00	\$45,000.00	\$45,000.00	\$45,000.00	\$45,000.00	\$60,700.00	\$60,700.00	\$47,260.00	\$47,260.00	\$68,000.00	\$68,000.00
187	EA	\$3,100.00	\$12,400.00	\$3,100.00	\$12,400.00	\$3,100.00	\$12,400.00	\$2,000.00	\$8,000.00	\$3,150.00	\$12,600.00	\$3,100.00	\$12,400.00
188	LS	\$7,000.00	\$7,000.00	\$7,100.00	\$7,100.00	\$7,000.00	\$7,000.00	\$10,200.00	\$10,200.00	\$7,350.00	\$7,350.00	\$7,200.00	\$7,200.00
189	LS	\$78,000.00	\$78,000.00	\$75,000.00	\$75,000.00	\$75,000.00	\$75,000.00	\$88,200.00	\$88,200.00	\$78,750.00	\$78,750.00	\$77,000.00	\$77,000.00
190	LS	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,150.00	\$3,150.00	\$3,100.00	\$3,100.00
191	EA	\$24,000.00	\$24,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$38,300.00	\$38,300.00	\$24,150.00	\$24,150.00	\$24,000.00	\$24,000.00
192	EA	\$500.00	\$5,000.00	\$500.00	\$5,000.00	\$500.00	\$5,000.00	\$300.00	\$3,000.00	\$472.50	\$4,725.00	\$462.00	\$4,620.00
193	LS	\$5,000.00	\$5,000.00	\$5,100.00	\$5,100.00	\$5,000.00	\$5,000.00	\$8,600.00	\$8,600.00	\$6,300.00	\$6,300.00	\$6,200.00	\$6,200.00

Bid Item Detail -

194	AT&T CONDUIT SYSTEM (5TH STREET NORTH, RAILYARDS BOULEVARD)	1	LS	\$68,000.00	\$68,000.00	\$65,000.00	\$65,000.00	\$65,000.00	\$63,500.00	\$63,800.00	\$63,250.00	\$63,250.00	\$67,000.00	\$67,000.00	\$67,000.00
195	AT&T PTS 65 PHONE VAULT	6	EA	\$7,500.00	\$45,000.00	\$7,500.00	\$45,000.00	\$45,000.00	\$3,300.00	\$19,800.00	\$7,250.00	\$7,250.00	\$7,700.00	\$7,700.00	\$46,200.00
196	AT&T PTS 3660 PHONE VAULT	4	EA	\$4,200.00	\$16,000.00	\$4,000.00	\$16,000.00	\$16,000.00	\$3,800.00	\$14,500.00	\$4,200.00	\$4,200.00	\$4,200.00	\$4,200.00	\$16,800.00
197	INJECT CRACK (EPOXY)	150	LF	\$50.00	\$80.00	\$70.00	\$10,500.00	\$10,500.00	\$70.00	\$16,500.00	\$1,500.00	\$1,500.00	\$1,070.00	\$1,070.00	\$16,650.00
198	BRIDGE CANOPIES	1	LS	\$265,000.00	\$300,000.00	\$325,000.00	\$325,000.00	\$325,000.00	\$355,835.00	\$355,835.00	\$210,000.00	\$210,000.00	\$210,000.00	\$210,000.00	\$210,000.00
199	RELOCATE 7TH STREET CONSTRUCTION ENTRANCE	1	LS	\$20,000.00	\$30,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$22,825.00	\$22,825.00	\$22,000.00	\$22,000.00	\$22,000.00
200	CONSTRUCT PAVED ACCESS AT F STREET ENTRANCE	14,400	SF	\$3.00	\$57,600.00	\$4.00	\$57,600.00	\$4.00	\$4.00	\$57,600.00	\$3.25	\$3.25	\$3.50	\$3.50	\$59,400.00
201	ADJUST EXISTING RIM TO GRADE	5	EA	\$2,300.00	\$3,750.00	\$2,500.00	\$2,500.00	\$2,500.00	\$430.00	\$2,150.00	\$475.00	\$475.00	\$2,800.00	\$2,800.00	\$14,500.00
202	1 YEAR MAINTENANCE PERIOD	1	LS	\$5,000.00	\$10,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$3,500.00	\$3,500.00	\$11,500.00	\$11,500.00	\$5,300.00	\$5,300.00	\$3,300.00
203	CDI Initial Trench Backfill	1,065	CY	\$80.00	\$85,200.00	\$80.00	\$80.00	\$80.00	\$725.00	\$133,125.00	\$85.00	\$85.00	\$76.00	\$76.00	\$80,940.00
				\$20,501,725.85	\$20,611,482.60	\$21,416,416.00	\$22,167,031.40	\$20,973,657.30	\$22,691,703.25						

KNOW ALL MEN BY THESE PRESENTS,

That we, _____

as Principal and _____

a corporation duly organized under the laws of the State of _____ and duly licensed to become sole surety on bonds required or authorized by the State of California, as Surety, are held and firmly bound unto the City hereinafter called the City, in the penal sum of ten percent (10%) of the (BASE OR LUMP SUM) Proposal of the Principal above named or other amount as set forth in the Invitation to Bidders submitted by said Principal to the City for the Work described below, for the payment of which sum in lawful money of the United States well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH

That whereas the Principal has submitted the above mentioned Proposal to the City, for which Proposals are to be opened in the Historic City hall, 2nd Floor Conference Room, Sacramento, California, on September 11, 2013 at 2:00pm for the Work specifically described as follows:

**5th Street, 5th Street Viaduct and Railyards Boulevard at Sacramento Railyards
(PN: T15135800)**

NOW, THEREFORE, if the aforesaid Principal is awarded the Contract and within the time and manner required under the Contract Documents, enters into a written Contract, in the prescribed form, in accordance with the Proposal, and files two (2) bonds with the City, one to guarantee faithful performance and the other to guarantee payment for labor and materials, and files the required insurance policies with the City, all as required by the Contract Documents or by law, then the obligation shall be null and void; otherwise it shall be and remain in full force and effect.

In the event suit is brought upon this bond by the Obligee and judgment is recovered, the Surety shall pay all costs incurred by the Obligee in such suit, including a reasonable attorney's fee to be fixed by the court, which sums shall be additional to the principal amount of this bond.

IN WITNESS THEREOF We have hereunto set our hands and seal this _____

day of _____, 20_____.

Contractor (Seal)

Surety (Seal)

By _____

By _____

Title _____

Title _____

ORIGINAL APPROVED AS TO FORM:

City Attorney

Agent Name and Address _____

Agent Phone # _____

Surety Phone # _____

California License # _____



DEPARTMENT OF
PUBLIC WORKS

CITY OF SACRAMENTO
CALIFORNIA

915 I ST
RM 2000
SACRAMENTO, CA
95814-2702

ENGINEERING SERVICES
DIVISION

PH 916-808-8300
FAX 916-808-8281

August 14, 2013,

RE: City of Sacramento Construction Contracting Opportunities

The City of Sacramento is currently soliciting bids for **5th Street, 5th Street Viaduct and Railyards Boulevard at Sacramento Railyards (PN: T15135800)**. The project consists of constructing approximately 712 linear feet of roadway and utility improvements from H Street north to the existing 5th Street Overhead Bridge including accompanying retaining walls and embankments; approximately 391 linear feet of elevated viaduct, approximately 725 linear feet of roadway and utility improvements from the 5th Street Viaduct to Railyards Boulevard, including accompanying retaining walls and embankments; and approximately 2,795 linear feet of roadway and utility improvements from Bercut Drive to 7th Street. The project also includes construction of a lined retention basin as well as the design, fabrication, and installation of a shade structures located at two locations on the 5th Street Overhead Bridge. **Bids to be received Wednesday, September 4, 2013 at 2:00 p.m. The plans may be reviewed at the following locations:**

1. Construction Data & News,
1791 Tribute Rd. Suite D, Sacramento, CA 95815
2. Greater Sacramento Small Business Development Center
1410 Ethan Way, Sacramento, CA 95815
3. Sacramento Builders Exchange
1331 T Street, Sacramento, CA 95814
4. Sacramento Builders Exchange, Roseville Office
1 Sierragate, Suite 290-C, Roseville, CA 95678
5. El Dorado Builders Exchange
3430 Robin Lane, Suite 7, Cameron Park, CA 95682
6. Placer County Builders' Exchange
10656 Industrial Ave, Roseville, CA 95678
7. Construction Market Data
1540 River Park Drive, Suite 117, Sacramento, CA 95815
8. Nevada County Contractors Association
149 Crown Point Ct, Ste A, Grass Valley, CA 95945
9. Shasta Builder's Exchange
2990 Innsbruck Dr, Redding, CA 96003

10. San Francisco Builders Exchange
850 South Van Ness Ave, San Francisco, CA 94110-1911
11. Builders Exchange of Santa Clara
400 Reed Street, Santa Clara, CA 95050
12. Sacramento Hispanic Chamber of Commerce
1491 River Park Drive, Ste #101, Sacramento, CA 95815
13. Fresno Builders Exchange
1244 Mariposa Street, Fresno, CA 93707-0111
14. Peninsula Builders Exchange
735 Industrial Rd, Ste #100, San Carlos, CA 94070
15. California Small Business Entrepreneurs, Inc (CalSBE)
3023 East Myrtle Street, Stockton, CA 95205
16. Sacramento Asian Pacific Chamber of Commerce
2012 H Street, Ste #202, Sacramento, CA 95814
17. Sacramento Black Chamber of Commerce
2655 Del Monte St, West Sacramento, CA 95691
18. Russian Chamber of Commerce
2929 Fulton Ave, Ste #6, Sacramento, CA 95821
19. Builders Exchange of Stockton
7500 West Lane
Stockton, CA 95210

Bidders may obtain the Contract Documents on the web at:
<http://www.planetbids.com/portal.cfm?CompanyID=15300#>.

The construction estimate is **\$23,000,000**. The City Project Manager is **Jon Blank (916) 808-7914**.

QUESTIONS AND RESOLUTION OF DISCREPANCIES: Submit written questions about the Contract Documents to:

Department of Public Works, Engineering Services Division
New City Hall
915 I St, Room 2000
Sacramento, CA 95814
Attention: Jose R. Ledesma (916) 808-8195

Respectfully,

Jose R. Ledesma
Contracts & Compliance Specialist

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VOLUME 2 (ON CD)

Appendix A:	Amendments to the State Standard Specifications
Appendix B:	Construction Work Area and Access Plan
Appendix C:	Bridge Canopy Concept Plans
Appendix D:	Storm Water Pollution Prevention Plan
Appendix E:	5 th Street and Railyards Boulevard Project Soil & Groundwater Management Plan
Appendix F:	Dry Utility Plans and Specifications (SMUD Engineering Specification T007 September 2006, SMUD Drawing UVC1.8B June 2007, 8x14x8 Precast Concrete Manhole Plans 9/2012, Cablecom Specifications, AT&T Specifications, AT&T Specification – A Guide for California Developers of Commercial Property
Appendix G:	Soil Stockpile Plan
Appendix H:	Sacramento Regional Transit Utility Permit, dated April 25, 2012 CPUC Decision to Construct New At Grade Crossing, dated November 29, 2012

Appendix I: Interconnect Installation Routing Exhibits
Appendix J: Bus Shelter Enclosure

INFORMATION HANDOUTS

Geotechnical Report for 5TH Street South Improvements
Geotechnical Report for 5TH Street North and Railyards Boulevard Improvements
Foundation Report for 5TH Street Viaduct
Geotechnical Memorandum, Open Ended PP 16x0.5 Steel Pipe Piles, 5th Street Viaduct
Railyards Ground Water Table 2009
Railyards Specific Plan Draft EIR, August 2007
Railyards Specific Plan Final EIR, November 2007
City Resolution 2007-903: Mitigation Monitoring Program
City Resolution 2007-912: Tentative Map Conditions
City of Sacramento Planning Director Record of Decision, April 18, 2012
5th Street Overhead As-Built Drawings

Prevailing Wage Compliance Monitoring

This project is funded with state bond proceeds and California Labor Code Section 1771.3 requires that the State Department of Industrial Relations (DIR) shall monitor compliance with the prevailing wage requirements, rather than the City, for this project unless the contractor agrees that it has or will enter into a collective bargaining agreement which includes a mechanism for resolving disputes regarding payment of wages, and all of the contractors performing work on the project shall be bound by such agreement. If the selected bidder awarded the contract is a party to such a collective bargaining agreement and if the bidder will require all of its subcontractors performing work on the project to also be a party to such an agreement, then the bidder shall be required to provide City with such certification at the time the contract is executed. City will rely on such certification to exempt this project from DIR monitoring and the City will undertake the prevailing wage compliance verification. Bidders are informed that if DIR monitors compliance with the prevailing wage requirements for this project, DIR's Compliance Monitoring Unit must verify the contractor's certified payroll records are in compliance with such requirements before City can release progress payments.

Sealed Proposals will be received by the City Clerk of the City of Sacramento at the office of the City Clerk, New City Hall, located at 915 I Street, Suite 1119, Sacramento, CA 95814, up to the hour of 2:00P.M. on **September 4, 2013** and will be opened as soon thereafter as business allows, in the Second Floor Conference Room, Historic City Hall for:

5th Street, 5th Street Viaduct and Railyards Boulevard at Sacramento Railyards

(PN: T15135800)

as set forth in the Contract Documents.

Proposals received and work performed thereunder shall comply with the requirements of Title 3 of the Sacramento City Code. Each Bid Proposal shall be accompanied by bid security of at least 10% of the sum of the Bid Proposal which conforms to the requirements of Section 7.0 of the Instructions to Bidders. The right to reject Proposals or to waive any error or omission in any Bid Proposal received is reserved by the Owner. Signed proposals shall be submitted on the printed forms contained in the Project Manual and enclosed in an envelope marked: Sealed Bid Proposal for:

5th Street, 5th Street Viaduct and Railyards Boulevard at Sacramento Railyards

(PN: T15135800)

Copies of the Contract Documents and Information Handouts are available at

<http://www.planetbids.com/portal.cfm?CompanyID=15300#>

Contract: Contract provisions, requirements and general conditions will be per the sample AGREEMENT BETWEEN OWNER AND CONTRACTOR FOR THE 5TH STREET, 5TH STREET VIADUCT AND RAILYARDS BOULEVARD AT SACRAMENTO RAILYARDS included with this bid package.

Scope of work: The project consists of constructing approximately 712 linear feet of roadway and utility improvements from H Street north to the existing 5th Street Overhead Bridge including accompanying retaining walls and embankments; approximately 391 linear feet of elevated viaduct, approximately 725 linear feet of roadway and utility improvements from the 5th Street Viaduct to Railyards Boulevard, including accompanying retaining walls and embankments; and approximately 2,795 linear feet of roadway and utility improvements from Bercut Drive to 7th Street. The project also includes construction of a lined retention basin as well as the design, fabrication, and installation of a shade structures located at two locations on the 5th Street Overhead Bridge.

The Owner reserves the right in its sole and absolute discretion to reject all bids in response to this Bid Invitation.

At the time this contract is awarded, the Contractor shall possess either a Class A license or a combination of Class C licenses which constitutes a majority of the work.

The Contractor shall perform with their own organization and with the assistance of workers under their immediate superintendent, work of a value not less than **twenty percent (20%)** of the value of all work in the Contract.

Subcontractors shall comply with the rates of wages currently established by the Director of Industrial Relations under provisions of Sections 1773 of the Labor Code of the State of California, a copy of which is on file in the office of the City Clerk. In accordance with Sacramento City Code Section 3.60.180 and Section 1771.5 of the California Labor Code, the payment of the general prevailing rate of per diem wages or the general prevailing rate of per diem wages for holiday and overtime is not required for any Public Construction project of \$25,000 or less, or Public Maintenance project of \$15,000 or less. The City of Sacramento has an approved Labor Compliance

Program. **The City uses an electronic system for the submission of Labor Compliance Reports is effective May 1, 2007.** Each contractor and every lower-tier subcontractor is required to submit certified payrolls and labor compliance documentation electronically at the discretion of and in the manner specified by the City of Sacramento.

Electronic submittal will be a web-based system, accessed on the World Wide Web by a web browser. Each contractor and subcontractor will be given a Log On identification and password to access the City of Sacramento reporting system.

Use of the system may entail additional data entry of weekly payroll information including; employee identification, labor classification, total hours worked and hours worked on this project, wage and benefit rates paid, etc. The contractor's payroll and accounting software might be capable of generating a 'comma delimited file' that will interface with the software.

This requirement will be 'flowed down' to every lower-tier subcontractor and vendor required to provide labor compliance documentation.

All questions regarding this Labor Compliance Program should be directed to the department's contracts staff or Contracts Services at (916) 808-5524.

Pursuant to Sacramento City Code Section 3.60.250, any Agreement awarded pursuant to this Invitation to Bid shall contain a provision permitting the substitution of securities for any monies withheld to ensure performance under the Agreement. The terms of such provisions shall be according to the requirements and the form required by the City.

Bid protests must be filled and maintained in accordance with the provisions of Sections 3.60.460 through 3.60.560 of the Sacramento City Code. Bid protests that do not comply with Sections 3.60.460 through 3.60.560 of the Sacramento City Code shall be invalid and shall not be considered. A bid protest fee of \$750.00 is required at the time of filing to be considered valid in accordance with City of Sacramento Resolution No. 2003-231 dated April 29, 2003. As used herein, the term "bid protest" includes any bid protest that (1) claims that one or more bidders on this contract should be disqualified or rejected for any reason, or (2) contests a City staff recommendation to award this contract to a particular bidder, or (3) contests a City staff recommendation to disqualify or reject one or more bidders on this contract. A copy of Sections 3.60.460 through 3.60.560 of the Sacramento City Code may be obtained from the Project Manager, or from the City Clerk, located at 915 I Street, Ste 116, Sacramento, CA 95814.

ESBE REQUIREMENTS

(City Construction Contracts no Federal Funds Used)

I. ESBE PARTICIPATION REQUIREMENT

On February 9, 1999, the Sacramento City Council adopted an Emerging and Small Business Development (ESBD) program to provide enhanced opportunities for the participation of small business enterprises (SBEs) and emerging business enterprises (EBEs) in the City's contracting and procurement activities. The ESBD program establishes an annual emerging and small business enterprise (ESBE) participation goal for City contracts, and authorizes City departments to require minimum ESBE participation levels in individual contracts so that the annual ESBE participation goal can be met. Under City Code section 3.60.270, when the bid specifications for a City contract establish a minimum participation level for ESBEs, no bidder on the contract shall be considered a responsive bidder unless its bid meets the minimum ESBE participation level required by the bid specifications.

The City has established a **minimum 20% participation level for ESBEs on this contract**. Pursuant to City code Section 3.60.270, no bidder on this contract shall be considered a responsive bidder unless its bid meets or exceeds this minimum participation level.

Bidders shall submit copies of their Certification as a SBE or EBE, and the SBE or EBE Certifications for each subcontractor, supplier, or other SBE or EBE business entity listed in the bidder's sealed proposal, within two (2) working days after being requested to do so by City. Failure to submit the requested ESBE information within this time period will be grounds for finding the bid non-responsive.

II. ESBE CERTIFICATION

- A. A SBE designated in the bid must be certified as such by the State of California, Department of General Services, or by the City, prior to the time bids are received by the City.
- B. An EBE designated in the bid must be certified as such by the City prior to the time bids are received by the City.

III. DETERMINATION OF ESBE PARTICIPATION LEVEL

- A. ESBE Participation: The percent of ESBE participation shall be determined based on the dollar value of the work to be performed or supplies to be furnished by certified ESBEs designated in the bidder's Subcontractor and ESBE Participation Verification Form, relative to the total dollar amount of the bid.
- B. Participation Credit: To receive credit for participation:(1) an ESBE subcontractor must be responsible for the execution of a distinct element of the work, must possess any license or certification required for the work, and must carry its responsibility by actually performing, managing, or supervising the work without subcontracting or otherwise shifting any portion of the work to another

subcontractor; and (2) an ESBE supplier must be furnishing materials, equipment, or supplies that the supplier sells as a recurring, although not necessarily primary, part of its business, and that are necessary for performance of the work.

- C. ESBE Bidders: The dollar value listed for an ESBE bidder on the bidder's Subcontractor and ESBE Participation Verification Form shall include only the amount of work to be performed by the ESBE bidder, and shall not include any amount to be paid by the ESBE bidder for the cost of materials, equipment, or supplies.
- D. Suppliers: Credit for an ESBE supplier of materials, equipment, or supplies is counted as one hundred (100) percent of the amount paid to the supplier for the material, equipment, or supplies. To receive this credit, ESBE suppliers must be listed on the bidder's Subcontractor and ESBE Participation Verification Form.
- E. Subcontractors (including truckers): To receive credit for an ESBE subcontractor, the subcontractor must be listed on the bidder's Subcontractor and ESBE Participation Verification Form. The dollar value listed for a subcontractor on the bidder's Subcontractor and ESBE Participation Verification Form shall not include any amount to be paid to the subcontractor for the cost of materials, equipment, or supplies.
 - Truckers: Credit for an ESBE trucker is counted as one hundred (100) percent of the amount paid to the trucker for trucking services, not including any amount paid to the trucker for the cost of any materials, equipment, or supplies being transported by the trucker.

IV. ESBE REQUIREMENTS FOR CONTRACTOR

- A. ESBE Records: The Contractor shall maintain records of all subcontracts with certified ESBE subcontractors and records of materials purchased from certified ESBE suppliers for one (1) year after receiving final payment from the City. Such records shall show the name and business address of each ESBE subcontractor or supplier and the total dollar amount actually paid each ESBE subcontractor or supplier.

Not later than 30 days after completion of the work performed under the contract, a summary of these records shall be prepared, certified correct by the Contractor's authorized representative and furnished to the City. The Contractor shall provide such other information, records, reports, certifications or other documents as may be required by City, to determine compliance with any provision of the ESBE program or these specifications.

- B. Performance of ESBE Subcontractors and Suppliers: The ESBEs listed by the Contractor shall perform the work and supply the materials, equipment, and supplies for which they are listed unless the Contractor has received prior written

authorization from the City to perform the work with other forces or to obtain the material, equipment, or supplies from other sources. Reasons for requesting such authorization would include:

1. The listed ESBE fails to execute a written contract based upon the general terms, conditions, plans, and specifications for the project.
 2. The listed ESBE becomes bankrupt or insolvent.
 3. The listed ESBE subcontractor fails to meet the bond requirements of the Contractor.
 4. The work performed or the materials/equipment/supplies provided by the listed ESBE are unsatisfactory or are not in accordance with the plans and specifications, or the listed ESBE fails to perform its contractual obligations.
 5. It would be in the best interest of the City.
- C. Subcontractor Substitution: No substitution of an ESBE subcontractor shall be made at any time without compliance with the Subletting and Subcontracting Fair Practices Act. If an ESBE subcontractor is unable to perform successfully and is to be replaced, the Contractor shall make reasonable efforts to replace the original ESBE subcontractor with another certified ESBE subcontractor. The new ESBE subcontractor must be certified at the time of substitution.
- D. Reporting and Utilization Requirements and Sanctions: Failure to provide specific information, records, reports, certifications, or any other documents required for compliance with these specifications, or failure to utilize one or more ESBEs in substantial compliance with the ESBE utilization indicated in the Contractor's bid (unless otherwise authorized by City as provided herein, or when such failure results from changes to the work approved by the City), shall be considered a breach of the contract, and a deduction may be made from the contract amount. The deduction shall be not more than ten (10) percent of the value of the work or materials/equipment/supplies that the subject ESBE(s) were listed to perform/provide in the Contractor's bid, and shall be deducted from any payment due to the Contractor. This is in addition to any deduction that may be made under any other provision of the contract, the Sacramento City Code, or State law.
- E. Hearing and Review of Division Manager Decision: Prior to making a deduction pursuant to Section IV(D), above, the City shall provide written notice of the proposed deduction to the Contractor, and the Contractor may, not later than five (5) working days after receiving such notice, provide a written request to City for a hearing to contest the proposed deduction. Upon receipt of a timely written request from the Contractor, the City shall schedule a hearing before the Division Manager (as defined in the City's Standard Specifications for Public Construction), and written notice of the date, time and location of the hearing shall be provided to the Contractor not less than five (5) working days prior to the date of the hearing. The

hearing shall be conducted in the manner specified in Section 4-8 of the Standard Specifications, and the Division Manager shall prepare and forward to the Contractor a written decision as soon as practicable after the hearing. The Division Manager's decision shall be subject to review in accordance with the provisions of Section 4-9 of the Standard Specifications. Failure to request such review in compliance with the requirements set forth in Section 4-9 shall constitute acceptance of the Division Manager's decision by the Contractor.

The written notices and requests described above shall be provided by registered or certified mail (return receipt requested), by telecopy, by personal delivery, or by any other method that provides reliable evidence of the date of receipt. Written notice provided by telecopy shall be deemed received on the date that it is transmitted and transmission is confirmed by the transmitting machine. Written notice provided by personal delivery shall be deemed received on the date of delivery.

V. DEFINITIONS

- A. Emerging Business Enterprise (EBE): The City shall certify EBEs utilizing the small business certification criteria and standards of the State of California, General Services Department, Office of Small Business and DVBE Services, that were in effect on December 1, 1998, provided that the size standard, industry by industry, shall be set at 50% of the State small business certification criteria and standards that were in effect on December 1, 1998.
- B. Small Business Enterprise (SBE): The City shall certify SBEs utilizing the current small business certification criteria and standards of the State of California, General Services Department, Office of Small Business and DVBE Services. The City will also accept State certified SBEs.
- C. The small business certification criteria and standards of the State of California, General Services Department, Office of Small Business and DVBE Services shall be used only for the purpose of determining whether a firm may receive certification as an EBE or SBE.
- D. Contractor: The sole proprietorship, partnership, limited liability company, corporation, or any other business entity entering into a contract with the City of Sacramento.
- E. Subcontractor: The sole proprietorship, partnership, limited liability company, corporation, or other business entity entering into a contract with the prime contractor to perform a portion of the work.
- F. Supplier: The sole proprietorship, partnership, limited liability company, corporation, or other business entity entering into a contract with the prime contractor to provide materials, equipment, or supplies necessary for performance of the work.

**EXCERPTS FROM THE CALIFORNIA LABOR CODE RELATING TO APPRENTICES
ON PUBLIC WORKS**

**Chapter 1 of Division 2
APPRENTICES ON PUBLIC WORKS**

1773.3. An awarding agency whose public works contract falls within the jurisdiction of Section 1777.5 shall, within five days of the award, send a copy of the award to the Division of Apprenticeship Standards. When specifically requested by a local joint apprenticeship committee, the division shall notify the local joint apprenticeship committee regarding all such awards applicable to the joint apprenticeship committee making the request. Within five days of a finding of any discrepancy regarding the ratio of apprentices to journeymen, pursuant to the certificated fixed number of apprentices to journeymen, the awarding agency shall notify the Division of Apprenticeship Standards.

1773.5. The Director of Industrial Relations may establish rules and regulations for the purpose of carrying out this chapter, including, but not limited to, the responsibilities and duties of awarding bodies under this chapter.

1776. (a) Each contractor and subcontractor shall keep accurate payroll records, showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by him or her in connection with the public work. Each payroll record shall contain or be verified by a written declaration that it is made under penalty of perjury, stating both of the following:

(1) The information contained in the payroll record is true and correct.

(2) The employer has complied with the requirements of Sections 1771, 1811, and 1815 for any work performed by his or her employees on the public works project.

(b) The payroll records enumerated under subdivision (a) shall be certified and shall be available for inspection at all reasonable hours at the principal office of the contractor on the following basis:

(1) A certified copy of an employee's payroll record shall be made available for inspection or furnished to the employee or his or her authorized representative on request.

(2) A certified copy of all payroll records enumerated in subdivision (a) shall be made available for inspection or furnished upon request to a representative of the body awarding the contract, the Division of Labor Standards Enforcement, and the Division of Apprenticeship Standards of the Department of Industrial Relations.

(3) A certified copy of all payroll records enumerated in subdivision (a) shall be made available upon request by the public for inspection or for copies thereof. However, a request by the public shall be made through either the body awarding the contract, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement. If the requested payroll records have not been provided pursuant to paragraph (2), the requesting party shall, prior to being provided the records, reimburse the costs of preparation by the contractor, subcontractors, and the entity through which the request was made. The public may not be given access to the records at the principal office of the contractor.

**EXCERPTS FROM THE CALIFORNIA LABOR CODE RELATING TO APPRENTICES
ON PUBLIC WORKS (cont.)**

(c) The certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement or shall contain the same information as the forms provided by the division. The payroll records may consist of printouts of payroll data that are maintained as computer records, if the printouts contain the same information as the forms provided by the division and the printouts are verified in the manner specified in subdivision (a).

(d) A contractor or subcontractor shall file a certified copy of the records enumerated in subdivision (a) with the entity that requested the records within 10 days after receipt of a written request.

(e) Except as provided in subdivision (f), any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by the awarding body, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement shall be marked or obliterated to prevent disclosure of an individual's name, address, and social security number. The name and address of the contractor awarded the contract or the subcontractor performing the contract shall not be marked or obliterated. Any copy of records made available for inspection by, or furnished to, a joint labor-management committee established pursuant to the federal Labor Management Cooperation Act of 1978 (29 U.S.C. Sec. 175a) shall be marked or obliterated only to prevent disclosure of an individual's name and social security number. A joint labor management committee may maintain an action in a court of competent jurisdiction against an employer who fails to comply with Section 1774. The court may award restitution to an employee for unpaid wages and may award the joint labor management committee reasonable attorney's fees and costs incurred in maintaining the action. An action under this subdivision may not be based on the employer's misclassification of the craft of a worker on its certified payroll records. Nothing in this subdivision limits any other available remedies for a violation of this chapter.

(f) (1) Notwithstanding any other provision of law, agencies that are included in the Joint Enforcement Strike Force on the Underground Economy established pursuant to Section 329 of the Unemployment Insurance Code and other law enforcement agencies investigating violations of law shall, upon request, be provided nonredacted copies of certified payroll records. Any copies of records or certified payroll made available for inspection and furnished upon request to the public by an agency included in the Joint Enforcement Strike Force on the Underground Economy or to a law enforcement agency investigating a violation of law shall be marked or redacted to prevent disclosure of an individual's name, address, and social security number.

(2) An employer shall not be liable for damages in a civil action for any reasonable act or omission taken in good faith in compliance with this subdivision.

(g) The contractor shall inform the body awarding the contract of the location of the records enumerated under subdivision (a), including the street address, city, and county, and shall, within five working days, provide a notice of a change of location and address.

(h) The contractor or subcontractor has 10 days in which to comply subsequent to receipt of a written notice requesting the records enumerated in subdivision (a). In the event that the contractor or subcontractor fails to comply within the 10-day period, he or she shall, as a penalty to the state or political subdivision on whose behalf the contract is made or awarded, forfeit one hundred dollars (\$100) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due. A contractor is not

**EXCERPTS FROM THE CALIFORNIA LABOR CODE RELATING TO APPRENTICES
ON PUBLIC WORKS (cont.)**

subject to a penalty assessment pursuant to this section due to the failure of a subcontractor to comply with this section.

(i) The body awarding the contract shall cause to be inserted in the contract stipulations to effectuate this section.

(j) The director shall adopt rules consistent with the California Public Records Act (Chapter 3.5 (commencing with Section 6250) of Division 7 of Title 1 of the Government Code) and the Information Practices Act of 1977 (Title 1.8 (commencing with Section 1798) of Part 4 of Division 3 of the Civil Code) governing the release of these records, including the establishment of reasonable fees to be charged for reproducing copies of records required by this section.

1777.5. (a) Nothing in this chapter shall prevent the employment of properly registered apprentices upon public works.

(b) Every apprentice employed upon public works shall be paid the prevailing rate of per diem wages for apprentices in the trade to which he or she is registered and shall be employed only at the work of the craft or trade to which he or she is registered.

(c) Only apprentices, as defined in Section 3077, who are in training under apprenticeship standards that have been approved by the Chief of the Division of Apprenticeship Standards and who are parties to written apprentice agreements under Chapter 4 (commencing with Section 3070) of Division 3 are eligible to be employed at the apprentice wage rate on public works. The employment and training of each apprentice shall be in accordance with either of the following:

- (1) The apprenticeship standards and apprentice agreements under which he or she is training.
- (2) The rules and regulations of the California Apprenticeship Council.

(d) When the contractor to whom the contract is awarded by the state or any political subdivision, in performing any of the work under the contract, employs workers in any apprenticeable craft or trade, the contractor shall employ apprentices in at least the ratio set forth in this section and may apply to any apprenticeship program in the craft or trade that can provide apprentices to the site of the public work for a certificate approving the contractor under the apprenticeship standards for the employment and training of apprentices in the area or industry affected. However, the decision of the apprenticeship program to approve or deny a certificate shall be subject to review by the Administrator of Apprenticeship. The apprenticeship program or programs, upon approving the contractor, shall arrange for the dispatch of apprentices to the contractor. A contractor covered by an apprenticeship program's standards shall not be required to submit any additional application in order to include additional public works contracts under that program. "Apprenticeable craft or trade," as used in this section, means a craft or trade determined as an apprenticeable occupation in accordance with rules and regulations prescribed by the California Apprenticeship Council. As used in this section, "contractor" includes any subcontractor under a contractor who performs any public works not excluded by subdivision (c).

(e) Prior to commencing work on a contract for public works, every contractor shall submit contract award information to an applicable apprenticeship program that can supply apprentices to the site of the public work. The information submitted shall include an estimate of journeyman hours to be performed under the contract, the number of apprentices proposed to be employed, and the

**EXCERPTS FROM THE CALIFORNIA LABOR CODE RELATING TO APPRENTICES
ON PUBLIC WORKS (cont.)**

approximate dates the apprentices would be employed. A copy of this information shall also be submitted to the awarding body if requested by the awarding body. Within 60 days after concluding work on the contract, each contractor and subcontractor shall submit to the awarding body, if requested, and to the apprenticeship program a verified statement of the journeyman and apprentice hours performed on the contract. The information under this subdivision shall be public. The apprenticeship programs shall retain this information for 12 months.

(f) The apprenticeship program that can supply apprentices to the area of the site of the public work shall ensure equal employment and affirmative action in apprenticeship for women and minorities.

(g) The ratio of work performed by apprentices to journeymen employed in a particular craft or trade on the public work may be no higher than the ratio stipulated in the apprenticeship standards under which the apprenticeship program operates where the contractor agrees to be bound by those standards, but, except as otherwise provided in this section, in no case shall the ratio be less than one hour of apprentice work for every five hours of journeyman work.

(h) This ratio of apprentice work to journeyman work shall apply during any day or portion of a day when any journeyman is employed at the jobsite and shall be computed on the basis of the hours worked during the day by journeymen so employed. Any work performed by a journeyman in excess of eight hours per day or 40 hours per week shall not be used to calculate the ratio. The contractor shall employ apprentices for the number of hours computed as above before the end of the contract or, in the case of a subcontractor, before the end of the subcontract. However, the contractor shall endeavor, to the greatest extent possible, to employ apprentices during the same time period that the journeymen in the same craft or trade are employed at the jobsite. Where an hourly apprenticeship ratio is not feasible for a particular craft or trade, the Chief of the Division of Apprenticeship Standards, upon application of an apprenticeship program, may order a minimum ratio of not less than one apprentice for each five journeymen in a craft or trade classification.

(i) A contractor covered by this section that has agreed to be covered by an apprenticeship program's standards upon the issuance of the approval certificate, or that has been previously approved for an apprenticeship program in the craft or trade, shall employ the number of apprentices or the ratio of apprentices to journeymen stipulated in the applicable apprenticeship standards, but in no event less than the 1-to-5 ratio required by subdivision (g).

(j) Upon proper showing by a contractor that he or she employs apprentices in a particular craft or trade in the state on all of his or her contracts on an annual average of not less than one hour of apprentice work for every five hours of labor performed by journeymen, the Chief of the Division of Apprenticeship Standards may grant a certificate exempting the contractor from the 1-to-5 hourly ratio, as set forth in this section for that craft or trade.

(k) An apprenticeship program has the discretion to grant to a participating contractor or contractor association a certificate, which shall be subject to the approval of the Administrator of Apprenticeship, exempting the contractor from the 1-to-5 ratio set forth in this section when it finds that any one of the following conditions is met:

(1) Unemployment for the previous three-month period in the area exceeds an average of 15 percent.

(2) The number of apprentices in training in the area exceeds a ratio of 1 to 5.

**EXCERPTS FROM THE CALIFORNIA LABOR CODE RELATING TO APPRENTICES
ON PUBLIC WORKS (cont.)**

(3) There is a showing that the apprenticeable craft or trade is replacing at least one-thirtieth of its journeymen annually through apprenticeship training, either on a statewide basis or on a local basis.

(4) Assignment of an apprentice to any work performed under a public works contract would create a condition that would jeopardize his or her life or the life, safety, or property of fellow employees or the public at large, or the specific task to which the apprentice is to be assigned is of a nature that training cannot be provided by a journeyman.

(l) When an exemption is granted pursuant to subdivision (k) to an organization that represents contractors in a specific trade from the 1-to-5 ratio on a local or statewide basis, the member contractors shall not be required to submit individual applications for approval to local joint apprenticeship committees, if they are already covered by the local apprenticeship standards.

(m) (1) A contractor to whom a contract is awarded, who, in performing any of the work under the contract, employs journeymen or apprentices in any apprenticeable craft or trade shall contribute to the California Apprenticeship Council the same amount that the director determines is the prevailing amount of apprenticeship training contributions in the area of the public works site. A contractor may take as a credit for payments to the council any amounts paid by the contractor to an approved apprenticeship program that can supply apprentices to the site of the public works project. The contractor may add the amount of the contributions in computing his or her bid for the contract.

(2) At the conclusion of the 2002-03 fiscal year and each fiscal year thereafter, the California Apprenticeship Council shall distribute training contributions received by the council under this subdivision, less the expenses of the Division of Apprenticeship Standards for administering this subdivision, by making grants to approved apprenticeship programs for the purpose of training apprentices. The funds shall be distributed as follows:

(A) If there is an approved multiemployer apprenticeship program serving the same craft or trade and geographic area for which the training contributions were made to the council, a grant to that program shall be made.

(B) If there are two or more approved multiemployer apprenticeship programs serving the same craft or trade and geographic area for which the training contributions were made to the council, the grant shall be divided among those programs based on the number of apprentices registered in each program.

(C) All training contributions not distributed under subparagraphs (A) and (B) shall be used to defray the future expenses of the Division of Apprenticeship Standards.

(3) All training contributions received pursuant to this subdivision shall be deposited in the Apprenticeship Training Contribution Fund, which is hereby created in the State Treasury. Upon appropriation by the Legislature, all money in the Apprenticeship Training Contribution Fund shall be used for the purpose of carrying out this subdivision and to pay the expenses of the Division of Apprenticeship Standards.

**EXCERPTS FROM THE CALIFORNIA LABOR CODE RELATING TO APPRENTICES
ON PUBLIC WORKS (cont.)**

(n) The body awarding the contract shall cause to be inserted in the contract stipulations to effectuate this section. The stipulations shall fix the responsibility of compliance with this section for all apprenticeable occupations with the prime contractor.

(o) This section does not apply to contracts of general contractors or to contracts of specialty contractors not bidding for work through a general or prime contractor when the contracts of general contractors or those specialty contractors involve less than thirty thousand dollars (\$30,000).

(p) All decisions of an apprenticeship program under this section are subject to Section 3081. 1777.6. An employer or a labor union shall not refuse to accept otherwise qualified employees as registered apprentices on any public works on any basis listed in subdivision (a) of Section 12940 of the Government Code, as those bases are defined in Sections 12926 and 12926.1 of the Government Code, except as provided in Section 3077 of this code and Section 12940 of the Government Code.

1777.7. (a) (1) A contractor or subcontractor that is determined by the Chief of the Division of Apprenticeship Standards to have knowingly violated Section 1777.5 shall forfeit as a civil penalty an amount not exceeding one hundred dollars (\$100) for each full calendar day of noncompliance. The amount of this penalty may be reduced by the Chief if the amount of the penalty would be disproportionate to the severity of the violation. A contractor or subcontractor that knowingly commits a second or subsequent violation of Section 1777.5 within a three-year period, where the noncompliance results in apprenticeship training not being provided as required by this chapter, shall forfeit as a civil penalty the sum of not more than three hundred dollars (\$300) for each full calendar day of noncompliance. Notwithstanding Section 1727, upon receipt of a determination that a civil penalty has been imposed by the Chief, the awarding body shall withhold the amount of the civil penalty from contract progress payments then due or to become due.

(2) In lieu of the penalty provided for in this subdivision, the Chief may, for a first-time violation and with the concurrence of an apprenticeship program described in subdivision (d), order the contractor or subcontractor to provide apprentice employment equivalent to the work hours that would have been provided for apprentices during the period of noncompliance.

(b) In the event a contractor or subcontractor is determined by the Chief to have knowingly committed a serious violation of any provision of Section 1777.5, the Chief may also deny to the contractor or subcontractor, and to its responsible officers, the right to bid on or be awarded or perform work as a subcontractor on any public works contract for a period of up to one year for the first violation and for a period of up to three years for a second or subsequent violation. Each period of debarment shall run from the date the determination of noncompliance by the Chief becomes a final order of the Administrator of Apprenticeship.

(c) (1) An affected contractor, subcontractor, or responsible officer may obtain a review of the determination of the Chief imposing the debarment or civil penalty by transmitting a written request to the office of the Administrator within 30 days after service of the determination of debarment or civil penalty. A copy of this report shall also be served on the Chief. If the Administrator does not receive a timely request for review of the determination of debarment or civil penalty made by the Chief, the order shall become the final order of the Administrator.

(2) Within 20 days of the timely receipt of a request for review, the Chief shall provide the contractor, subcontractor, or responsible officer the opportunity to review any evidence the

**EXCERPTS FROM THE CALIFORNIA LABOR CODE RELATING TO APPRENTICES
ON PUBLIC WORKS (cont.)**

Chief may offer at the hearing. The Chief shall also promptly disclose any nonprivileged documents obtained after the 20-day time limit at a time set forth for exchange of evidence by the Administrator.

(3) Within 90 days of the timely receipt of a request for review, a hearing shall be commenced before the Administrator or an impartial hearing officer designated by the Administrator and possessing the qualifications of an administrative law judge pursuant to subdivision (b) of Section 11502 of the Government Code. The affected contractor, subcontractor, or responsible officer shall have the burden of providing evidence of compliance with Section 1777.5.

(4) Within 45 days of the conclusion of the hearing, the Administrator shall issue a written decision affirming, modifying, or dismissing the determination of debarment or civil penalty. The decision shall contain a statement of the factual and legal basis for the decision and an order. This decision shall be served on all parties and the awarding body pursuant to Section 1013 of the Code of Civil Procedure by first-class mail at the last known address of the party that the party has filed with the Administrator. Within 15 days of issuance of the decision, the Administrator may reconsider or modify the decision to correct an error, except that a clerical error may be corrected at any time.

(5) An affected contractor, subcontractor, or responsible officer who has timely requested review and obtained a decision under paragraph (4) may obtain review of the decision of the Administrator by filing a petition for a writ of mandate to the appropriate superior court pursuant to Section 1094.5 of the Code of Civil Procedure within 45 days after service of the final decision. If no timely petition for a writ of mandate is filed, the decision shall become the final order of the Administrator. The decision of the Administrator shall be affirmed unless the petitioner shows that the Administrator abused his or her discretion. If the petitioner claims that the findings are not supported by the evidence, abuse of discretion is established if the court determines that the findings are not supported by substantial evidence in light of the entire record.

(6) The Chief may certify a copy of the final order of the Administrator and file it with the clerk of the superior court in any county in which the affected contractor or subcontractor has property or has or had a place of business. The clerk, immediately upon the filing, shall enter judgment for the state against the person assessed in the amount shown on the certified order. A judgment entered pursuant to this section shall bear the same rate of interest and shall have the same effect as other judgments and be given the same preference allowed by the law on other judgments rendered for claims for taxes. The clerk shall not charge for the service performed by him or her pursuant to this section. An awarding body that has withheld funds in response to a determination by the Chief imposing a penalty under this section shall, upon receipt of a certified copy of a final order of the Administrator, promptly transmit the withheld funds, up to the amount of the certified order, to the Administrator.

(d) If a subcontractor is found to have violated Section 1777.5, the prime contractor of the project is not liable for any penalties under subdivision (a), unless the prime contractor had knowledge of the subcontractor's failure to comply with the provisions of Section 1777.5 or unless the prime contractor fails to comply with any of the following requirements:

**EXCERPTS FROM THE CALIFORNIA LABOR CODE RELATING TO APPRENTICES
ON PUBLIC WORKS (cont.)**

(1) The contract executed between the contractor and the subcontractor or the performance of work on the public works project shall include a copy of the provisions of Sections 1771, 1775, 1776, 1777.5, 1813, and 1815.

(2) The contractor shall continually monitor a subcontractor's use of apprentices required to be employed on the public works project pursuant to subdivision (d) of Section 1777.5, including, but not limited to, periodic review of the certified payroll of the subcontractor.

(3) Upon becoming aware of a failure of the subcontractor to employ the required number of apprentices, the contractor shall take corrective action, including, but not limited to, retaining funds due the subcontractor for work performed on the public works project until the failure is corrected.

(4) Prior to making the final payment to the subcontractor for work performed on the public works project, the contractor shall obtain a declaration signed under penalty of perjury from the subcontractor that the subcontractor has employed the required number of apprentices on the public works project.

(e) Any funds withheld by the awarding body pursuant to this section shall be deposited in the General Fund if the awarding body is a state entity, or in the equivalent fund of an awarding body if the awarding body is an entity other than the state.

(f) The Chief shall consider, in setting the amount of a monetary penalty, in determining whether a violation is serious, and in determining whether and for how long a party should be debarred for violating this section, all of the following circumstances:

(1) Whether the violation was intentional.

(2) Whether the party has committed other violations of Section 1777.5.

(3) Whether, upon notice of the violation, the party took steps to voluntarily remedy the violation.

(4) Whether, and to what extent, the violation resulted in lost training opportunities for apprentices.

(5) Whether, and to what extent, the violation otherwise harmed apprentices or apprenticeship programs. If a party seeks review of a decision by the Chief to impose a monetary penalty or period of debarment, the Administrator shall decide de novo the appropriate penalty, by considering the same factors set forth above.

(g) The interpretation of Section 1777.5 and this section shall be in accordance with the regulations of the California Apprenticeship Council. The Administrator may adopt regulations to establish guidelines for the imposition of monetary penalties and periods of debarment and may designate precedential decisions under Section 11425.60 of the Government Code.

**NOTE: THE ABOVE CALIFORNIA LABOR CODE SECTIONS ARE AVAILABLE
FROM THE INTERNET @ www.dir.ca.gov/.**

DAS 10 (Rev. 02-12)

JOINT VENTURE
(Only applicable for Joint Ventures)

If two or more prospective bidders desire to bid jointly as a joint venture, then they must comply with the provisions of Section 2-16 of the City of Sacramento Specifications, which includes filing the attached affidavit of joint venture with the City Engineer prior to the time for opening of bids. If the affidavit of joint venture is not filed and approved by the City Engineer prior to the time for opening bids, then the bid submitted by the joint venture shall be rejected.

AFFIDAVIT OF JOINT VENTURE*

We the undersigned, each a currently licensed contractor in the State of California, have entered into a joint venture to bid on and perform the work of the project listed below for the City of Sacramento. The provisions of this joint venture are such that each of the members makes their assets available for this joint venture. Bonds and insurance required by the project must be executed in the name of the joint venture.

PROJECT NO. _____

BIDS RECEIVED AT _____ P.M. ON _____
(Month, Day, Year)

NAME OF THE JOINT VENTURE: _____

MEMBERS OF THE JOINT VENTURE

1. Name and Address of Entity or Individual	Signature and Title**
_____	_____
_____	_____

Subscribed and sworn to before me, this _____ day of _____
(Day) (Month, Year)

Notary Public in and for the County of _____, California.

2. Name and Address of Entity or Individual	Signature and Title**
_____	_____
_____	_____

Subscribed and sworn to before me, this _____ day of _____
(Day) (Month, Year)

Notary Public in and for the County of _____, California.

*This affidavit must be accompanied by a completed certificate of acknowledgement in the form specified in California Civil Code section 1189 for each member of the joint venture.

**For corporations, this affidavit must be executed by the president, vice president, secretary, or assistant secretary of the corporation.

State of California

County of _____

On _____ before me, (here insert name and title of the officer), personally appeared

_____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

State of California

County of _____

On _____ before me, (here insert name and title of the officer), personally appeared

_____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

BID PROPOSAL FORMS

PLEASE REMOVE AND
COMPLETE
THE FOLLOWING DOCUMENTS
AND
SUBMIT AS
THE BID PROPOSAL
PACKAGE

O.C. Jones & Sons, Inc.

BID SUBMITTAL CHECKLIST

**5TH STREET, 5TH STREET VIADUCT AND RAILYARDS BOULEVARD AT
SACRAMENTO RAILYARDS (PN: T15135800)**

The following items are required to be submitted as part of the Bid Proposal. Failure to do so will result in the Bid being declared non-responsive.

	Pages
Bid Proposal Form	1-10
Equipment List	1 only
Bid Proposal Guarantee	1 only
Drug Free Work Place Certification	1 only
Minimum Qualifications Questionnaire	1-6
Non-Discrimination in Employee Benefits Ordinance Certification	1-9
E/SBE Subcontractor Form*	1 only

*Documentation of subcontractor E/SBE certification is due by no later than close of business two (2) working days after bid opening. Subcontractor list is due with submission of bid. This information is due to Dept of Transportation, Attn: Jose R. Ledesma, 915 I Street, Room 2000, Sacramento CA 95814. Email: jlledesma@cityofsacramento.org or fax: 916-808-8281.

TO THE HONORABLE CITY COUNCIL
SACRAMENTO, CALIFORNIA:

In compliance with the Contract Documents, the undersigned hereby proposes to furnish all required labor, materials, supervision, transportation, equipment, services, taxes and incidentals required for:

**5TH STREET, 5TH STREET VIADUCT AND RAILYARDS BOULEVARD AT SACRAMENTO RAILYARDS
(PN: T15135800)**

in the City and County of Sacramento, California.

The Work is to be done in strict conformity with the Contract Documents now on file in the Office of the City Clerk, for the following sum:

Item No.	Item	Estimated Quantity	Unit	Unit Price	Total
1	MOBILIZATION	1	LS	\$ 390,000.-	\$ 390,000.-
2	FURNISH FIELD OFFICE	10	MOS	\$ 1,400.-	\$ 14,000.-
3	IMPLEMENT STORM WATER POLLUTION PREVENTION PLANS (SWPPP)	1	LS	\$ 125,000.-	\$ 125,000.-
4	DEMOLITION (5TH STREET SOUTH)	1	LS	\$ 130,000.-	\$ 130,000.-
5	DEMOLITION (5 TH STREET NORTH)	1	LS	\$ 140,000.-	\$ 140,000.-
6	DEMOLITION (RAILYARDS BOULEVARD)	1	LS	\$ 25,000.-	\$ 25,000.-
7	SURCHARGE FILL REMOVAL (SOUTH)	12,500	CY	\$ 5.75	\$ 71,875.-
8	SURCHARGE FILL REMOVAL (NORTH)	14,500	CY	\$ 7.50	\$ 108,750.-
9	OVEREXCAVATE AND RECOMPACT	76,700	CY	\$ 5.50	\$ 421,850.-
10	ROADWAY EMBANKMENT (IMPORT MATERIAL)	86,700	CY	\$ 6.20	\$ 537,540.-
11	STRUCTURE EXCAVATION (RETAINING WALLS 3 AND 4)	552 (F)	CY	\$ 85.-	\$ 46,920.-
12	STRUCTURE BACKFILL (RETAINING WALLS 3 AND 4)	1,396 (F)	CY	\$ 90.-	\$ 125,640.-
13	NORTH RETENTION POND GRADING	11,300	CY	\$ 15.-	\$ 169,500.-
14	EXCAVATE, HAUL, AND STOCKPILE SUSPECT OR IMPACTED SOIL	5,500	CY	\$ 11.-	\$ 60,500.-
15	CONCRETE CRUSHING	8,500	CY	\$ 18.-	\$ 153,000.-

Item No.	Item	Estimated Quantity	Unit	Unit Price	Total
16	CELLULAR CONCRETE BACKFILL (MIX NO. 1)	1,840 (F)	CY	\$ 38.-	\$ 69,920.-
17	CELLULAR CONCRETE BACKFILL (MIX NO. 2)	16,200 (F)	CY	\$ 34.-	\$ 550,800.-
18	EARTH RETAINING STRUCTURE, WALL 1	5,208 (F)	SF	\$ 60.-	\$ 312,480.-
19	EARTH RETAINING STRUCTURE, WALL 2	7,415 (F)	SF	\$ 60.-	\$ 444,900.-
20	STRUCTURAL CONCRETE RETAINING WALL	449 (F)	CY	\$ 460.-	\$ 206,540.-
21	BAR REINFORCING STEEL (RETAINING WALL)	55,787 (F)	LBS	\$ 1.50	\$ 83,680.50
22	STRUCTURAL CONCRETE BARRIER SLAB	241 (F)	CY	\$ 600.-	\$ 144,600.-
23	MINOR CONCRETE, SIDEWALK	272 (F)	CY	\$ 510.-	\$ 138,720.-
24	ARCHITECTURAL TREATMENT (RETAINING WALL)	11,861 (F)	SF	\$ 1.-	\$ 11,861.-
25	PREPARE AND PAINT CONCRETE (RETAINING WALL)	15,863 (F)	SF	\$ 1.-	\$ 15,863.-
26	CALIFORNIA ST-40 BRIDGE RAIL (MOD), RETAINING WALL	943 (F)	LF	\$ 185.-	\$ 174,455.-
27	STRUCTURAL CONCRETE, APPROACH SLAB TYPE N(30S)	81 (F)	CY	\$ 700.-	\$ 56,700.-
28	JOINT SEAL (TYPE B-MR=2")	92	LF	\$ 110.-	\$ 10,120.-
29	JOINT SEAL (TYPE A-MR=1")	10	LF	\$ 100.-	\$ 1,000.-
30	CONCRETE BARRIER (TYPE 26 MODIFIED)	14 (F)	LF	\$ 450.-	\$ 6,300.-
31	CHAIN LINK RAILING	14 (F)	LF	\$ 280.-	\$ 3,920.-
32	ARCHITECTURAL TREATMENT (BARRIER)	58 (F)	SF	\$ 25.-	\$ 1,450.-
33	PREPARE AND PAINT CONCRETE (BARRIER)	58 (F)	SF	\$ 10.-	\$ 580.-
34	ARCHITECTURAL TREATMENT (RETAINING WALL 3 AND 4)	3,756 (F)	SF	\$ 10.-	\$ 37,560.-
35	8" PVC SDR-35 SANITARY SEWER PIPE	2,065	LF	\$ 42.-	\$ 86,730.-
36	30" PVC PS46 SANITARY SEWER PIPE	1,009	LF	\$ 85.-	\$ 85,765.-
37	36" PVC PS46 SANITARY SEWER PIPE	1,801	LF	\$ 135.-	\$ 243,135.-
38	48" DIAMETER STANDARD MANHOLE 3A (SEWER)	7	EA	\$ 5,000.-	\$ 35,000.-
39	60" DIAMETER STANDARD MANHOLE 4 (SEWER)	12	EA	\$ 6,700.-	\$ 80,400.-
40	OUTSIDE DROP CONNECTION	1	EA	\$ 2,000.-	\$ 2,000.-

Item No.	Item	Estimated Quantity	Unit	Unit Price	Total
41	18" STEEL CASING PIPE	1	LS	\$ 30,000.-	\$ 30,000.-
42	FLUSHER BRANCH	10	EA	\$ 1,500.-	\$ 15,000.-
43	12" PVC PS46 STORM DRAIN PIPE	1,387	LF	\$ 48.-	\$ 66,576.-
44	18" PVC PS46 STORM DRAIN PIPE	884	LF	\$ 65.-	\$ 57,460.-
45	24" PVC PS46 STORM DRAIN PIPE	256	LF	\$ 84.-	\$ 21,504.-
46	30" PVC PS46 STORM DRAIN PIPE	355	LF	\$ 102.-	\$ 36,210.-
47	36" PVC PS46 STORM DRAIN PIPE	138	LF	\$ 136.-	\$ 18,768.-
48	42" RGRCP STORM DRAIN PIPE	409	LF	\$ 112.-	\$ 45,808.-
49	48" RGRCP STORM DRAIN PIPE	330	LF	\$ 142.-	\$ 46,860.-
50	54" RGRCP STORM DRAIN PIPE	80	LF	\$ 180.-	\$ 14,400.-
51	60" RGRCP STORM DRAIN PIPE	1,171	LF	\$ 215.-	\$ 251,765.-
52	66" RCP STORM DRAIN PIPE	422	LF	\$ 200.-	\$ 84,400.-
53	72" RCP STORM DRAIN PIPE	462	LF	\$ 275.-	\$ 127,050.-
54	8" PVC SDR35 STORM DRAIN PIPE	192	LF	\$ 35.-	\$ 6,720.-
55	6" PVC SDR35 STORM DRAIN PIPE	303	LF	\$ 30.-	\$ 9,090.-
56	8" STORM DRAIN CLEAN OUT	4	EA	\$ 1,750.-	\$ 7,000.-
57	48" DIAMETER STANDARD MANHOLE NO. 3A (STORM DRAIN)	4	EA	\$ 5,100.-	\$ 20,400.-
58	48" DIAMETER STANDARD MANHOLE NO. 3 (STORM DRAIN)	4	EA	\$ 5,000.-	\$ 20,000.-
59	48" DIAMETER STANDARD MANHOLE NO. 3 WITH SLOTTED COVER (STORM DRAIN)	4	EA	\$ 5,000.-	\$ 20,000.-
60	60" DIAMETER STANDARD MANHOLE NO. 4 (STORM DRAIN)	5	EA	\$ 5,000.-	\$ 25,000.-
61	60" DIAMETER STANDARD SADDLE TYPE MANHOLE (STORM DRAIN)	5	EA	\$ 5,000.-	\$ 25,000.-
62	96" DIAMETER MANHOLE (STORM DRAIN)	14	EA	\$ 13,000.-	\$ 182,000.-
63	6.5' X 7' CONCRETE JUNCTION BOX	1	EA	\$ 18,000.-	\$ 18,000.-
64	DROP INLET WITH GRATED TOP	20	EA	\$ 2,900.-	\$ 58,000.-
65	STORMWATER QUALITY INLET (6' X 8')	8	EA	\$ 20,000.-	\$ 160,000.-
66	STORMWATER QUALITY INLET (6' X 10')	3	EA	\$ 23,000.-	\$ 69,000.-

Item No.	Item	Estimated Quantity	Unit	Unit Price	Total
67	STORMWATER QUALITY INLET (6' X 12')	2	EA	\$ 27,000.-	\$ 54,000.-
68	STORMWATER QUALITY INLET (6' X 15')	3	EA	\$ 35,000.-	\$ 105,000.-
69	TYPE "B" DRAIN INLET	2	EA	\$ 2,500.-	\$ 5,000.-
70	STORMWATER QUALITY VAULT (4 CARTRIDGE)	1	EA	\$ 35,000.-	\$ 35,000.-
71	STORMWATER QUALITY VAULT (8'X6')	1	EA	\$ 45,000.-	\$ 45,000.-
72	6" PERIMETER WALL (STORMWATER QUALITY PLANTER)	118 (F)	CY	\$ 2,000.-	\$ 236,000.-
73	12" SEAT WALL (STORMWATER QUALITY PLANTER)	240 (F)	CY	\$ 845.-	\$ 202,800.-
74	FILTER FABRIC (STORMWATER QUALITY PLANTER)	2,092	SY	\$ 1.52	\$ 3,138.-
75	TOPSOIL (STORMWATER QUALITY PLANTER)	175	CY	\$ 105.-	\$ 18,375.-
76	BIORETENTION SOIL (STORMWATER QUALITY PLANTER)	523	CY	\$ 95.-	\$ 49,685.-
77	CRUSHED ROCK (STORMWATER QUALITY PLANTER)	262	CY	\$ 120.-	\$ 31,440.-
78	8" SUBDRAIN (STORMWATER QUALITY PLANTER)	782	LF	\$ 17.-	\$ 13,294.-
79	8" CLEANOUT (STORMWATER QUALITY PLANTER)	40	EA	\$ 400.-	\$ 16,000.-
80	LINE NORTH BASIN	10,165	SY	\$ 5.20	\$ 52,858.-
81	NORTH BASIN HEADWALL	1	EA	\$ 14,000.-	\$ 14,000.-
82	NORTH BASIN CHAIN LINK FENCE	1,350	LF	\$ 13.-	\$ 17,550.-
83	6" AB ACCESS ROAD	16,200	SF	\$ 1.30	\$ 21,060.-
84	HYDROSEED NORTH BASIN	14,250	SY	\$ 0.70	\$ 9,975.-
85	12" DIP WATER PIPE	5,911	LF	\$ 35.-	\$ 206,885.-
86	8" GATE VALVES	2	EA	\$ 2,000.-	\$ 4,000.-
87	12" GATE VALVES	35	EA	\$ 3,000.-	\$ 105,000.-
88	2" BLOW-OFF ASSEMBLY	14	EA	\$ 1,700.-	\$ 23,800.-
89	12" BALL JOINT	1	EA	\$ 13,000.-	\$ 13,000.-
90	12" FORCED BALANCED FLEX-TEND	1	EA	\$ 40,000.-	\$ 40,000.-
91	FIRE HYDRANT ASSEMBLY	19	EA	\$ 7,200.-	\$ 136,800.-
92	24" STEEL CASING PIPE	1	LS	\$ 50,000.-	\$ 50,000.-
93	INSTALL CUT IN TEE	1	EA	\$ 7,500.-	\$ 7,500.-

Item No.	Item	Estimated Quantity	Unit	Unit Price	Total
94	ASPHALT CONCRETE PAVEMENT, TYPE A	8809	TON	\$ 76.-	\$ 669,484.-
95	AGGREGATE BASE, CLASS 2	13599	CY	\$ 35.-	\$ 475,965.-
96	CONCRETE SIDEWALK	100,562	SF	\$ 5.50	\$ 553,091.-
97	VERTICAL CURB AND GUTTER NO. 2	7,604	LF	\$ 28.-	\$ 212,912.-
98	VERTICAL CURB AND GUTTER NO. 2 - REINFORCED	173	LF	\$ 38.-	\$ 6,574.-
99	CONCRETE SURVEY MONUMENT	9	EA	\$ 500.-	\$ 4,500.-
100	SINGLE FLARE CURB RAMP WITH TRUNCATED DOMES	48	EA	\$ 540.-	\$ 25,920.-
101	DOUBLE FLARE CURB RAMP WITH TRUNCATED DOMES	5	EA	\$ 1,100.-	\$ 5,500.-
102	SINGLE FLARE CURB RAMP WITH TRUNCATED DOMES (5 TH AND H STREETS)	3	EA	\$ 1,100.-	\$ 3,300.-
103	DOUBLE FLARE CURB RAMP WITH TRUNCATED DOMES (5 TH AND H STREETS)	2	EA	\$ 1,900.-	\$ 3,800.-
104	STREET BARRICADE	1,041	LF	\$ 30.-	\$ 31,230.-
105	SIDEWALK BARRICADE	23	LF	\$ 50.-	\$ 1,150.-
106	STREET LIGHTING SYSTEM (5 TH STREET SOUTH)	1	LS	\$ 20,000.-	\$ 20,000.-
107	STREET LIGHTING SYSTEM (VIADUCT)	1	LS	\$ 75,000.-	\$ 75,000.-
108	STREET LIGHTING SYSTEM (5 TH STREET NORTH)	1	LS	\$ 100,000.-	\$ 100,000.-
109	STREET LIGHTING SYSTEM (RAILYARDS BOULEVARD)	1	LS	\$ 310,000.-	\$ 310,000.-
110	TRAFFIC SIGNING, STRIPING, AND LEGENDS (5 TH STREET SOUTH)	1	LS	\$ 20,000.-	\$ 20,000.-
111	TRAFFIC SIGNING, STRIPING, AND LEGENDS (VIADUCT AND 5 TH STREET NORTH)	1	LS	\$ 13,000.-	\$ 13,000.-
112	TRAFFIC SIGNING, STRIPING, AND LEGENDS (RAILYARDS BOULEVARD)	1	LS	\$ 40,000.-	\$ 40,000.-
113	TRAFFIC SIGNAL - RAILYARDS BOULEVARD AND BERGUT DRIVE	1	LS	\$ 120,000.-	\$ 120,000.-
114	TRAFFIC SIGNAL - RAILYARDS BOULEVARD AND HUNTINGTON STREET	1	LS	\$ 150,000.-	\$ 150,000.-
115	TRAFFIC SIGNAL - RAILYARDS BOULEVARD AND CROCKER STREET	1	LS	\$ 160,000.-	\$ 160,000.-
116	TRAFFIC SIGNAL - RAILYARDS BOULEVARD AND STANFORD STREET	1	LS	\$ 165,000.-	\$ 165,000.-

Item No.	Item	Estimated Quantity	Unit	Unit Price	Total
117	TRAFFIC SIGNAL - RAILYARDS BOULEVARD AND 5TH STREET	1	LS	\$ 150,000.-	\$ 150,000.-
118	TRAFFIC SIGNAL - RAILYARDS BOULEVARD AND 6TH STREET	1	LS	\$ 150,000.-	\$ 150,000.-
119	TRAFFIC SIGNAL - RAILYARDS BOULEVARD AND 7TH STREET	1	LS	\$ 175,000.-	\$ 175,000.-
120	TRAFFIC SIGNAL - 5TH STREET AND STEVENS STREET	1	LS	\$ 160,000.-	\$ 160,000.-
121	TRAFFIC SIGNAL - 5TH STREET AND CAMILE LANE	1	LS	\$ 170,000.-	\$ 170,000.-
122	TRAFFIC SIGNAL - 5TH STREET AND G STREET	1	LS	\$ 170,000.-	\$ 170,000.-
123	TRAFFIC SIGNAL - 5TH STREET AND H STREET	1	LS	\$ 150,000.-	\$ 150,000.-
124	TRAFFIC SIGNAL INTERCONNECT SYSTEM (H STREET TO NORTH END OF 5TH STREET OVERCROSSING)	1	LS	\$ 160,000.-	\$ 160,000.-
125	TRAFFIC SIGNAL INTERCONNECT SYSTEM (INTERSECTION OF 5TH AND H STREETS TO INTERSECTION OF 7TH AND I STREET)	1	LS	\$ 30,000.-	\$ 30,000.-
126	TRAFFIC SIGNAL INTERCONNECT SYSTEM (5TH STREET NORTH AND VIADUCT)	1	LS	\$ 45,000.-	\$ 45,000.-
127	TRAFFIC SIGNAL INTERCONNECT SYSTEM (RAILYARDS BOULEVARD)	1	LS	\$ 100,000.-	\$ 100,000.-
128	ROOT BARRIER	3,988	LF	\$ 10.-	\$ 39,880.-
129	IRRIGATION SYSTEM (5TH STREET SOUTH)	1	LS	\$ 25,000.-	\$ 25,000.-
130	IRRIGATION SYSTEM (5TH STREET NORTH)	1	LS	\$ 25,000.-	\$ 25,000.-
131	IRRIGATION SYSTEM (RAILYARDS BOULEVARD)	1	LS	\$ 155,000.-	\$ 155,000.-
132	1-GALLON SHRUB	1,014	EA	\$ 9.-	\$ 9,126.-
133	15-GALLON SHRUB	28	EA	\$ 100.-	\$ 2,800.-
134	24" BOX TREE - "EMERALD SUNSHINE" ELM	52	EA	\$ 270.-	\$ 14,040.-
135	Not Used			\$ -	\$ -
136	24" BOX TREE - "REDPOINT" MAPLE	72	EA	\$ 270.-	\$ 19,440.-
137	8'X6' TREE BOX	9	EA	\$ 10,000.-	\$ 90,000.-
138	TOPSOIL MIX (TREE WELLS)	400	CY	\$ 60.-	\$ 24,000.-
139	BARK	66	CY	\$ 54.-	\$ 3,564.-
140	FURNISH/INSTALL 6' ALUMINUM BENCH	47	EA	\$ 1,200.-	\$ 56,400.-
141	FURNISH/INSTALL TRASH RECEPTACLES	48	EA	\$ 1,100.-	\$ 52,800.-

Item No.	Item	Estimated Quantity	Unit	Unit Price	Total
142	FURNISH/INSTALL 6'X8' TREE GRATE W/ CAST IN PLACE FRAME	52	EA	\$ 4,900.-	\$ 254,800.-
143	FURNISH/INSTALL 8'X8' TREE GRATE W/ CAST IN PLACE FRAME	72	EA	\$ 5,700.-	\$ 410,400.-
144	FURNISH AND INSTALL TREE GUARD	124	EA	\$ 800.-	\$ 99,200.-
145	FURNISH/INSTALL BIKE RACKS	56	EA	\$ 530.-	\$ 29,680.-
146	FURNISH AND INSTALL BUS SHELTER	1	EA	\$ 35,000.-	\$ 35,000.-
147	1" IRRIGATION WATER SERVICE, METER, BACKFLOW PREVENTER AND ENCLOSURE	2	EA	\$ 4,400.-	\$ 8,800.-
148	2" IRRIGATION WATER SERVICE, METER, BACKFLOW PREVENTER AND ENCLOSURE	4	EA	\$ 6,500.-	\$ 26,000.-
149	STABILIZED CONSTRUCTION ENTRANCE	300	SY	\$ 25.-	\$ 7,500.-
150	INLET SEDIMENT CONTROL AND FILTER BAGS	44	EA	\$ 250.-	\$ 11,000.-
151	INSTALL SAND BAGS TO CONTROL DRAINAGE VELOCITY	40	EA	\$ 45.-	\$ 1,800.-
152	INSTALL SILT FENCE	3,457	LF	\$ 3.-	\$ 10,371.-
153	INSTALL ROCK RIP RAP AT MANHOLES WITH SLOTTED COVERS	2,560	SF	\$ 6.-	\$ 15,360.-
154	INSTALL EMBANKMENT SLOPE FIBER ROLLS	800	LF	\$ 4.-	\$ 3,200.-
155	APPLY HYDRO-SEED MIX	17,700	SY	\$ 0.70	\$ 12,390.-
156	6' CHAIN LINK FENCE	6,640	LF	\$ 13.-	\$ 86,320.-
157	16' GATE	1	EA	\$ 1,700.-	\$ 1,700.-
158	BRIDGE REMOVAL (PORTION)	1	LS	\$ 8,000.-	\$ 8,000.-
159	STRUCTURE EXCAVATION (BRIDGE)	326 (F)	CY	\$ 40.-	\$ 13,040.-
160	STRUCTURE BACKFILL (BRIDGE)	370 (F)	CY	\$ 50.-	\$ 18,500.-
161	FURNISH PILING (CLASS 200) (ALTERNATIVE W)	8479	LF	\$ 45.-	\$ 381,555.-
162	DRIVING PILE (CLASS 200) (ALTERNATIVE W)	76	EA	\$ 3,500.-	\$ 266,000.-
163	PRESTRESSING CAST-IN-PLACE CONCRETE (MOD)	1	LS	\$ 100,000.-	\$ 100,000.-
164	STRUCTURAL CONCRETE, BRIDGE FOOTING	176 (F)	CY	\$ 410.-	\$ 72,160.-
165	STRUCTURAL CONCRETE, BRIDGE	2,045 (F)	CY	\$ 695.-	\$ 1,421,275.-
166	STRUCTURAL CONCRETE, APPROACH SLAB TYPE EQ(10)	20 (F)	CY	\$ 700.-	\$ 14,000.-

Item No.	Item	Estimated Quantity	Unit	Unit Price	Total
167	ARCHITECTURAL TREATMENT (BRIDGE)	775 (F)	SF	\$ 15.-	\$ 11,625.-
168	JOINT SEAL (TYPE B MR=2") (BRIDGE)	80	LF	\$ 100.-	\$ 8,000.-
169	JOINT SEAL ASSEMBLY (MR=6") (MOD)	45	LF	\$ 1,300.-	\$ 58,500.-
170	WABO SEISMIC SPAN II	29	LF	\$ 500.-	\$ 14,500.-
171	BAR REINFORCING STEEL (BRIDGE)	538,599 (F)	LBS	\$ 1.10	\$ 592,458.90
172	BAR REINFORCING STEEL (EPOXY COATED) (BRIDGE)	2,802 (F)	LBS	\$ 2.-	\$ 5,604.-
173	PREPARE AND PAINT CONCRETE (BRIDGE)	775 (F)	SF	\$ 2.-	\$ 1,550.-
174	BRIDGE DECK DRAINAGE SYSTEM	4,050 (F)	LBS	\$ 10.-	\$ 40,500.-
175	CALIFORNIA ST-40 BRIDGE RAIL (MOD) (BRIDGE)	798 (F)	LF	\$ 320.-	\$ 255,360.-
176	UTILITY CONDUITS (BRIDGE)	1	LS	\$ 50,000.-	\$ 50,000.-
177	WATERLINE (BRIDGE)	394 (F)	LF	\$ 110.-	\$ 43,340.-
178	VIBRATION MONITORING	1	LS	\$ 50,000.-	\$ 50,000.-
179	JOINT UTILITY TRENCH - EXCAVATION, BACKFILL, AND COMPACTION (5 TH STREET SOUTH)	1	LS	\$ 80,000.-	\$ 80,000.-
180	JOINT UTILITY TRENCH - EXCAVATION, BACKFILL, AND COMPACTION (5 TH STREET NORTH, RAILYARDS BOULEVARD)	1	LS	\$ 220,000.-	\$ 220,000.-
181	SMUD CONDUIT SYSTEM (5 TH STREET SOUTH)	1	LS	\$ 40,000.-	\$ 40,000.-
182	SMUD CONDUIT SYSTEM (5 TH STREET NORTH, RAILYARDS BOULEVARD)	1	LS	\$ 225,000.-	\$ 225,000.-
183	SMUD SPLICE BOX (17"X30")	12	EA	\$ 500.-	\$ 6,000.-
184	SMUD SPLICE BOX (24"X36")	3	EA	\$ 700.-	\$ 2,100.-
185	SMUD SPLICING VAULT (6'X8')	7	EA	\$ 8,500.-	\$ 59,500.-
186	SMUD PRIMARY SPLICING ENCLOSURE (8'X14'X8')	14	EA	\$ 47,000.-	\$ 658,000.-
187	SMUD 3 PHASE TRANSFORMER PAD	4	EA	\$ 3,000.-	\$ 12,000.-
188	PG&E GAS SYSTEM (5 TH STREET SOUTH)	1	LS	\$ 8,000.-	\$ 8,000.-
189	PG&E GAS SYSTEM (5 TH STREET NORTH, RAILYARDS BOULEVARD)	1	LS	\$ 75,000.-	\$ 75,000.-
190	COMCAST CONDUIT SYSTEM (5 TH STREET SOUTH)	1	LS	\$ 3,000.-	\$ 3,000.-

Item No.	Item	Estimated Quantity	Unit	Unit Price	Total
191	COMCAST CONDUIT SYSTEM (5 TH STREET NORTH, RAILYARDS BOULEVARD)	1	LS	\$ 23,000.-	\$ 23,000.-
192	CABLE TV (18"X24") VAULT	10	EA	\$ 450.-	\$ 4,500.-
193	AT&T CONDUIT SYSTEM (5 TH STREET SOUTH)	1	LS	\$ 6,000.-	\$ 6,000.-
194	AT&T CONDUIT SYSTEM (5 TH STREET NORTH, RAILYARDS BOULEVARD)	1	LS	\$ 60,000.-	\$ 60,000.-
195	AT&T PTS 65 PHONE VAULT	6	EA	\$ 7,500.-	\$ 45,000.-
196	AT&T PTS 3660 PHONE VAULT	4	EA	\$ 4,000.-	\$ 16,000.-
197	INJECT CRACK (EPOXY)	150	LF	\$ 100.-	\$ 15,000.-
198	BRIDGE CANOPIES	1	LS	\$ 200,000.-	\$ 200,000.-
199	RELOCATE 7 TH STREET CONSTRUCTION ENTRANCE	1	LS	\$ 25,000.-	\$ 25,000.-
200	CONSTRUCT PAVED ACCESS AT F STREET ENTRANCE	14,400	SF	\$ 4.-	\$ 57,600.-
201	ADJUST EXISTING RIM TO GRADE	5	EA	\$ 1,500.-	\$ 7,500.-
202	1 YEAR MAINTENANCE PERIOD	1	LS	\$ 5,000.-	\$ 5,000.-
203	CDF INITIAL TRENCH BACKFILL	1,065	CY	\$ 65.-	\$ 69,225.-

(F) - denotes final pay quantity

CONTRACTOR NAME: O.C. Jones & Sons, Inc. TOTAL BID \$ 19,782,645.⁴⁰

It is understood that this Bid Proposal is based upon completion of the Work within a period of **220 WORKING DAYS**, commencing on the date set forth in the written Notice to Proceed issued by the City to the Contractor.

In determining the amount bid by each bidder, the City may disregard mathematical errors in addition, subtraction, multiplication, and division that appear obvious on the face of the Proposal. When such a mathematical error appears on the face of the Proposal, the City shall have the right to correct such error and to compute the total amount bid by said bidder on the basis of the corrected figure or figures.

The City Council may reject any and all bids and waive any informalities or minor irregularities in the bids.

When an item price is required to be set forth in the Proposal, and the total for the item set forth separately does not agree with a figure which is derived by multiplying the item price times the Engineer's estimate of the quantity of work to be performed for said item, the item price shall prevail over the sum set forth as the total for the item unless, in the sole discretion of the City, such a procedure would be inconsistent with the policy of the bidding procedure. The total paid for each such item of work shall be based upon the item price and not the total price. Should the Proposal contain only total price for the item and the item price is omitted, the City shall determine the item price by dividing the total price for the item by the Engineer's estimate of the estimated quantities of work to be performed as items of work.

If the Proposal contains neither the item price nor the total price for the item, then it shall be deemed incomplete and the Proposal shall be disregarded.

The undersigned has examined the location of the proposed Work, the local conditions at the place where the Work is to be done, is familiar with the Contract Documents and is familiar and expressly agrees to the liquidated damages provision of the Contract Documents.

The undersigned has checked carefully all of the foregoing figures and understands that the City of Sacramento will not be responsible for any errors or omissions on the part of the undersigned in making up this Bid Proposal.

Enclosed is a Bid Proposal Guarantee, as required, consisting of a bidder's bond or other acceptable security for not less than ten percent (10%) of the amount Bid Proposal.

The undersigned agrees that all addenda received and acknowledged herein shall become a part of and be included in this Bid Proposal. This Bid Proposal includes the following addenda:

Add. #	<u>1</u>	DATE	<u>8/27/13</u>
Add. #	<u>2</u>	DATE	<u>9/4/13</u>
Add. #	<u>3</u>	DATE	<u>9/6/13</u>

NOTE: State whether your concern is a corporation, a co-partnership, private individual, or individuals doing business under a firm name.

Corporation

If the Bidder is a corporation, the Bid Proposal must be executed in the name of the corporation and must be signed by a duly authorized officer of the corporation.

If the Bidder is a partnership, the Bid Proposal must be executed in the name of the partnership and one of the partners must subscribe their signature thereto as the authorized representative of the partnership.

AMOUNT OF BID PROPOSAL GUARANTEE ENCLOSED:

(\$ 10% of total bid) not less than ten percent (10%) of amount Bid Proposal

<u> </u>	CERTIFIED CHECK
<u> </u>	CASHIER'S CHECK
<u> X </u>	BID BOND
<u> </u>	MONEY ORDER
<u> </u>	OTHER SECURITY

CONTRACTOR:

By 
(Signature)

Greg Souder
(Print or Type)

Title Secretary

Address 1520 Fourth Street

Berkeley, CA 94710

Telephone No (510) 526-3424

Fax No. (510) 526-0990

Email Address mcrowley@ocjones.com or rhague@ocjones.com

Date 9/4/13

FOR CITY USE ONLY

Bid Bond Security	
<input type="checkbox"/> Properly Signed	<input type="checkbox"/> Improperly Signed
<input type="checkbox"/> Not Included	<input type="checkbox"/> Not Required
Type of Deposit	
<input checked="" type="checkbox"/> Bid Bond	<input type="checkbox"/> Cashier/Certified Check
<input type="checkbox"/> Other	Initial: <u>RS</u>

Contractor's License No. 759729 Type A HAZ

Expiration Date 3/31/15

Tax I.D. Nos.- Fed. 94-3320164 State CA

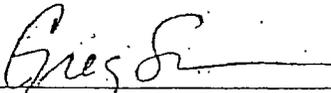
RESOLUTION OF THE BOARD OF DIRECTORS
of
O. C. JONES & SONS, INC.

RESOLVED, that any one of the following officers, President, Vice President, Treasurer, Secretary or Contracts Officer, of this corporation be and they are hereby authorized and empowered for and on behalf of and in the name of this Corporation and as its corporate act and deed: to perform all acts and to execute and deliver all documents necessary or convenient to any bidding, contracting, or negotiating, public or private, whatsoever.

CERTIFICATION BY SECRETARY
of
O. C. JONES & SONS, INC.

I, Greg Souder, Secretary of O. C. Jones & Sons, Inc., a corporation created and existing under the laws of the State of California, do hereby certify and declare the foregoing is a full, true and correct copy of the Resolution duly passed and accepted by the Board of Directors of said Corporation at a meeting of said Board duly and regularly called and noticed and held on October 29, 2008, at which meeting a quorum of the Board of Directors was present and voted in favor of the Resolution; said Resolution is now in full force and effect; there is no provision in the Articles of Incorporation or Bylaws of said Corporation, or any shareholder agreement, limiting the power of the Board of Directors of said Corporation to pass the foregoing resolution and that said Resolution is in conformity with the provisions of such Articles of Incorporation and Bylaws; and that no approval by the shareholders of, or the outstanding shares of, said Corporation is required with respect to the matters which are the subject of the foregoing Resolution.

IN WITNESS WHEREOF, I have hereunto set my hand as of 3-27-09


Greg Souder, Secretary

City of Sacramento Business Operation Tax Certificate No. 1002689
 (City will not award contract if Certificate Number is missing.)

Please indicate if you are any of the following:

EBE _____ Cert # _____ SBE _____ Cert # _____
 UDBE _____ Cert # _____ MWBE _____ Cert # _____

EQUIPMENT LIST

5th Street, 5th Street Viaduct and Railyards Boulevard at Sacramento Railyards
 (PN: T15135800)

Equipment		Engine			Projected Hours of Operation	Lbs Nox Emitted	
Make/Model	ID #	Year	H.P.	Carb Compliance		Per Hour	Per Day
CAT/623F	21--	1999	365	Yes	330	5.55	44.32
CAT/613G	20--	2008	181	Yes	68	1.20	9.57
CAT/815F	33--	2001	220	Yes	110	3.34	26.75
CAT/14H	62--	2005	240	Yes	160	2.27	18.19
CAT/CS653	71--	2001	153	Yes	88	2.33	18.60
CAT/CS433	70--	2002	105	Yes	40	1.60	12.77
CAT/CP56	31--	2008	157	Yes	68	0.90	7.19
CAT/CP433	30--	2003	105	Yes	48	0.99	7.96
CAT/CB24	73--	2008	33	Yes	40	0.36	2.85
CAT/CB54	75--	2010	130	Yes	68	0.74	5.96
CAT/330	43--	2003	247	Yes	64	2.34	18.72
CAT/328	43--	2006	216	Yes	41	1.24	9.90
CAT/315	42--	2002	90	Yes	41	1.37	10.94
JD/410J	41--	2008	99	Yes	68	0.65	5.23
JD/710	41--	2006	122	Yes	41	1.16	9.24
CAT/D5	12--	2005	121	Yes	41	1.15	9.17
CAT/314	41--	2005	90	Yes	41	0.97	7.77
CAT/257	50--	2007	57	Yes	41	0.62	4.92
JD/544	51--	2011	153	Yes	41	0.88	7.01
CAT/AP1055	82--	2003	175	Yes	60	1.66	13.26

Certification: The undersigned bidder certifies under penalty of perjury under the laws of the State of California that the above information is accurate and complete and that its equipment fully complies with the current off-road diesel equipment emission regulations of the California Air Resources Board for the Railyards Project in all respects.



Signature

Greg Souder, Secretary

9/4/13

Date

KNOW ALL MEN BY THESE PRESENTS,

That we, O.C. Jones & Sons, Inc.
as Principal and Liberty Mutual Insurance Company

a corporation duly organized under the laws of the State of Massachusetts and duly licensed to become sole surety on bonds required or authorized by the State of California, as Surety, are held and firmly bound unto the City hereinafter called the City, in the penal sum of ten percent (10%) of the (BASE OR LUMP SUM) Proposal of the Principal above named or other amount as set forth in the Invitation to Bidders submitted by said Principal to the City for the Work described below, for the payment of which sum in lawful money of the United States well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH

That whereas the Principal has submitted the above mentioned Proposal to the City, for which Proposals are to be opened in the Historic City hall, 2nd Floor Conference Room, Sacramento, California, on September 11, 2013 at 2:00pm for the Work specifically described as follows:

**5th Street, 5th Street Viaduct and Railyards Boulevard at Sacramento Railyards
(PN: T15135800)**

NOW, THEREFORE, if the aforesaid Principal is awarded the Contract and within the time and manner required under the Contract Documents, enters into a written Contract, in the prescribed form, in accordance with the Proposal, and files two (2) bonds with the City, one to guarantee faithful performance and the other to guarantee payment for labor and materials, and files the required insurance policies with the City, all as required by the Contract Documents or by law, then the obligation shall be null and void; otherwise it shall be and remain in full force and effect.

In the event suit is brought upon this bond by the Obligee and judgment is recovered, the Surety shall pay all costs incurred by the Obligee in such suit, including a reasonable attorney's fee to be fixed by the court, which sums shall be additional to the principal amount of this bond.

IN WITNESS THEREOF We have hereunto set our hands and seal this 6th

day of September, 2013

O.C. Jones & Sons, Inc.
Contractor (Seal)

By 
Title Greg Souder, Secretary

ORIGINAL APPROVED AS TO FORM:

City Attorney

Liberty Mutual Insurance Company
Surety (Seal)

By 
Title Bill G. Bergan, Attorney in Fact

Agent Name and Address Leavitt Group, 1765 Challenge Way, Suite 200, Sacramento Ca 95815
Agent Phone # 916-576-1502
Surety Phone # 925-979-6705
California License # 0545478

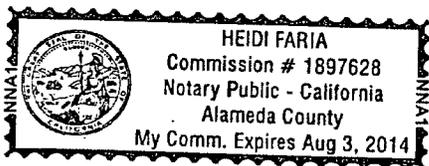
**CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT
CIVIL CODE § 1189**

State of California

County of Alameda }

On 9/9/13 before me, Heidi Faria, Notary Public
Date Here Insert Name and Title of the Officer

personally appeared Greg Souder
Name(s) of Signer(s)



Place Notary Seal Above

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature: Heidi Faria
Signature of Notary Public

OPTIONAL

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: Bid Proposal Guarantee Document Date: 9/6/13

Number of Pages: 1 Signer(s) Other Than Named Above: Bill G. Bergan

Capacity(ies) Claimed by Signer(s)

Signer's Name: Greg Souder
 Corporate Officer — Title(s): Secretary
 Partner — Limited General
 Individual Attorney in Fact
 Trustee Guardian or Conservator
 Other: _____

Signer's Name: _____
 Corporate Officer — Title(s): _____
 Partner — Limited General
 Individual Attorney in Fact
 Trustee Guardian or Conservator
 Other: _____

Signer Is Representing: O.C. Jones + Sons Inc.

Signer Is Representing: _____

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

CIVIL CODE § 1189

State of California }
County of Sacramento, CA }

On September 6, 2013 before me, Leticia Castro, Notary Public
Date Here Insert Name and Title of the Officer

personally appeared Bill G. Bergan
Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.



I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature: Leticia Castro
Signature of Notary Public

Place Notary Seal Above

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: _____

Document Date: _____ Number of Pages: _____

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____ Signer's Name: _____

Corporate Officer — Title(s): _____ Corporate Officer — Title(s): _____

Individual Individual

Partner — Limited General Partner — Limited General

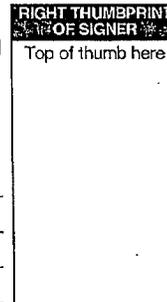
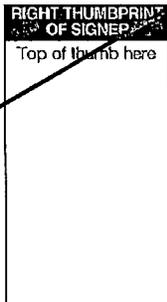
Attorney in Fact Attorney in Fact

Trustee Trustee

Guardian or Conservator Guardian or Conservator

Other: _____ Other: _____

Signer Is Representing: _____ Signer Is Representing: _____



THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON RED BACKGROUND

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Certificate No. 6116203

American Fire and Casualty Company
The Ohio Casualty Insurance Company

Liberty Mutual Insurance Company
West American Insurance Company

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That American Fire & Casualty Company and The Ohio Casualty Insurance Company are corporations duly organized under the laws of the State of New Hampshire; that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts; and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"); pursuant to and by authority herein set forth, does hereby name, constitute and appoint: Bill G. Bergan

all of the city of Sacramento state of CA each individually if there be more than one named; its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 8th day of May 2013.



American Fire and Casualty Company
The Ohio Casualty Insurance Company
Liberty Mutual Insurance Company
West American Insurance Company

By: Gregory W. Davenport
Gregory W. Davenport, Assistant Secretary

STATE OF WASHINGTON ss
COUNTY OF KING

On this 8th day of May 2013, before me personally appeared Gregory W. Davenport, who acknowledged himself to be the Assistant Secretary of American Fire and Casualty Company, Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Seattle, Washington, on the day and year first above written.



By: KD Riley
KD Riley, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company, which resolutions are now in full force and effect reading as follows:

ARTICLE IV - OFFICERS - Section 12. Power of Attorney. Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII - Execution of Contracts - SECTION 5. Surety Bonds and Undertakings. Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes Gregory W. Davenport, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, David M. Carey, the undersigned, Assistant Secretary of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 10th day of SEPTEMBER 2013.



By: David M. Carey
David M. Carey, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees

To confirm the validity of this Power of Attorney call 1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.

DRUG-FREE WORKPLACE POLICY AND AFFIDAVIT

BID PROPOSAL MAY BE DECLARED NONRESPONSIVE IF THIS FORM (COMPLETED) IS NOT ATTACHED.
Pursuant to City Council Resolution CC90-498 dated 6/26/90 the following is required.

The undersigned contractor certifies that it and all subcontractors performing under this Agreement will provide a drug-free workplace by:

1. Publishing a "Drug-Free Workplace" statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition.
2. Establishing a Drug-Free Awareness Program to inform employees about:
 - a. The dangers of drug abuse in the workplace.
 - b. The contractor's policy of maintaining a drug-free workplace.
 - c. Any available drug counseling, rehabilitation, and employee assistance program.
 - d. The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace.
3. Notify employees that as a condition of employment under this Agreement, employees will be expected to:
 - a. Abide by the terms of the statement.
 - b. Notify the employer of any criminal drug statute conviction for a violation occurring in the workplace.
4. Making it a requirement that each employee to be engaged in the performance of the Agreement be given a copy on the "Drug-Free Workplace" statement.
5. Taking one of the following appropriate actions, within thirty (30) days of receiving notice from an employee or otherwise receiving such notice, that said employee has received a drug conviction for a violation occurring in the workplace:
 - a. Taking appropriate disciplinary action against such an employee, up to and including termination; or
 - b. Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a federal, state, or local health, law enforcement or other appropriate agency.

* I certify that no person employed by this company, corporation, or business has been convicted of any criminal drug statute violation on any job site or project where this company, corporation or business was performing was within three years of the date of my signature below.

EXCEPTION: None
Date Violation Type Place of Occurrence

If additional space is required use back of this form.

* The above statement will also be incorporated as a part of each subcontract agreement for any and all subcontractors selected for performance on this project.

IN THE EVENT THIS COMPANY, CORPORATION, OR BUSINESS IS AWARDED THIS CONSTRUCTION AGREEMENT, AS A RESULT OF THIS BID; THE CONTRACTOR WITH HIS/HER SIGNATURE REPRESENTS TO THE OWNER THAT THE INFORMATION DISCLOSED IN THIS DOCUMENT IS COMPLETE AND ACCURATE. IT IS UNDERSTOOD AND AGREED THAT FALSE CERTIFICATION IS SUBJECT TO IMMEDIATE TERMINATION BY THE OWNER.

The Representations Made Herein On This Document Are Made Under Penalty Of Perjury.

CONTRACTOR'S NAME: O.C. Jones & Sons, Inc.
BY:  Greg Souder, Secretary Date: 9/4/13
Signature Title

Effects of violations: a. Suspension of payments under the Agreement. b. Suspension or termination of the Agreement. c. Suspension or debarment of the contractor from receiving any Agreement from the City of Sacramento for a period not to exceed five years.

CITY OF SACRAMENTO

THIS FORM MUST BE SUBMITTED WITH THE SEALED BID PROPOSAL

CITY OF SACRAMENTO SUBCONTRACTOR and ESBE PARTICIPATION VERIFICATION

To be eligible for award of this contract, the bidder shall list any business entity used to attain the 20% ESBE goal. Additionally, all other subcontractors who perform work, labor, or render service in an amount in excess of one-half of 1 percent of the total bid amount shall be listed. In the case of bids for the construction of streets and highways, including bridges, subcontractors whose subcontract value exceeds one-half (0.5) of one percent of the total bid or ten thousand dollars (\$10,000), whichever is greater, shall be listed. Estimated dollar values shall be provided for all work / services listed. The inclusion of false information or the omission of required information will render the bid non-responsive. **READ THE ABOVE REQUIREMENT CAREFULLY**

Name of Prime Contractor:	O.C. Jones & Sons, Inc.	Bid Amount:	19,782,615.40	Date:	9/11/13
Business Entity or Subcontractor Name and Location	Indicate EBE or SBE (subject to verification)	Specific Bid Items of Work and brief description of labor materials and equipment to be provided.	Estimated Dollar Value of Work / Services Provided		
RNR CONSTRUCTION INC SACRAMENTO	SBE	1(P), 20-22, 27-30, 32, 34, 158-172, 174, 176, 23 Structural Concrete	3,500,000.-		
		Bridge and Retaining Wall			
ST. FRANCIS ELECTRIC SAN LEANDRO		1(P), 106-109, 113-127, 199(P) Electrical & Signals	2,670,000.-		
SMITH DENISON COMPANY LIVERMORE	SBE	1(P), 179-196 Joint Trench	1,500,000.-		

(P) = Partial Item
FM 440 (Rev. 2/25/04)

EBE AND SBE CERTIFICATION STATEMENTS ARE DUE BY THE CLOSE OF BUSINESS TWO DAYS AFTER BID OPENING

CITY OF SACRAMENTO

THIS FORM MUST BE SUBMITTED WITH THE SEALED BID PROPOSAL

CITY OF SACRAMENTO SUBCONTRACTOR and ESBE PARTICIPATION VERIFICATION

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Name of Prime Contractor: O.C. Jones & Sons, Inc.	Bid Amount:	Date: 9/11/13
Business Entity or Subcontractor Name and Location	Indicate EBE or SBE (subject to verification)	Specific Bid Items of Work and brief description of labor materials and equipment to be provided.
		Estimated Dollar Value of Work / Services Provided
GEO CELL SOLUTION INC FRESNO	1(P), 16, 17	Cellular Concrete Backfill 585,000.-
FBD VANGUARD CONSTRUCTION INC. LIVERMORE	65 72, 73, 81, 96-98, 100-103, 142(P), 143(P), 146(P), 198(P), 199(P)	Minor Concrete 1,040,000.-
PRESTON PIPELINES SACRAMENTO	1(P), 4(P), 5(P), 6(P), 35-71, 85-93, 177(P), 201, 203, 147, 148	Underground Storm, Sewer, Water 2,890,000.-

(P) = Partial Item

CITY OF SACRAMENTO

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CITY OF SACRAMENTO SUBCONTRACTOR and ESBE PARTICIPATION VERIFICATION

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Name of Prime Contractor:	Business Entity or Subcontractor Name and Location	Indicate EBE or SBE (subject to verification)	Specific Bid Items of Work and brief description of labor materials and equipment to be provided.	Estimated Dollar Value of Work / Services Provided
O.C. Jones & Sons, Inc.				
	CENTRAL FENCE COMPANY SACRAMENTO		31, 82, 156, 157, 199(P) Fencing & Railing	125,000.-
	TAKAHARA LANDSCAPE INC. SACRAMENTO	SBE	1(P), 128-134, 136, 139, 147-148 , 202 Landscape, Planting, Irrigation	300,000.-
	CENTERLINE STRIPING COMPANY INC. ELK GROVE	SBE	99, 104, 105, 110-112 Striping, Signs, Barricades	102,000.-

EBE AND SBE CERTIFICATION STATEMENTS ARE DUE BY THE CLOSE OF BUSINESS TWO DAYS AFTER BID OPENING

CITY OF SACRAMENTO

THIS FORM MUST BE SUBMITTED WITH THE SEALED BID PROPOSAL

CITY OF SACRAMENTO SUBCONTRACTOR and ESBE PARTICIPATION VERIFICATION

To be eligible for award of this contract, the bidder shall list any business entity used to attain the 20% ESBE goal. Additionally, all other subcontractors who perform work, labor, or render service in an amount in excess of one-half of 1 percent of the total bid amount shall be listed. In the case of bids for the construction of streets and highways, including bridges, subcontractors whose subcontract value exceeds one-half (0.5) of one percent of the total bid or ten thousand dollars (\$10,000), whichever is greater, shall be listed. Estimated dollar values shall be provided for all work / services listed. The inclusion of false information or the omission of required information will render the bid non-responsive. **READ THE ABOVE REQUIREMENT CAREFULLY**

Name of Prime Contractor:	Bid Amount:	Date:	
O.C. Jones & Sons, Inc.		9/11/13	
Business Entity or Subcontractor Name and Location	Indicate EBE or SBE (subject to verification)	Specific Bid Items of Work and brief description of labor materials and equipment to be provided.	Estimated Dollar Value of Work / Services Provided
KCK BUILDERS		198(P)	220,000.-
SAN FRANCISCO		Bridge Canopies	
RNR CONSTRUCTION INC. SACRAMENTO	SBE	26,175 EPS ST-40 BRIDGE RAIL	430,000.-

(P) = Partial Item

EBE AND SBE CERTIFICATION STATEMENTS ARE DUE BY THE CLOSE OF BUSINESS TWO DAYS AFTER BID OPENING

MINIMUM QUALIFICATIONS QUESTIONNAIRE

Sacramento City Code Section 3.60.020 authorizes the Sacramento City Council to adopt standard minimum qualifications for bidders on competitively bid public works construction projects, and requires, among other provisions, that a bidder meet such minimum qualifications at the time of bid opening in order to bid. On July 31, 2007, the City Council adopted Resolution No. 2007-574 establishing these standard minimum qualifications. Pursuant to City Code section 3.60.020, a bidder failing to meet these minimum qualifications at the time of bid opening shall not be considered a responsible bidder for purposes of bidding on the subject project.

All bidders must demonstrate compliance with the minimum qualifications established by Resolution No. 2007-574 by completing all of the questions contained in this questionnaire. Bidder responses shall be limited to those operating business units, offices, branches and/or subsidiary divisions of the bidder that will be involved with the performance of any project work if awarded the contract. If a bidder answers "yes" to any single question, fails to submit a fully completed questionnaire, or submits false information, this will result in a determination that the minimum qualifications are not met, and the bidder shall not be considered a qualified bidder for purposes of bidding on this contract. If two or more entities submit a bid on a contract as a Joint Venture, each entity within the Joint Venture must separately meet these minimum qualifications for the Joint Venture to be considered a qualified bidder.

The City of Sacramento ("City") shall make its determination on the basis of the submitted questionnaire, as well as any relevant information that is obtained from others or as a result of investigation by the City. While it is the intent of this questionnaire to assist the City in determining whether bidders possess the minimum qualifications necessary to submit bids on the City's competitively bid public works construction contract, the fact that a bidder submits a questionnaire demonstrating that it meets these minimum qualifications shall not in any way limit or affect the City's ability to: (1) review other information contained in the bid submitted by the bidder, and additional relevant information, and determine whether the contractor is a responsive and/or responsible bidder; or (2) establish pre-qualification requirements for a specific contract or contracts.

By submitting this questionnaire, the bidder consents to the disclosure of its questionnaire answers: (i) to third parties for purposes of verification and investigation; (ii) in connection with any protest, challenge or appeal of any action taken by the City; and (iii) as required by any law or regulation, including without limitation the California Public Records Act (Calif. Gov't Code sections 6250 et seq.). Each questionnaire must be signed under penalty of perjury in the manner designated at the end of the form, by an individual who has the legal authority to bind the bidder submitting the questionnaire. If any information provided by a bidder becomes inaccurate, the bidder shall immediately notify the City and provide updated accurate information in writing, under penalty of perjury.

FOR OWNER USE ONLY

RESOLUTION NO.: 2007-574
DATE ADOPTED: July 31, 2007

Minimum Qualifications Questionnaire
Page 1 of 6

QUESTIONNAIRE

NOTICE: For firms that maintain other operating business units, offices, branches and/or subsidiary divisions that will not be involved with the performance of any project work if the firm is awarded the contract, references hereafter to "your firm" shall mean only those operating business units, offices, branches and/or subsidiary divisions that will be involved with the performance of any project work.

All of the following questions regarding "your firm" refer to the firm (corporation, partnership or sole proprietor) submitting this questionnaire, as well as any firm(s) with which any of your firm's owners, officers, or partners are or have been associated as an owner, officer, partner or similar position within the last five years

The firm submitting this questionnaire shall not be considered a responsible bidder if the answer to any of these questions is "yes", or if the firm submits a questionnaire that is not fully completed or contains false information.

Classification & Expiration Date(s) of California Contractor's License Number(s) held by firm:

A HAZ Exp. 3/31/15 759729

2. Has a contractor's license held by your firm and/or any owner, officer or partner of your firm been revoked at anytime in the last five years?

Yes No

3. Within the last five years, has a surety firm completed a contract on your firm's behalf, or paid for completion of a contract to which your firm was a party, because your firm was considered to be in default or was terminated for cause by the project owner?

Yes No

4. At the time of submitting this minimum qualifications questionnaire, is your firm ineligible to bid on or be awarded a public works contract, or perform as a subcontractor on a public works contract, pursuant to either California Labor Code section 1777.1 (prevailing wage violations) or Labor Code section 1777.7 (apprenticeship violations)?

Yes No

5. At any time during the last five years, has your firm, or any of its owners, officers or partners been convicted of a crime involving the awarding of a contract for a government construction project, or the bidding or performance of a government contract?

Yes No

FOR OWNER USE ONLY

RESOLUTION NO.: 2007-574
DATE ADOPTED: July 31, 2007

Minimum Qualifications Questionnaire
Page 2 of 6

Answer either subsection A or B, as applicable:

A. Your firm has completed three or more government construction contracts in Sacramento County within the last five years: Within those five years, has your firm been assessed liquidated damages on three or more government construction contracts in Sacramento County for failure to complete contract work on time?

NOTE: If there is a pending administrative or court action challenging the assessment of liquidated damages on a government contract within the last five years, you need not include that contract in responding to this question.

Yes No Not applicable

OR

B. Your firm has not completed at least three government construction contracts in Sacramento County within the last five years: Within the last three years, has your firm been assessed liquidated damages on three or more government construction contracts for failure to complete contract work on time?

NOTE: If there is a pending administrative or court action challenging an assessment of liquidated damages on a government contract within the last three years, you need not include that contract in responding to this question.

Yes No Not applicable

7. In the last three years has your firm been debarred from bidding on, or completing, any government agency or public works construction contract for any reason?

NOTE: If there is a pending administrative or court action challenging a debarment, you need not include that debarment in responding to this question.

Yes No

Has CAL OSHA assessed a total of three or more penalties against your firm for any "serious" or "willful" violation occurring on construction projects performed in Sacramento County at any time within the last three years?

NOTE: If there is a pending administrative or court action appealing a penalty assessment, you need not include that penalty assessment in responding to this question.

Yes No

FOR OWNER USE ONLY

RESOLUTION NO.: 2007-574
DATE ADOPTED: July 31, 2007

Minimum Qualifications Questionnaire
Page 3 of 6

9. Answer either subsection A or B, as preferred:

A. In the last three years has your firm had a three year average Workers' Compensation experience modification rate exceeding 1.1?

Yes No

OR

B. In the last three years has your firm had a three-year average incident rate for total lost workday cases exceeding 10?

NOTE: Incident rates represent the number of lost workday cases per 100 full-time workers and is to be calculated as: $(N/EH) \times 200,000$, where

N = number of lost workday cases (as defined by the U.S. Dept. of Labor, Bureau of Labor Statistics)

EH = total hours worked by all employees during the calendar year

200,000 = base for 100 equivalent full-time working (working 40 hours per week, 50 weeks per year)

Yes No

10. In the past three years, has the federal EPA, Region IX or a California Air Quality Management District or Regional Water Quality Control Board assessed penalties three or more times, either against your firm, or against the project owner for a violation resulting in whole or in part from any action or omission by your firm on a project on which your firm was a contractor in Sacramento County?

NOTE: If there is a pending administrative or court action appealing a penalty assessment, you need not include that penalty assessment in responding to this question.

Yes No

FOR OWNER USE ONLY

RESOLUTION NO.: 2007-574
DATE ADOPTED: July 31, 2007

Minimum Qualifications Questionnaire
Page 4 of 6

In the past three years, has the federal EPA, Region IX or a California Air Quality Management District or Regional Water Quality Control Board assessed a single penalty of \$100,000 or more, either against your firm, or against the project owner for a violation resulting in whole or in part from any action or omission by your firm on a project on which your firm was the contractor in Sacramento County?

NOTE: If there is a pending administrative or court action appealing a penalty assessment, you need not include that penalty assessment in responding to this question.

Yes No

12. In the past three years, have civil penalties been assessed against your firm pursuant to California Labor Code 1777.7 for violation of California public works apprenticeship requirements, three or more times?

NOTE: If there is a pending administrative or court action appealing a penalty assessment, you need not include that penalty assessment in responding to this question.

Yes No

13. In the past three years, has a public agency in California withheld contract payments or assessed penalties against your firm for violation of public works prevailing wage requirements, three or more times?

NOTE: If there is a pending administrative or court action appealing a withholding or penalty assessment, you need not include that withholding or penalty assessment in responding to this question.

Yes No

14. Has your firm been assessed penalties for violation of public works prevailing wage requirements in California, in an aggregate amount for the past three years of \$50,000 or more?

NOTE: If there is a pending administrative or court action appealing a penalty assessment, you need not include that penalty assessment in responding to this question.

Yes No

FOR OWNER USE ONLY

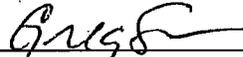
RESOLUTION NO.: 2007-574
DATE ADOPTED: July 31, 2007

Minimum Qualifications Questionnaire
Page 5 of 6

VERIFICATION AND SIGNATURE

I, the undersigned, certify and declare that I have read all the foregoing answers to this Minimum Qualifications Questionnaire, and know their contents. The matters stated in these Questionnaire answers are true of my own knowledge and belief, except as to those matters stated on information and belief, and as to those matters I believe them to be true. I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Signed at Berkeley, CA, on 9/4/13
(Location) (Date)

Signature: 

Print name: Greg Souder

Title: Secretary

NOTE: If two or more entities submit a bid on a contract as a Joint Venture, each entity within the Joint Venture must submit a separate Minimum Qualifications Questionnaire.

FOR OWNER USE ONLY

RESOLUTION NO.: 2007-574
DATE ADOPTED: July 31, 2007

NON-DISCRIMINATION IN EMPLOYEE BENEFITS BY CITY CONTRACTORS ORDINANCE

INTRODUCTION

The Sacramento Non-Discrimination In Employee Benefits By City Contractors Ordinance (the "Ordinance"), codified as Sacramento City Code Chapter 3.54, prohibits City contractors from discriminating in the provision of employee benefits between employees with spouses and employees with domestic partners, and between the spouses and domestic partners of employees.

APPLICATION

The provisions of the Ordinance apply to any contract or agreement (as defined below), between a Contractor and the City of Sacramento, in an amount exceeding \$25,000.00. The Ordinance applies to that portion of a contractor's operations that occur: (i) within the City of Sacramento; (ii) on real property outside the City of Sacramento if the property is owned by the City or if the City has a right to occupy the property; or (iii) at any location where a significant amount of work related to a City contract is being performed. The provisions apply only to those employee(s) actually working on the City contract and only for the actual amount of time the employee(s) spend working on such contract.

The Ordinance does not apply: to subcontractors or subcontracts of any Contractor or contractors; to transactions entered into pursuant to cooperative purchasing agreements approved by the Sacramento City Council; to legal contracts of other governmental jurisdictions or public agencies without separate competitive bidding by the City; where the requirements of the ordinance will violate or are inconsistent with the terms or conditions of a grant, subvention or agreement with a public agency or the instructions of an authorized representative of any such agency with respect to any such grant, subvention or agreement; to contracts for excavation or street construction; or to agreements for the use of City right-of-way where a contracting utility has the power of eminent domain.

DEFINITIONS

As set forth in the Ordinance, the following definitions apply:

"Contract" means an agreement for public works or improvements to be performed, or for goods or services to be purchased or grants to be provided, at the expense of the City or to be paid out of moneys deposited in the treasury or out of the trust money under the control or collected by the City. "Contract" also means a written agreement for the exclusive use ("exclusive use" means the right to use or occupy real property to the exclusion of others, other than the right reserved by the fee owner) or occupancy of real property for a term exceeding 29 days in any calendar year, whether by singular or cumulative instrument, (i) for the operation or use by others of real property owned or controlled by the City for the operation of a business, social, or other establishment or organization, including leases, concessions, franchises and easements, or (ii) for the City's use of occupancy of real property owned by others, including leases, concessions, franchises and easements.

"Contract" shall not include: a revocable at-will use or encroachment permit for the use of or encroachment on City property regardless of the ultimate duration of such permit; excavation, street construction or street use permits; agreements for the use of City right-of-way where a contracting utility has the power of eminent domain; or agreements governing the use of City property that constitute a public forum for activities that are primarily for the purpose of espousing or advocating causes or ideas and that are generally protected by the First Amendment to the United States Constitution or that are primarily recreational in nature.

"Contractor" means any person or persons, firm partnership or corporation, company, or combination thereof, that enters into a Contract with the City. "Contractor" does not include a public entity.

"Domestic Partner" means any person who has a currently registered domestic partnership with a governmental entity pursuant to state or local law authorizing the registration.

"Employee Benefits" means bereavement leave; disability, life, and other types of insurance; family medical leave; health benefits; membership or membership discounts; moving expenses; pension and retirement benefits; vacation; travel benefits; and any other benefit given to employees; "Employee benefits" shall not include benefits to the extent that the application of the requirements of this chapter to such benefits may be preempted by federal or state.

CONTRACTOR'S OBLIGATION TO PROVIDE THE CITY WITH DOCUMENTATION AND INFORMATION

Contractor shall provide the City with documentation and information verifying its compliance with the requirements of the Ordinance within ten (10) days of receipt of a request from the City. Contractors shall keep accurate payroll records, showing, for each City Contract, the employee's name, address, Social Security number, work classification, straight time pay rate, overtime pay rate, overtime hours worked, status and exemptions, and benefits for each day and pay period that the employee works on the City Contract. Each request for payroll records shall be accompanied by an affidavit to be completed and returned by the Contractor, as stated, attesting that the information contained in the payroll records is true and correct, and that the Contractor has complied with the requirements of the Ordinance. A violation of the Ordinance or noncompliance with the requirements of the Ordinance shall constitute a breach of contract.

EMPLOYER COMPLIANCE CERTIFICATE AND NOTICE REQUIREMENTS

- (a) All contractors seeking a Contract subject to the Ordinance shall submit a completed Declaration of Compliance Form (attachment "A"), signed by an authorized representative, with each proposal, bid or application. The Declaration of Compliance shall be made a part of the executed contract, and will be made available for public inspection and copying during regular business hours.
- (b) The Contractor shall give each existing employee working directing on a City contract and (at the time of hire), each new employee, a copy of the notification provided as attachment "B."
- (c) Contractor shall post, in a place visible to all employees, a copy of the notice provided as attachment "C."

**DECLARATION OF COMPLIANCE
Equal Benefits Ordinance**

O.C. Jones & Sons, Inc.

Name of Contractor

1520 Fourth St., Berkeley, CA 94710

Address

The above named contractor ("Contractor") hereby declares and agrees as follows:

1. I have read and understand the Non-Discrimination In Employee Benefits By City Contractors Ordinance ("Ordinance") provided to me by the City of Sacramento ("City") in connection with the City's request for proposals or other solicitations for the performance of services, or for the provision of commodities, under a City contract or agreement ("Contract").
2. As a condition of receiving the City Contract, I agree to fully comply with the requirements of the Ordinance, codified as Chapter 3. 54 of the Sacramento City Code.
3. If the face amount of this City Contract is less than \$25,000, as a condition of receiving this Contract, I agree to notify the City in writing if the aggregate value of the City Contract referenced herein, after changes, modifications, or similar actions, equals or exceeds \$25,000 in total value.
4. I understand, to the extent that such benefits are not preempted or prohibited by federal or state law, employee benefits covered by the Ordinance, are any of the following:
 - a. Bereavement Leave
 - b. Disability, life, and other types of insurance
 - c. Family medical leave
 - d. Health benefits
 - e. Membership or membership discounts
 - f. Moving expenses
 - g. Pension and retirement benefits
 - h. Vacation
 - i. Travel benefits
 - j. Any other benefit offered to employees

I agree that should I offer any of the above listed employee benefits, that I will offer those benefits, without discrimination between employees with spouses and employees with domestic partners, and without discrimination between the spouses and domestic partners of such employees.

5. I understand that I will not be considered to be discriminating in the provision or application of employee benefits under the following conditions or circumstances:

- a. In the event that the actual cost of providing a benefit to a domestic partner or spouse, exceeds the cost of providing the same benefit to a spouse or domestic partner of an employee, I will not be required to provide the benefit, nor shall it be deemed discriminatory, if I require the employee to pay the monetary difference in order to provide the benefit to the domestic partner or to the spouse.
- b. In the event I am unable to provide a certain benefit, despite taking reasonable measures to do so, if I provide the employee with a cash equivalent, I will not be deemed to be discriminating in the application of that benefit.
- c. If I provide employee benefits neither to employee's spouses nor to employee's domestic partners.
- d. If I provide employee benefits to employees on a basis unrelated to marital or domestic partner status.
- e. If I submit, to the Program Coordinator, written evidence of making reasonable efforts to end discrimination in employee benefits by implementing policies which are to be enacted before the first effective date after the first open enrollment process following the date the Contract is executed with the City.

I understand that any delay in the implementation of such policies may not exceed one (1) year from the date the Contract is executed with the City, and applies only to those employee benefits for which an open enrollment process is applicable.

- f. Until administrative steps can be taken to incorporate, in the infrastructure, nondiscrimination in employee benefits

The time allotted for these administrative steps will apply only to those employee benefits for which administrative steps are necessary and may not exceed three (3) months from the date the Contract is executed with the City.

- g. Until the expiration of a current collective bargaining agreement(s) where, in fact, employee benefits are governed by a collective bargaining agreement(s).
- h. I take all reasonable measures to end discrimination in employee benefits by either requesting the union(s) involved agree to reopen the agreement(s) in order for me to take whatever steps are necessary to end discrimination in employee benefits or by my ending discrimination in employee benefits without reopening the collective bargaining agreement(s).

- i. In the event I cannot end discrimination in employee benefits despite taking all reasonable measures to do so, I provide a cash equivalent to eligible employees for whom employee benefits (as listed previously), are not available.

Unless otherwise authorized in writing by the City Manager, I understand this cash equivalent must begin at the time the union(s) refuse to allow the collective bargaining agreement(s) to be reopened or no longer than three (3) months from the date the Contract is executed with the City.

6. I understand that failure to comply with the provisions of Section 5. (a) through 4. (i), above, will subject me to possible suspension and/or termination of this Contract for cause; repayment of any or all of the Contract amount disbursed by the City; debarment for future contracts until all penalties and restitution have been paid in full; deemed ineligible for future contracts for up to two (2) years; the imposition of a penalty, payable to the City, in the sum of \$50.00 for each employee, for each calendar day during which the employee was discriminated against in violation of the provisions of the Ordinance.
7. I understand and do hereby agree to provide each current employee and, within ten (10) days of hire, each new employee, of their rights under the Ordinance. I further agree to maintain a copy of each such letter provided, in an appropriate file for possible inspection by an authorized representative of the City. I also agree to prominently display a poster informing each employee of these rights.
8. I understand that I have the right to request an exemption to the benefit provisions of the Ordinance when such a request is submitted to the Procurement Services Division, in writing with sufficient justification for resolution, prior to contract award.

I further understand that the City may request a waiver or exemption to the provisions or requirements of the Ordinance, when only one contractor is available to enter into a contract or agreement to occupy and use City property on terms and conditions established by the City; when sole source conditions exist for goods, services, public project or improvements and related construction services; when there are no responsive bidders to the EBO requirements and the contract is for essential goods or services; when emergency conditions with public health and safety implications exist; or when the contract is for specialized legal services if in the best interest of the City.

9. In consideration of the foregoing, I shall defend, indemnify and hold harmless, the City, its officers and employees, against any claims, actions, damages, costs (including reasonable attorney fees), or other liabilities of any kind arising from any violation of the City's Equal Benefits Requirements or of the Ordinance by me.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, and that I am authorized to bind the Contractor to the provisions of this Declaration.

Greg Souder
Signature of Authorized Representative

9/4/13
Date

Greg Souder
Print Name

Secretary
Title



**YOUR RIGHTS UNDER THE CITY OF SACRAMENTO'S
NON-DISCRIMINATION IN EMPLOYEE BENEFITS BY CITY CONTRACTORS ORDINANCE**

On (date), your employer (the "Employer") entered into a contract with the City of Sacramento (the "City") for (contract details), and as a condition of that contract, agreed to abide by the requirements of the City's Non-Discrimination In Employee Benefits By City Contractors Ordinance (Sacramento City Code Section 3.54).

The Ordinance does not require the Employer to provide employee benefits. The Ordinance does require that if certain employee benefits are provided by the Employer, that those benefits be provided without discrimination between employees with spouses and employees with domestic partners, and without discrimination between the spouse or domestic partner of employees.

The Ordinance covers any employee working on the specific contract referenced above, but only for the period of time while those employees are actually working on this specific contract.

The included employee benefits are:

- Bereavement leave
- Disability, life and other types of insurance
- Family medical leave
- Health benefits
- Membership or membership discounts
- Moving expenses
- Pension and retirement benefits
- Vacation
- Travel benefits
- Any other benefits given to employees

(Employee Benefits does not include benefits that may be preempted by federal or state law.)

If you feel you have been discriminated or retaliated against by your employer in the terms and conditions of your application for employment, or in your employment, or in the application of these employee benefits, because of your status as an applicant or as an employee protected by the Ordinance, or because you reported a violation of the Ordinance, and after having exhausted all remedies with your employer,

You May . . .

- Submit a written complaint to the City of Sacramento, Contract Services Unit, containing the details of the alleged violation. The address is:

City of Sacramento
Contract Services Unit
915 I St., 2nd Floor
Sacramento, CA 95814-2714.

- Bring an action in the appropriate division of the Superior Court of the State of California against the Employer and obtain the following remedies:
 - Reinstatement, injunctive relief, compensatory damages and punitive damages
 - Reasonable attorney's fees and costs



**YOUR RIGHTS UNDER THE CITY OF SACRAMENTO'S
NON-DISCRIMINATION IN EMPLOYEE BENEFITS BY CITY CONTRACTORS ORDINANCE**

If your employer provides employee benefits, they must be provided to those employees working on a City of Sacramento contract without discriminating between employees with spouses and employees with domestic partners.

The included employee benefits are:

- Bereavement leave
- Disability, life and other types of insurance
- Family medical leave
- Health benefits
- Membership or membership discounts
- Moving expenses
- Pension and retirement benefits
- Vacation
- Travel benefits
- Any other benefits given to employees

If you feel you have been discriminated against by your employer . . .

You May . . .

- o Submit a written complaint to the City of Sacramento, Contract Services Unit, containing the details of the alleged violation. The address is:

City of Sacramento
Contract Services Unit
915 I St, 2nd Floor
Sacramento, CA 95814
- o Bring an action in the appropriate division of the Superior Court of the State of California against the employer and obtain reinstatement, injunctive relief, compensatory damages, punitive damages and reasonable attorney's fees and costs.

Discrimination and Retaliation Prohibited.

If you feel you have been discriminated or retaliated against by your employer in the terms and conditions of your application for employment, or in your employment, because of your status as an applicant or as an employee protected by the Ordinance, or because you reported a violation of this Ordinance . . .

You May Also . . .

Submit a written complaint to the City of Sacramento, Contract Services Unit, at the same address, containing the details of the alleged violation.

TITLE VI

Title VI Language

APPENDIX A

During the performance of this contract, the contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

(1) Compliance with Regulations:

The contractor shall comply with the Regulations relative to nondiscrimination in Federally-assisted programs of the Department of Public Works (hereinafter, "DOT") Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.

(2) Nondiscrimination:

The contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.

(3) Solicitations for Subcontracts, Including Procurements of Materials and Equipment:

In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.

(4) Information and Reports:

The contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the (Recipient) or the (Name of Appropriate Administration) to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information the contractor shall so certify to the (Recipient), or the (Name of Appropriate Administration) as appropriate, and shall set forth what efforts it has made to obtain the information.

(5) Sanctions for Noncompliance:

In the event of the contractor's noncompliance with the nondiscrimination provisions of this contract, the (**Recipient**) shall impose such contract sanctions as it or the (**Name of Appropriate Administration**) may determine to be appropriate, including, but not limited to:

- (a) withholding of payments to the contractor under the contract until the contractor complies, and/or
- (b) cancellation, termination or suspension of the contract, in whole or in part.

(6) Incorporation of Provisions:

The contractor shall include the provisions of paragraphs (1) through (6) in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto. The contractor shall take such action with respect to any subcontract or procurement as the (**Recipient**) or the (**Name of Appropriate Administration**) may direct as a means of enforcing such provisions including sanctions for non-compliance: Provided, however, that, in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request the (**Recipient**) to enter into such litigation to protect the interests of the (**Recipient**), and, in addition, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

FOLLOWING FORMS TO BE FILLED OUT

AND SIGNED

ONLY

IF AWARDED CONTRACT

AGREEMENT
(Construction Contract Over \$25,000)

THIS AGREEMENT, dated for identification October 15, 2013, is made and entered into between the CITY OF SACRAMENTO, a municipal corporation ("City"), and O.C. Jones & Sons, Inc. 1520 Fourth Street, Berkeley CA 94710-1774 ("Contractor").

The City and Contractor hereby mutually agree as follows:

1. CONTRACT DOCUMENTS

The Contract Documents, sometimes also referred to as the "Contract," consist of the following items, which are hereby incorporated by reference as if set forth in full in this Agreement:

- The Notice to Contractors
- The Proposal Form submitted by the Contractor
- The Instructions to Bidders
- The Emerging and Small Business Enterprise (ESBE) Requirements
- The Requirements for the Non-Discrimination in Employee Benefits by City Contractors Ordinance and the Declaration of Compliance
- The City's Reference Guide for Construction Contracts
- The Addenda, if any
- This Agreement
- The Standard Specifications
- The Special Provisions
- The Plans and Technical Specifications
- The drawings and other data and all developments thereof prepared by City pursuant to the Contract
- Any modifications of any of the foregoing made or approved by City, including but not limited to duly authorized change orders.

Unless specifically noted otherwise, references to the "Standard Specifications" shall mean and refer to the Standard Specifications for Public Construction of the City of Sacramento approved by the Sacramento City Council on June 4, 2007 (Resolution No. 2007-350), and any subsequent amendments thereto approved by the Sacramento City Council or the Sacramento City Manager. Work called for in any one Contract Document and not mentioned in another is to be performed and executed as if mentioned in all Contract Documents. The table of contents, titles and headings contained in the Contract Documents are provided solely to facilitate reference to various provisions of the Contract Documents and in no way affect or limit the interpretation of the provisions to which they refer.

2. DEFINITIONS

Unless otherwise specifically provided herein, all words and phrases defined in the Standard Specifications shall have the same meaning and intent in this Agreement.

3. AGREEMENT CONTROLS

In the event of a conflict between any of the terms and conditions set forth in this Agreement and the terms and conditions set forth in other Contract Documents, the terms and conditions set forth in this Agreement shall prevail, except that the provisions of any duly authorized change order shall prevail over any conflicting provisions of this Agreement.

4. SCOPE OF CONTRACT

Contractor agrees to furnish all tools, equipment, apparatus, facilities, labor, material and transportation necessary to perform and complete in a good and workmanlike manner to the satisfaction of City, all the Work called for in the Contract Documents entitled:

5th Street Viaduct & Railyards Blvd Project (PN: T15135800)

including the Work called for in the following alternative bid items described in the Proposal Form:

Contractor agrees to perform such Work in the manner designated in and in strict conformity with the Contract Documents.

5. CONTRACT AMOUNT AND PAYMENTS

City agrees to pay and Contractor agrees to accept, as complete payment for the above Work, in accordance with the schedule and procedures set forth in the Contract Documents and subject to deductions, withholdings and additions as specified in the Contract Documents, a total sum that shall not exceed the total bid amount set forth in Contractor's Proposal Form. In addition, subject to deductions, withholdings and additions as specified in the Contract Documents, payment for individual items of the Work shall be computed as follows:

(A) For items of the Work for which a lump sum price is specified in Contractor's Proposal Form, Contractor shall be paid the lump sum price(s) specified in Contractor's Proposal Form; and

(B) For items of the Work for which a unit price is specified in Contractor's Proposal Form, Contractor shall be paid the sum computed at such unit price, or computed at a different price if such different price is determined by City in accordance with the Standard Specifications, based on the actual amount of each such item performed and/or furnished and incorporated in the Work; provided that in no event shall the total sum for a unit price item exceed the total bid amount set forth for such item in the Contractor's Proposal Form, unless authorized by Change Order.

6. PROGRESS PAYMENTS

Subject to the terms and conditions of the Contract, City shall cause payments to be made upon demand of Contractor as follows:

(A) On or about the first of the month, the Engineer shall present to the Contractor a statement showing the amount of labor and materials incorporated in the Work through the twentieth (20) calendar day of the preceding month. , and, The City shall issue a certificate for ninety-five (95) percent of the amount it shall find to be due, subject to any deductions or withholdings authorized or required under the Contract or any applicable Laws or Regulations, if (i) both Contractor and Engineer approve the statement in writing; (ii) the City's labor compliance officer provides written approval; and, (iii) Contractor executes and submits to City a conditional waiver and release for the amount certified by the City on a form that complies with Civil Code section 8132. Not later than five (5) days after receipt of a progress payment, Contractor shall execute and submit to City an unconditional waiver and release on a form that complies with Civil Code section 8134 for an amount equal to the progress payment.

(B) No inaccuracy or error in said monthly estimates shall operate to release Contractor from damages arising from such Work or from enforcement of each and every provision of the Contract Documents, and City shall have the right subsequently to correct any error made in any estimate for payment.

(C) Contractor shall not be paid for any defective or improper Work.

(D) The remaining five (5) percent of the value of the Work performed under the Contract, if unencumbered and subject to any deductions or withholdings authorized or required under the Contract or any applicable Laws or Regulations, shall be released not later than sixty (60) days after (i) completion and final acceptance of the Work by City; and (ii) Contractor executes and submits to City a conditional waiver and release for the amount to be released on a form that complies with Civil Code section 8136. Not later than five (5) days after receipt of final payment, Contractor shall execute and submit to City an unconditional waiver and release on a form that complies with Civil Code section 8138 for an amount equal to the final payment. Acceptance by Contractor of the final payment shall constitute a waiver of all claims against the City arising under the Contract Documents, except for disputed claims in stated amounts that the Contractor specifically reserves in writing, but only to the extent that the Contractor has complied with all procedures and requirements applicable to the presentation and processing of such claim(s) under the Contract Documents. Contractor shall be entitled to substitute securities for retention or to direct that payments of retention be made into escrow, as provided in Public Contract Code Section 22300, upon execution of the City's Escrow Agreement for Security Deposits in Lieu of Retention.

(E) The parties agree that, for purposes of the timely progress payment requirements specified in Public Contract Code Section 20104.50, the date that the City receives a statement jointly approved by the Contractor and the Engineer as provided above shall be deemed to constitute the date that City receives an undisputed and properly submitted payment request from the Contractor. Progress payments not made within 30 days after this date may be subject to payment of interest as provided in Public Contract Code Section 20104.50.

7. RETENTION OF SUMS CHARGED AGAINST CONTRACTOR

When, under the provisions of this Contract or any applicable Laws or Regulations, City is authorized or required to withhold, deduct or charge any sum of money against Contractor, City may deduct and retain the amount of such charge from the amount of the next succeeding progress estimate(s), or from any other moneys due or that may become due Contractor from City. If, on completion or termination of the Contract, sums due Contractor are insufficient to pay City's charges, City shall have the right to recover the balance from Contractor or its Sureties.

8. COMMENCEMENT AND PROSECUTION OF WORK

Contractor shall commence the Work not later than fifteen (15) working days after the date of the written Notice to Proceed from City to Contractor and shall diligently prosecute the Work to final completion. The phase "commence the Work" means to engage in a continuous program on-site including, but not limited to, site clearance, grading, dredging, land filling and the fabrications, erection, or installation of the Work. The Notice to Proceed shall be issued within fifteen (15) calendar days following execution of the Agreement by the City and the filing by Contractor of the required Bonds and proof of insurance, provided that the Engineer may delay issuance of the Notice to Proceed if the Engineer determines in the Engineer's sole discretion that conditions on the site of the Work are unsuitable for commencement of the Work. After the Notice to Proceed is issued, the continuous prosecution of Work by Contractor shall be subject only to Excusable Delays as defined in this Agreement.

9. TIME OF COMPLETION

The entire Work shall be brought to completion in the manner provided for in the Contract Documents on or before 220 Working days from the date of the Notice to Proceed (hereinafter called the "Completion Date") unless extensions of time are granted in accordance with the Contract Documents.

Failure to complete the entire Work by the Completion Date and in the manner provided for in the Contract Documents shall subject Contractor to liquidated damages as provided in this Agreement. Time is and shall be of the essence in the performance of the Contract and the Work.

10. PAYMENTS DO NOT IMPLY ACCEPTANCE OF WORK

The payment of any progress payment, or the acceptance thereof by Contractor, shall not constitute acceptance of the Work or any portion thereof and shall in no way reduce the liability of Contractor to replace unsatisfactory work or material, whether or not the unsatisfactory character of such work or material was apparent or detected at the time such payment was made.

11. ACCEPTANCE NOT RELEASE

Contractor shall correct immediately any defective or imperfect work or materials that may be discovered before final acceptance of the entire Work, whether or not such defect or imperfection was previously noticed or identified by the City. The inspection of the Work, or any part thereof, shall not relieve Contractor of any of its obligations to perform satisfactory work as herein specified.

Failure or neglect on the part of City or any of its officers, employees or authorized agents to discover, identify, condemn or reject defective or imperfect work or materials shall not be construed to imply an acceptance of such work or materials, if such defect or imperfection becomes evident at any time prior to final acceptance of the entire Work, nor shall such failure or neglect be construed as barring City from enforcing Contractor's warranty(ies) or otherwise recovering damages or such a sum of money as may be required to repair or rebuild the defective or imperfect work or materials whenever City may discover the same, subject only to any statutes of limitation that may apply to any such claim.

12. CITY'S RIGHT TO TAKE POSSESSION OF THE WORK IN WHOLE OR IN PART

The City shall have the right at any time to enter upon the Work and perform work not covered by this Contract, or to occupy and use a portion of the Work, prior to the date of the final acceptance of the Work as a whole, without in any way relieving Contractor of any obligations under this Contract.

13. NO WAIVER OF REMEDIES

Neither the inspection by City, its officers, employees or agents, nor any certificate or other approval for the payment of money, nor any payment for, nor acceptance of the whole or any part of the Work by City, nor any extensions of time, nor any position taken by City, its officers, employees or its agents shall operate as a waiver of any provision of the Contract Documents nor of any power herein reserved to City or any right to damages herein provided, nor shall any waiver of any breach of this Agreement be held to be a waiver of any other or subsequent breach. All remedies provided in the Contract Documents shall be taken and construed as cumulative; in addition to each and every other remedy herein provided, the City shall have any and all equitable and legal remedies that it would in any case have.

14. WARRANTY

Except as otherwise expressly provided in the Contract Documents, and excepting only items of routine maintenance, ordinary wear and tear and unusual abuse or neglect by City, Contractor warrants and guarantees all Work executed and all supplies, materials and devices of whatsoever nature incorporated in or attached to the Work, or otherwise provided as a part of the Work pursuant to the Contract, to be absolutely free of all defects of workmanship and materials for a period of one year after final acceptance

of the entire Work by the City. Contractor shall repair or replace all work or material, together with any other work or material that may be displaced or damaged in so doing, that may prove defective in workmanship or material within this one year warranty period without expense or charge of any nature whatsoever to City.

In the event that Contractor shall fail to comply with the conditions of the foregoing warranty within ten (10) days after being notified of the defect in writing, City shall have the right, but shall not be obligated, to repair, or obtain the repair of, the defect and Contractor shall pay to City on demand all costs and expense of such repair. Notwithstanding anything herein to the contrary, in the event that any defect in workmanship or material covered by the foregoing warranty results in a condition that constitutes an immediate hazard to public health or safety, or any property interest, or any person, City shall have the right to immediately repair, or cause to be repaired, such defect, and Contractor shall pay to City on demand all costs and expense of such repair. The foregoing statement relating to hazards to health, safety or property shall be deemed to include both temporary and permanent repairs that may be required as determined in the sole discretion and judgment of City.

In addition to the above, the Contractor shall make a written assignment of all manufacturer's and other product warranties to the City, prior to completion and final acceptance of the Work by City.

The Contractor's Performance Bond shall secure the performance of the Contractor's obligations under this Section 14, and the Contractor and its Surety shall be jointly and severally liable for these obligations.

15. LIQUIDATED DAMAGES IF WORK NOT COMPLETED ON TIME

(A) The actual fact of the occurrence of damages and the actual amount of the damages that City would suffer if the entire Work, and/or any specified portion thereof, were not completed within the time(s) specified herein are dependent upon many circumstances and conditions that could prevail in various combinations, and for this reason, it is impracticable and extremely difficult to fix the actual damages. Damages that City would suffer in the event of such delay include: loss of the use of the project; expenses of prolonged assignment to the project of an architectural and/or engineering staff; prolonged costs of administration, inspection, and supervision; increased operational expenses and/or impaired operation of other facilities dependent upon completion of the project; and the loss and inconvenience suffered by the public within the City of Sacramento by reason of the delay in the completion of the project or portion thereof. Accordingly, the parties agree, and by execution of this Agreement, Contractor acknowledges that it understands and agrees, that the amount(s) set forth herein as liquidated damages reflect the parties' best efforts at the time of entering into the Contract to estimate the damages that may be incurred by City and the public due to the Contractor's delay in completion of the Work and/or any specified portion thereof, and shall be presumed to be the amount of damages sustained by the failure of Contractor to complete the entire Work and/or any specified portion thereof within the time(s) specified herein.

(B) Contractor shall pay liquidated damages to City for failure to complete the entire Work by the Completion Date (as extended in accordance with the Contract Documents, if applicable) in the amount of **\$2,500** for each calendar day after the Completion Date (as extended in accordance with the Contract Documents, if applicable), continuing to the time at which the entire Work is completed. Such amount is the actual cash value agreed upon by the City and Contractor as the loss to City and the public resulting from Contractor's default.

The parties agree, and by execution of this Agreement, Contractor acknowledges that it understands and agrees, that the foregoing provisions provide for the imposition of liquidated damages from the Completion Date (as extended in accordance with the Contract Documents, if applicable) until the date of completion of the entire Work as determined by the Engineer in accordance with Section 8-4 of the

Standard Specifications, whether or not the Work or any portion thereof is claimed or determined to be substantially complete prior to such date of completion.

(C) In the event Contractor shall become liable for liquidated damages, City, in addition to all other remedies provided by law, shall have the right to withhold any and all payments that otherwise would be or become due Contractor until the liability of Contractor under this section is finally determined. City shall have the right to use and apply such payments, in whole or in part, to reimburse City for all liquidated damages due or to become due to City. Any remaining balance of such payments shall be paid to Contractor only after discharge in full of all liability incurred by Contractor under this section or otherwise under any provision of the Contract Documents or any applicable Law or Regulation. If the sum so retained by City is not sufficient to discharge all such liabilities of Contractor, Contractor shall continue to remain liable to City until all such liabilities are satisfied in full. No failure by City to withhold any payment as specified above shall in any manner be construed to constitute a release of any such liabilities nor a waiver of the City's right to withhold payment for such liabilities.

16. INDEMNITY AND HOLD HARMLESS

(A) Contractor shall defend, hold harmless and indemnify the City, its officers, employees, and agents, and each and every one of them, from and against any and all actions, damages, costs, liabilities, claims, demands, losses, judgments, penalties, costs and expenses of every type and description, whether arising on or off the site of the Work, including, but not limited to, any fees and/or costs reasonably incurred by City's staff attorneys or outside attorneys and any fees and expenses incurred in enforcing this provision (hereafter collectively referred to as "Liabilities"), including but not limited to Liabilities arising from personal injury or death, damage to personal, real or intellectual property or the environment, contractual or other economic damages, or regulatory penalties, arising out of or in any way connected with performance of or failure to perform the Work by the Contractor, any subcontractor or agent, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, whether or not (i) such Liabilities are caused in part by a party indemnified hereunder, or (ii) such Liabilities are litigated, settled or reduced to judgment; provided that the foregoing indemnity does not apply to liability for damages for death or bodily injury to persons, injury to property, or other loss, damage or expense to the extent arising from (i) the sole negligence or willful misconduct of, or defects in design furnished by, City, its agents, servants, or independent contractors who are directly responsible to City, or (ii) the active negligence of City.

(B) The existence or acceptance by City of any of the insurance policies or coverages described in this Agreement shall not affect or limit any of City's rights under this Section 16, nor shall the limits of such insurance limit the liability of Contractor hereunder. The provisions of this Section 16 shall survive any expiration or termination of the Contract.

17. CONTRACTOR SHALL ASSUME RISKS

Until the completion and final acceptance by City of all Work under this Contract, the Work shall be under Contractor's responsible care and charge, and Contractor, at no cost to City, shall rebuild, repair, restore and make good all injuries, damages, re-erections, and repairs occasioned or rendered necessary by accidental causes of any nature, to all or any portions of the Work.

18. GENERAL LIABILITY OF CONTRACTOR

Except as otherwise herein expressly stipulated, Contractor shall perform all the Work and furnish all the labor, materials, tools, equipment, apparatus, facilities, transportation, power and light, and appliances, necessary or proper for performing and completing the Work herein required in the manner

and within the time herein specified. The mention of any specific duty or liability of Contractor shall not be construed as a limitation or restriction of any general liability or duty of Contractor, and any reference to any specific duty or liability shall be construed to be solely for the purpose of explanation.

19. INSURANCE

During the entire term of this Contract and until completion and final acceptance of the Work as provided in the Contract Documents, Contractor shall maintain in full force and effect the insurance coverage described in this section.

Full compensation for all premiums that Contractor is required to pay for the insurance coverage described herein shall be included in the compensation specified for performance of the Work under the Contract. No additional compensation will be provided for Contractor's insurance premiums.

It is understood and agreed by the Contractor that its liability to the City shall not in any way be limited to or affected by the amount of insurance coverage required of or carried by the Contractor.

(A) Minimum Scope and Limits of Insurance Coverage

(1) Commercial General Liability Insurance, providing coverage at least as broad as ISO CGL Form 00 01 on an occurrence basis for bodily injury, including death, of one or more persons, property damage and personal injury, with limits of not less than two million dollars (\$2,000,000) per occurrence and two million dollars (\$2,000,000) per project aggregate. The policy shall provide contractual liability and products and completed operations coverage for the term of the policy.

(2) Automobile Liability Insurance providing coverage at least as broad as ISO Form CA 00 01 on an occurrence basis for bodily injury, including death, of one or more persons, property damage and personal injury, with limits of not less than two million dollars (\$2,000,000) per occurrence. The policy shall provide coverage for owned, non-owned and/or hired autos as appropriate to the operations of the Contractor.

(3) Workers' Compensation Insurance with statutory limits, and Employers' Liability Insurance with limits of not less than one million dollars (\$1,000,000). The Worker's Compensation policy shall include a waiver of subrogation in favor of the City of Sacramento, IA Sacramento Holdings, L.L.C. In the event Contractor is self-insured, it shall furnish City with a certificate of consent to self-insure issued by the director of the California Department of Industrial Relations.

(4) Pollution Legal Liability Insurance (including asbestos and lead paint) providing coverage on an occurrence form with limits of not less than \$10,000,000 per occurrence.

(5) Umbrella/Excess Liability Insurance providing coverage at least as broad as the underlying policies and with limits of not less than \$25,000,000 per occurrence on an occurrence basis in excess of the underlying insurance coverage limits.

(6) Builder's Risk Property Insurance

- i. Contractor shall purchase and maintain Builder's Risk Insurance with a company or companies lawfully authorized to do business in the State of California. Such policy shall be written in the amount of the total bid amount set forth in Contractor's Proposal Form, plus the value of subsequent Contract

modifications, comprising the total value Work at the project site on a replacement cost basis. Such insurance shall be maintained, unless otherwise provided in the Contract Documents or otherwise agreed upon in writing by all persons and entities who are beneficiaries of such insurance, until final payment has been made as provided in the Contract Documents or until no persons or entities other than the Contractor has an insurable interest in the Work required to be covered, whichever is later. This insurance shall include the City, IA Holdings, and all subcontractors working on the Work as primary additional insureds. Contractor shall be responsible to pay any deductible under the policy.

- ii. Such policy or policies shall provide waivers of all subrogation rights against the City of Sacramento, IA Holdings, and all subcontractors working on the Work, even if their negligence causes a covered loss, and regardless of the extent of their insurable interest in the covered property.
- iii. Such Builder's Risk Insurance shall be on an "all risk" or equivalent policy form and shall include, without limitation, insurance against the perils of fire (with extended coverage), flood, theft, vandalism, malicious mischief, collapse, windstorm, testing and startup and debris removal.
- iv. Such policy or policies shall cover portions of the materials for the Work that are stored off of the project site and also portions in transit.

(B) Additional Insured Coverage

(1) Commercial General Liability Insurance: The City, IA Sacramento Holdings, L.L.C., and their officials, employees and volunteers shall be covered by policy terms or endorsement as additional insureds as respects general liability arising out of activities performed by or on behalf of Contractor, products and completed operations of Contractor, and premises owned, leased or used by Contractor. The general liability additional insured endorsement must be signed by an authorized representative of the insurance carrier.

If the policy includes a blanket additional insured endorsement or contractual additional insured coverage, the above signature requirement may be fulfilled by submitting that document with a signed declaration page referencing the blanket endorsement or policy form.

(2) Automobile Liability Insurance: The City, IA Sacramento Holdings, L.L.C., and their officials, employees and volunteers shall be covered by policy terms or endorsement as additional insureds under the automobile liability insurance, pollution legal liability insurance, and umbrella/excess liability insurance policies.

(C) Other Insurance Provisions

The policies are to contain, or be endorsed to contain, the following provisions:

(1) Contractor's insurance coverage shall be primary insurance as respects City, IA Sacramento Holdings, L.L.C., and their officials, employees and volunteers. Any insurance or self-insurance maintained by City, IA Sacramento Holdings, L.L.C., and their officials, employees or volunteers shall be in excess of Contractor's insurance and shall not contribute with it.

(2) Any failure to comply with reporting provisions of the policies shall not affect coverage provided to City, IA Sacramento Holdings, L.L.C., and their officials, employees or volunteers.

(3) Coverage shall state that Contractor's insurance 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.

(4) City will be provided with sixty (60) days written notice of cancellation or material change in the policy language or terms.

(D) Acceptability of Insurance

Insurance shall be placed with insurers with a Bests' rating of not less than A:V. Self-insured retentions, policy terms or other variations that do not comply with the requirements of this Section 19 must be declared to and approved by the City Risk Management Division in writing prior to execution of this Agreement.

(E) Verification of Coverage

(1) Contractor shall furnish City with certificates and required endorsements evidencing the insurance required. The certificates and endorsements shall be forwarded to the City representative designated by City. Copies of policies shall be delivered to the City on demand. Certificates of insurance shall be signed by an authorized representative of the insurance carrier.

(2) The City may withdraw its offer of contract or cancel the Contract if the certificates of insurance and endorsements required have not been provided prior to execution of this Agreement. The City may withhold payments to Contractor and/or cancel the Contract if the insurance is canceled or Contractor otherwise ceases to be insured as required herein.

(F) Subcontractors

Contractor shall require and verify that all subcontractors maintain insurance coverage that meets the minimum scope and limits of insurance coverage specified in subsections A(1), A(2) and A(3) above.

20. FAILURE TO MAINTAIN BONDS OR INSURANCE

If, at any time during the performance of this Contract, Contractor fails to maintain any item of the bonds and/or insurance required under the Contract in full force and effect, Contractor shall immediately suspend all work under the Contract and notify City in writing of such failure. After such notice is provided, or if City discovers such failure and notifies Contractor, the City thereafter may withhold all Contract payments due or that become due until notice is received by City that such bonds and/or insurance have been restored in full force and effect and that the premiums therefor have been paid for a period satisfactory to the Division of Risk Management. Contractor shall not resume work until notified by City to do so, and the City shall have no responsibility or liability for any costs incurred by Contractor as a result of such suspension of Work.

In addition to the foregoing, any failure to maintain any item of the required bonds and/or insurance at any time during the performance of this Contract will be sufficient cause for termination of the Contract by City.

The Contractor shall be solely responsible for, and shall defend, indemnify and hold harmless the City, its officers, employees and agents against and from, any and all damages, claims, losses, actions, costs or other expenses of any kind incurred by any party as a direct or indirect result of any suspension of Work or termination of the Contract under the provisions of this Section.

21. EXCUSABLE DELAYS

For the purpose of these Contract Documents, the term "Excusable Delay" shall mean, and is limited to, delay caused directly by: acts of God; acts of a public enemy; fires; inclement weather as determined by the Engineer; riots; insurrections; epidemics; quarantine restrictions; strikes; lockouts; sitdowns; acts of a governmental agency; priorities or privileges established for the manufacture, assemble, or allotment of materials necessary in the Work by order, decree or otherwise of the United States or by any department, bureau, commission, committee, agent, or administrator of any legally constituted public authority; changes in the Work ordered by City insofar as they necessarily require additional time in which to complete the Work; the prevention of Contractor from commencing or prosecuting the Work because of the acts of others, excepting Contractor's subcontractors or suppliers; or the prevention of Contractor from commencing or prosecuting the Work because of a Citywide failure of public utility service.

The term "Excusable Delay" shall specifically not include: (i) any delay that could have been avoided by the exercise of care, prudence, foresight and diligence on the part of Contractor; (ii) any delay in the prosecution of any part of the Work that does not constitute a Controlling Operation, whether or not such delay is unavoidable; (iii) any reasonable delay resulting from time required by City for review of any Contractor submittals and for the making of surveys, measurements and inspection; and, (iv) any delay arising from an interruption in the prosecution of the Work on account of reasonable interference by other Contractors employed by City that does not necessarily prevent the completion of the entire Work within the time specified. Excusable Delays, if any, shall operate only to extend the Completion Date (not in excess of the period of such delay as determined by City) and shall not under any circumstances increase the amount City is required to pay Contractor except as otherwise provided in these Contract Documents.

22. CONTRACTOR TO SERVE NOTICE OF DELAYS

Whenever Contractor foresees any delay in the prosecution of the Work, and in any event as soon as possible (not to exceed a period of ten (10) calendar days) after the initial occurrence of any delay that Contractor regards as or may later claim to be an Excusable Delay, the Contractor shall notify the Engineer in writing of such delay and its cause, in order that the Engineer: (i) may take immediate steps to prevent if possible the occurrence or continuance of the delay; or (ii) if this cannot be done, may determine whether the delay is to be considered excusable, how long it continues, and to what extent the prosecution and completion of the Work are delayed thereby. Said written notice shall constitute an application for an extension of time only if the notice requests such an extension and sets forth the Contractor's estimate of the additional time required together with a full description of the cause of the delay relied upon.

After the completion of any part or whole of the Work, the Engineer, in estimating the amount due Contractor, will assume that any and all delays that may have occurred in its prosecution and completion were not Excusable Delays, except for such delays for which the Contractor has provided timely written notice as required herein, and that the Engineer has found to be excusable. Contractor shall not be entitled to claim Excusable Delay for any delay for which the Contractor failed to provide such timely written notice.

23. EXTENSION OF TIME

If the Contractor complies with Section 22, above, and the Engineer finds a delay claimed by the Contractor to be an Excusable Delay, the Contractor shall be allowed an extension of time to complete the Work that is proportional to the period of Excusable Delay determined by the Engineer, subject to the approval by City of a change order granting such time extension. During a duly authorized extension for an Excusable Delay, City shall not charge liquidated damages against the Contractor for such delay.

If the City extends the time to complete the Work as provided herein, such extension shall in no way release any warranty or guarantee given by Contractor pursuant to the provisions of the Contract Documents, nor shall such extension of time relieve or release the sureties of the Bonds provided pursuant to the Contract Documents. By executing such Bonds, the Sureties shall be deemed to have expressly agreed to any such extension of time. The granting of any extension of time as provided herein shall in no way operate as a waiver on the part of City of its rights under this Contract, excepting only extension of the Completion Date for such period of Excusable Delay as may be determined by the Engineer and approved by a duly authorized change order.

24. NO PAYMENT FOR DELAYS

No damages or compensation of any kind shall be paid to Contractor or any subcontractor because of delays in the progress of the Work whether or not such delays qualify for extension of time under this Agreement; except that this provision shall not preclude the recovery of damages for a delay caused by the City that is unreasonable under the circumstances and that is not within the contemplation of the parties, provided that the Contractor timely submits all such written notice(s) and fully complies with such other procedures as may be specified in the Contract Documents or any Laws or Regulations for Contractor to claim damages for such delay.

25. CHANGES IN THE WORK

Changes in the Work authorized or directed in accordance with the Contract Documents and extensions of time of completion made necessary by reason thereof shall not in any way release any warranty or guarantee given by Contractor pursuant to the provisions of the Contract Documents, nor shall such changes in the Work relieve or release the Sureties on Bonds provided pursuant to the Contract Documents. By executing such Bonds, the Sureties shall be deemed to have expressly agreed to any such change in Work and to any extension of time made by reason thereof.

26. TERMINATION AFTER COMPLETION DATE

In addition to any other rights City may have, if any services or work required under the Contract (including but not limited to punch list items) are not completed as of the Completion Date (as adjusted by any extensions of time for Excusable Delays granted pursuant to the Contract Documents), City may terminate the Contract at any time after the Completion Date (as adjusted by any extensions of time for Excusable Delays granted pursuant to the Contract Documents), by providing a written notice to Contractor specifying the date of termination. Such notice also may specify conditions or requirements that Contractor must meet to avoid termination of the Contract on such date. If Contractor fails to fulfill all such conditions and requirements by such termination date, or, if no such conditions or requirements are specified, Contractor shall cease rendering services and performing work on such termination date, and shall not be entitled to receive any compensation for services rendered or work performed after such termination date. In the event of such termination, Contractor shall remain liable to City for liquidated damages incurred for any period of time prior to the termination date.

In addition to any other charges, withholdings or deductions authorized under the Contract or any Laws or Regulations, if City terminates the Contract pursuant to this section, City may withhold and deduct from any payment and/or retention funds otherwise due Contractor any sum necessary to pay the City's cost of completing or correcting, or contracting for the completion or correction of, any services or work under the Contract that are not completed to the satisfaction of the City or that otherwise are

deficient or require correction as of such termination date, including but not limited to incomplete punch list items. Such costs shall include all of the City's direct and indirect costs incurred to complete or correct such services or work, including the City's administrative and overhead costs. If the amount of payment(s) and/or retention funds otherwise due the Contractor are insufficient to pay such costs, City shall have the right to recover the balance of such costs from the Contractor and/or its Surety(ies).

27. TERMINATION FOR CONVENIENCE

Upon written notice to the Contractor, the City may at any time, without cause and without prejudice to any other right or remedy of the City, elect to terminate the Contract for the convenience of City. In such case, the Contractor shall be paid (without duplication of any items, and after deduction and/or withholding of any amounts authorized to be deducted or withheld by the Contract Documents or any Laws or Regulations):

(A) For Work executed in accordance with the Contract Documents prior to the effective date of termination and determined to be acceptable by the Engineer, including fair and reasonable sums for overhead and profit on such Work;

(B) For reasonable claims, costs, losses, and damages incurred in settlement of terminated contracts with subcontractors, suppliers, and others; and

(C) For reasonable expenses directly attributable to termination.

Contractor shall not be paid for any loss of anticipated profits or revenue for any Work not performed prior to termination, nor for any economic loss arising out of or resulting from such termination, except for the payments listed in this section. Contractor's warranty under Section 14 of this Agreement shall apply, and Contractor shall remain responsible for all obligations related to such warranty, with respect to all portions of the Work performed prior to the effective date of the termination for convenience pursuant to this section. The City shall be entitled to have any or all remaining Work performed by other contractors or by any other means at any time after the effective date of a termination for convenience pursuant to this section.

28. TERMINATION FOR BREACH OF CONTRACT

If Contractor abandons the Work under this Contract, or if the Contract or any portion of the Contract is sublet or assigned without the consent of the City, or if the Engineer determines in the Engineer's sole discretion that the conditions of the Contract in respect to the rate of progress of the Work are not being fulfilled or any part thereof is unnecessarily delayed, or if Contractor violates or breaches, or fails to execute in good faith, any of the terms or conditions of the Contract, or if Contractor refuses or fails to supply enough properly skilled labor or materials or refuses or fails to make prompt payment to subcontractors for material or labor, or if Contractor disregards any Laws or Regulations or proper instruction or orders of the Engineer, then, notwithstanding any provision to the contrary herein, the City may give Contractor and its Sureties written notification to immediately correct the situation or the Contract shall be terminated.

In the event that such notice is given, and, in the event such situation is not corrected, or arrangements for correction satisfactory to the City are not made, within ten (10) calendar days from the date of such notice or within such other period of time as may be specified by the City in the notice, the Contract shall upon the expiration of said period cease and terminate. In the event of any such termination, City may take over the Work and prosecute the Work to completion, or otherwise, and the Contractor and its Sureties shall be liable to City for any cost occasioned City thereby, as hereinafter set forth.

In the event City completes the Work, or causes the Work to be completed, no payment of any kind shall be made to Contractor until the Work is complete. The cost of completing the Work, including but not limited to, extra costs of project administration and management incurred by City, both direct or indirect, shall be deducted from any sum then due, or that becomes due, to Contractor from City. If sums due to Contractor from City are less than the cost of completing the Work, Contractor and its Sureties shall pay City a sum equal to this difference on demand. In the event City completes the Work, and there is a sum remaining due to Contractor after City deducts the costs of completing the Work, then City shall pay such sum to Contractor. The Contractor and Contractor's Sureties shall be jointly and severally liable for all obligations imposed on Contractor hereunder.

No act by City before the Work is finally accepted, including, but not limited to, exercise of other rights under the Contract, actions at law or in equity, extensions of time, payments, assessments of liquidated damages, occupation or acceptance of any part of the Work, waiver of any prior breach of the Contract or failure to take action pursuant to this section upon the happening of any prior default or breach of Contractor, shall be construed to be a waiver or estoppel of the City's right to act pursuant to this Section upon any subsequent event, occurrence or failure by Contractor to fulfill the terms and conditions of the Contract. The rights of City to terminate the Contract pursuant to this Section and pursuant to Sections 26 and 27 are cumulative and are in addition to all other rights of City pursuant to the Contract and at law or in equity.

29. CONTRACTOR BANKRUPT

If Contractor should commence any bankruptcy proceeding, or if Contractor is adjudged a bankrupt, or if Contractor makes any assignment for the benefit of creditors, or if a receiver is appointed on account of Contractor's insolvency, then the City may, without prejudice to any other right or remedy, terminate the Contract and complete the work by giving notice as provided in Section 28 above.

30. SURETIES' OBLIGATIONS UPON TERMINATION

If the City terminates the Contract pursuant to Section 28 or Section 29 above:

(A) The Surety under Contractor's performance bond shall be fully responsible for all of the Contractor's remaining obligations of performance under the Contract as if the Surety were a party to the Contract, including without limitation Contractor's obligations, as provided in the Contract Documents, to complete and provide a one-year warranty of the entire Work, pay liquidated damages and indemnify, defend and hold harmless City, up to the full amount of the performance bond.

(B) The Surety under Contractor's payment bond shall be fully responsible for the performance of all of the Contractor's remaining payment obligations for work, services, equipment or materials performed or provided in connection with the Work or any portion thereof, up to the full amount of the payment bond.

31. ACCOUNTING RECORDS OF CONTRACTOR

During performance of the Contract and for a period of three (3) years after completing the entire Work, Contractor shall maintain all accounting and financial records related to the Contract and performance of the Work in accordance with generally accepted accounting practices, and shall keep and make such records available for inspection and audit by representatives of the City upon reasonable written notice.

32. USE TAX REQUIREMENTS

During the performance of this Agreement, CONTRACTOR, for itself, its assignees and successors in interest, agrees as follows:

(A) Use Tax Direct Payment Permit: For all leases and purchases of materials, equipment, supplies, or other tangible personal property used to perform the Agreement and shipped from outside California, the Contractor and any subcontractors leasing or purchasing such materials, equipment, supplies or other tangible personal property shall obtain a Use Tax Direct Payment Permit from the California State Board of Equalization ("SBE") in accordance with the applicable SBE criteria and requirements.

(B) Sellers Permit: For any construction contract and any construction subcontract in the amount of \$5,000,000 or more, Contractor and the subcontractor(s) shall obtain sellers permits from the SBE and shall register the jobsite as the place of business for the purpose of allocating local sales and use tax to the City. Contractor and its subcontractors shall remit the self-accrued use tax to the SBE, and shall provide a copy of each remittance to the City.

(C) The above provisions shall apply in all instances unless prohibited by the funding source for the Agreement.

IN WITNESS WHEREOF, the parties hereto have signed this Agreement on the date set for opposite their names.

CONTRACTOR

Under penalty of perjury, I certify that the taxpayer identification number and all other information provided here are correct.

DATE 9/24/13

BY Robert Pelascini
Robert Pelascini

Print Name
Chairman of the Board

Title

BY Greg Souder
Greg Souder

Print Name
Secretary

Title

94-3320164

Federal ID#

44722346

State ID#

1002689

City of Sacramento Business Operation Tax Certificate No. (City will not award contract until Certificate Number is obtained)

Type of Business Entity (*check one*):

- Individual/Sole Proprietor
- Partnership
- Corporation
- Limited Liability Company
- Other (*please specify:* _____)

CITY OF SACRAMENTO
a municipal corporation

DATE _____

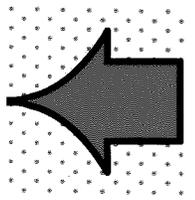
BY _____
For: _____
City Manager

Original Approved As To Form:

[Signature]
City Attorney

Attest:

City Clerk



HERE

**CITY OF SACRAMENTO
PAYMENT BOND**

Department of Public Works
Page 1 of 1

Bond No.: 070015023

Premium: Included in
Performance Bond

WHEREAS, the City of Sacramento, in the State of California, hereinafter called City, has conditionally awarded to: O.C. Jones & Sons, 1520 Fourth Street, Berkeley, CA 94710

hereinafter called Contractor, a contract for construction of:

**5TH STREET, 5TH STREET VIADUCT AND RAILYARDS BOULEVARD AT
SACRAMENTO RAILYARDS (PN: T15135800)**

Which contract is by reference incorporated herein and made a part hereof, and is hereinafter referred to as the Contract; and

WHEREAS, under the terms of the Contract and pursuant to Chapter 5 of Title 3 of Part 6 of Division 4 of the California Civil Code (commencing with Civil Code Section 9550), Contractor is required to furnish a good and sufficient payment bond to secure payment of the claims to which reference is made in Civil Code Section 9554.

NOW, THEREFORE, we the Contractor and *(here insert full name and address of Surety):*

Liberty Mutual Insurance Company, 1340 Treat Blvd. Suite 550, Walnut Creek, CA 94597,

a corporation duly authorized and admitted to transact business and issue surety bonds in the State of California, hereinafter called Surety, are held and firmly bound unto the City, and unto all persons or entities entitled to assert a claim against a payment bond under any of the aforesaid Civil Code provisions in the sum of Nineteen Million Seven Hundred Eighty Two Thousand Six Hundred Fifteen and no/100s DOLLARS

(\$19,782,615.00***), on the condition that if Contractor shall fail to pay for any materials or equipment furnished or used in performance of the Contract, or for any work or labor thereon of any kind, or for amounts due under the Unemployment Insurance Act with respect to such work or labor, or for any amounts required to be deducted, withheld, and paid over to the Franchise Tax Board or the Employment Development Department from the wages of employees of the Contractor and all subcontractors with respect to such work or labor, then the Surety shall pay the same in an amount not exceeding the sum specified above. If suit is brought upon this bond, Surety shall pay, in addition to the above sum, all costs, expenses and fees, including attorney's fees, reasonably incurred by any party in successfully enforcing the obligation secured hereby, all to be taxed as costs and included in any judgment rendered. Should the condition of this bond be fully performed, then this obligation shall become null and void, otherwise it shall be and remain in full force and effect, and shall bind Contractor, Surety, their heirs, executors, administrators, successors and assigns, jointly and severally.

It is hereby stipulated and agreed that this bond shall inure to the benefit of all persons, companies, corporations, political subdivisions, State agencies and other entities entitled to assert a claim against a payment bond under any of the aforesaid Civil Code provisions, so as to give a right of action to them or their assigns in any suit brought upon this bond. The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder or to the specifications accompanying the same shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension, alteration or addition.

IN WITNESS WHEREOF, this instrument has been duly executed by authorized representatives of the Contractor and Surety. SIGNED AND SEALED on September 25, 2013

O.C. Jones & Sons, Inc.

(Contractor) (Seal)

By Greg Souder
Title Greg Souder, Secretary

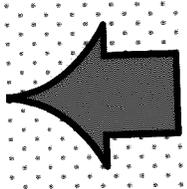
Liberty Mutual Insurance Company

(Surety) (Seal)

By Susan Peragallo
Title Susan Peragallo, Attorney-in-Fact

ORIGINAL APPROVED AS TO FORM:

[Signature]
City Attorney



THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON RED BACKGROUND.

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Certificate No. 6116176

American Fire and Casualty Company
The Ohio Casualty Insurance Company

Liberty Mutual Insurance Company
West American Insurance Company

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That American Fire & Casualty Company and The Ohio Casualty Insurance Company are corporations duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Billy G. Bergan; Kathleen Beck; Patricia L. Drew; Susan Peragallo

all of the city of Concord state of CA each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 8th day of May, 2013



American Fire and Casualty Company
The Ohio Casualty Insurance Company
Liberty Mutual Insurance Company
West American Insurance Company

By: Gregory W. Davenport
Gregory W. Davenport, Assistant Secretary

STATE OF WASHINGTON ss
COUNTY OF KING

On this 8th day of May, 2013, before me personally appeared Gregory W. Davenport, who acknowledged himself to be the Assistant Secretary of American Fire and Casualty Company, Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Seattle, Washington, on the day and year first above written.



By: KD Riley
KD Riley, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV – OFFICERS – Section 12. Power of Attorney. Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII – Execution of Contracts – SECTION 5. Surety Bonds and Undertakings. Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation – The President of the Company, acting pursuant to the Bylaws of the Company, authorizes Gregory W. Davenport, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization – By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, David M. Carey, the undersigned, Assistant Secretary, of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 25th day of September, 2013.



By: David M. Carey
David M. Carey, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

To confirm the validity of this Power of Attorney call 1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.

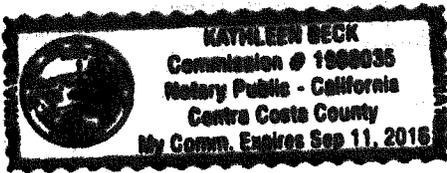
CALIFORNIA ALL-PURPOSE ACKNOWLEDGEMENT

State of California
County of Contra Costa

On September 25, 2013, before me, Kathleen Beck, Notary Public personally appeared Susan Peragallo

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 following paragraph is true and correct



WITNESS my hand and official seal.

Kathleen Beck

Signature of Notary Public

Optional

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of attached Document

Title or Type of Document: Payment Bond

Document Date September 25, 2013

Number of Pages: 1

Signer(s) Other Than Named Above: _____

Capacity(ies) claimed by Signer(s)

Signer's Name:

- Individual
- Corporate Officer

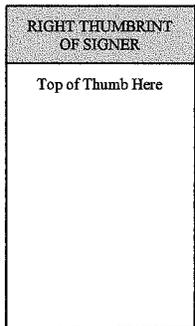
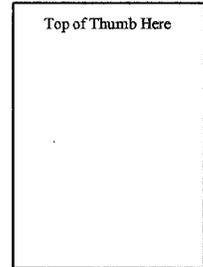
Title(s):

- Partner- Limited General
- Attorney-in-Fact
- Trustee
- Guardian or Conservator
- Other : _____

Guardian or Conservator

Other : _____

Signer is Representing:



Signer is Representing:

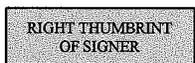
Liberty Mutual Insurance Company

Signer's Name:

- Individual
- Corporate Officer

Title(s):

- Partner- Limited General
- Attorney-in-Fact
- Trustee



CITY OF SACRAMENTO
PERFORMANCE BOND
Department of Public Works
Page 1 of 1

Bond No. 070015023
Premium: \$85,152.00

WHEREAS, the City of Sacramento, State of California, hereinafter called City, has conditionally awarded to O.C. Jones & Sons, 1520 Fourth Street, Berkeley, CA 94710 as principal, hereinafter called Contractor, a contract for construction of:

**5TH STREET, 5TH STREET VIADUCT AND RAILYARDS BOULEVARD AT SACRAMENTO
RAILYARDS**

(PN: T15135800)

which contract is by reference incorporated herein and made a part hereof as if the Surety named below were a party to the contract, and is hereinafter referred to as the Contract; and

WHEREAS, under the terms of the Contract, Contractor is required to furnish a bond for the faithful performance of the Contract.

NOW, THEREFORE, we the Contractor and (here insert full name and address of Surety):

Liberty Mutual Insurance Company, 1340 Treat Blvd, Suite 550, Walnut Creek, CA 94597,
a corporation duly authorized and admitted to transact business and issue surety bonds in the State of California, hereinafter called Surety, are held and firmly bound unto the City, as obligee, in the sum of:

NINETEEN MILLION SEVEN HUNDRED EIGHTY TWO THOUSAND SIX HUNDRED FIFTEEN DOLLARS FORTY CENTS (\$19,782,615.40), for the payment of which sum well and truly to be made, we the Contractor and Surety bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally. The condition of this obligation is such that, if the Contractor, Contractor's heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and fully perform all covenants, conditions and agreements required to be kept and performed by Contractor in the Contract and any changes, additions or alterations made thereto, to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meanings, and shall indemnify and save harmless the City, its officers, employees and agents, as therein provided, then the Surety's obligations under the Contract and this bond shall be null and void; otherwise they shall be and remain in full force and effect. This obligation shall remain in full force and effect through the end of the Contract warranty period, which will expire one year after the completion of work date specified in the Notice of Completion filed for the above-named project.

As part of the obligations secured hereby and in addition to the sum specified above, there shall be included all costs, expenses and fees, including attorney's fees, reasonably incurred by City in successfully enforcing such obligations, all to be taxed as costs and included in any judgment rendered.

The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder or to the specifications accompanying the same shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension, alteration or addition.

IN WITNESS WHEREOF, this instrument has been duly executed by authorized representatives of the Contractor and Surety.
SIGNED AND SEALED on September 25, 2013.

O.C. Jones & Sons, Inc.
By [Signature] (Contractor) (Seal)
Title Greg Souder, Secretary

Liberty Mutual Insurance Company
By [Signature] (Surety) (Seal)
Title Susan Peragallo, Attorney-in-Fact

ORIGINAL APPROVED AS TO FORM:

[Signature]
City Attorney

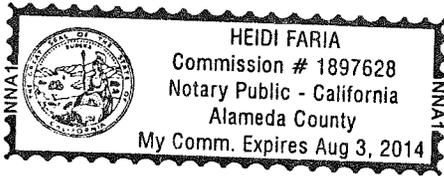
**CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT
CIVIL CODE § 1189**

State of California

County of Alameda

On 9/27/13 before me, Heidi Faria, Notary Public,
Date Here Insert Name and Title of the Officer

personally appeared Greg Souder
Name(s) of Signer(s)



Place Notary Seal Above

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature: Heidi Faria
Signature of Notary Public

OPTIONAL

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: Payment Bond Document Date: 9/25/13

Number of Pages: 1 Signer(s) Other Than Named Above: Susan Peragallo

Capacity(ies) Claimed by Signer(s)

Signer's Name: Greg Souder

- Corporate Officer — Title(s): Secretary
- Partner — Limited General
- Individual Attorney in Fact
- Trustee Guardian or Conservator
- Other: _____

Signer's Name: _____

- Corporate Officer — Title(s): _____
- Partner — Limited General
- Individual Attorney in Fact
- Trustee Guardian or Conservator
- Other: _____

Signer Is Representing: O.C. Jones & Sons, Inc.

Signer Is Representing: _____

THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON RED BACKGROUND.

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Certificate No. 6116175

American Fire and Casualty Company
The Ohio Casualty Insurance Company

Liberty Mutual Insurance Company
West American Insurance Company

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That American Fire & Casualty Company and The Ohio Casualty Insurance Company are corporations duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Billy G. Bergan; Kathleen Beck; Patricia L. Drew; Susan Peragallo

all of the city of Concord state of CA each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 8th day of May, 2013.



American Fire and Casualty Company
The Ohio Casualty Insurance Company
Liberty Mutual Insurance Company
West American Insurance Company

By: Gregory W. Davenport
Gregory W. Davenport, Assistant Secretary

STATE OF WASHINGTON ss
COUNTY OF KING

On this 8th day of May, 2013, before me personally appeared Gregory W. Davenport, who acknowledged himself to be the Assistant Secretary of American Fire and Casualty Company, Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Seattle, Washington, on the day and year first above written.



By: KD Riley
KD Riley, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV – OFFICERS – Section 12. Power of Attorney. Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII – Execution of Contracts – SECTION 5. Surety Bonds and Undertakings. Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation – The President of the Company, acting pursuant to the Bylaws of the Company, authorizes Gregory W. Davenport, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization – By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, David M. Carey, the undersigned, Assistant Secretary, of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 25th day of September, 2013.



By: David M. Carey
David M. Carey, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

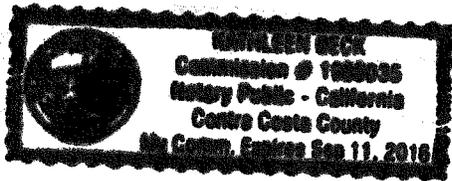
To confirm the validity of this Power of Attorney call 1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.

CALIFORNIA ALL-PURPOSE ACKNOWLEDGEMENT

State of California
County of Contra Costa

On September 25, 2013, before me, Kathleen Beck, Notary Public personally appeared Susan Peragallo

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 following paragraph is true and correct

WITNESS my hand and official seal.

Kathleen Beck
Signature of Notary Public

Optional

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of attached Document

Title or Type of Document: Performance Bond

Document Date September 25, 2013

Number of Pages: 1

Signer(s) Other Than Named Above: _____

Capacity(ies) claimed by Signer(s)

Signer's Name:

- Individual
- Corporate Officer

Title(s):

- Partner- Limited General
- Attorney-in-Fact
- Trustee
- Guardian or Conservator
- Other : _____

- Guardian or Conservator
- Other : _____

Signer is Representing:

Signer is Representing:

Liberty Mutual Insurance Company

Signer's Name:

- Individual
- Corporate Officer

Title(s):

- Partner- Limited General
- Attorney-in-Fact
- Trustee

RIGHT THUMBPRINT OF SIGNER
Top of Thumb Here

Top of Thumb Here

RIGHT THUMBPRINT OF SIGNER



O.C. Jones & Sons, Inc.
General Engineering Contractor

Page 2 of 2

Ladies and Gentlemen:

We are planning to prepare bids on the general contract for the listed project(s). It is our responsibility to make a sufficient portion of the work available to subcontractors and suppliers so as to assure meeting the goals for DBE participation. We at **O. C. Jones & Sons, Inc.** are assuring an effort to comply with the above goals, but in order to be successful in achieving these goals, your participation is necessary. We, therefore, would appreciate your assistance in the identifications of any interested and qualified subcontractor and material suppliers who would be interested in submitting a subbid to us on the work we have made available which is indicated on the opposite page.

The listed projects are subject to Part 23, title 49, Code of Federal Regulation entitled "Participation by Minority Business Enterprise in Department of Transportation Programs". Effective immediately, greater effort must be made by prime contractors toward meeting or exceeding the DBE program requirements implemented by the California Dept. of Transportation.

We at **O.C. Jones & Sons, Inc.** encourage the use of subcontractors/contractors in utilizing small, local, minority, female and veteran contractors/suppliers whenever feasible, and to utilize services offered by banks owned and controlled by minorities or women.

The insurance requirements relating to this project (s) may be different than those of O.C. Jones & Sons, Inc. Please refer to the Specifications. Assistance in obtaining insurance and Bonding will be provided by contacting Heidi Faria @ (510) 526-3424, or through the Small Business Administration website at www.sba.gov or the U.S. Department of Transportation, Office of Small and Disadvantaged Business Utilization website at www.osdbu.dot.gov or the Office of Minority Business Enterprise of the U.S. Department of Commerce website at www.commerce.gov/os/ogc/minority-business-development-agency.

O.C. Jones & Sons, Inc. bond requirements are as follows: 100% Performance and 100% payment for full amounts of the subcontract price. O.C. Jones & Sons, Inc. will pay bond premium up to 1.5%. Bid packages can be made available from **O. C. Jones & Sons, Inc.** to assist you in the bonding process.

O.C. Jones & Sons, Inc. insurance requirements are as follows: **CERTIFICATE OF COMMERCIAL GENERAL LIABILITY INSURANCE** with the following provisions: (a.) Minimum limits: \$1,000,000 Combined Single Limit Bodily Injury and Property Damage. (b.) **O.C. Jones & Sons, Inc.** shall always be named as Additional Insured by specific endorsement on all policies. Others, such as Owner, General, City, etc., may also need to be named Additional Insured (Refer to the specifications). (c.) Policy shall cover on an "Occurrence" basis. (d.) Policy shall provide coverage for Bodily Injury and Property Damage including Premises/Operations Liability, Products/Completed Operation Liability, Personal Injury, Blanket Contractual and Broad Form Property Damage. (e.) Included shall be Thirty (30) days Cancellation Clause (See Below), Primary Insurance Clause, and a Standard Cross Liability Clause. (f.) So-Called "X C U Exclusion" shall be deleted. All insurance companies must have a best's rating of B+6 or better unless specification requires a higher rating.

CERTIFICATE OF AUTOMOBILE LIABILITY. with the following provision: (a.) Minimum Limits: \$1,000,000 Combined Single Limit Bodily Injury and Property Damage. (b.) Coverage afforded for Owned, Non-owned, and Hired Vehicles.

CERTIFICATE OF WORKER' COMPENSATION/EMPLOYERS LIABILITY. with statutory limits. (a.) If required, USL&H coverage shall be provided.

CANCELLATION CLAUSE: "Thirty (30) days written notice of any policy cancellation will be mailed to O.C. Jones & Sons, Inc.. Delete clauses like.. "endeavor to" and.. "but failure to mail such notice shall impose no obligation or liability of any kind upon the company". These clauses are unacceptable!

Please contact **O.C. Jones & Sons, Inc.** if you should have any questions or need assistance concerning the bid package, cost estimates, bonding requirement, insurance etc. Plans and specifications for all the above projects may be examined at our office in Berkeley, through Builders Exchanges, which can be found at www.constructionweblinks.com/industry, or at Small Business Development Centers at www.sba.gov/localresources/district/ca/index.html.

Heidi Faria
O.C. Jones & Sons, Inc.

1520 Fourth Street, Berkeley, California 94710-1774 Phone: (510)526-3424
FAX: Estimating – (510) 526-0990; Engineering – (510) 525-0457
AN EQUAL OPPORTUNITY EMPLOYER

132 of 577

Construction and Demolition (C&D) Debris Recycling Requirements

As a condition of receiving this Contract, Contractor agrees to fully comply with the requirements specified herein for projects with a valuation of \$250,000 or more:

1. **Definitions.** For purposes of this section, the following terms, words and phrases shall have the following meanings:

“Certified C&D sorting facility” means a facility that receives C&D debris and/or processes C&D debris into its component material types for reuse, recycling, and disposal of residuals and possesses a valid certificate as a C&D sorting facility from the Sacramento Regional County Solid Waste Authority.

“Construction and demolition debris” or “C&D debris” means used or commonly discarded materials resulting from construction, repair, remodel or demolition operations on any pavement, house, building, or other structure, or from landscaping that are not hazardous as defined in California Health and Safety Code section 25100 et seq. Such materials include, but are not limited to, concrete, asphalt, wood, metal, brick, dirt, sand, rock, gravel, plaster, glass, gypsum wallboard, cardboard and other associated packaging, roofing material, ceramic tile, carpeting, masonry, plastic pipe, trees, and other vegetative matter resulting from land clearing and landscaping.

“Divert” or “diversion” means to use materials for any purpose other than disposal in a landfill or transformation facility. Methods to divert materials include on-site reuse of the materials, delivery of materials from the project site to a certified C&D sorting facility or a recycling facility, or other methods as approved in regulations promulgated by the City Department of Utilities.

“Franchised waste hauler” means a person who possesses a valid commercial solid waste collection franchise issued by the Sacramento Regional County Solid Waste Authority.

“Mixed C&D debris” means loads that include commingled recyclable and non-recyclable C&D debris generated at a project site.

“Recyclable C&D debris” means C&D debris required to be diverted from landfills as specified in the Waste Management Plan and returned to the economic mainstream in the form of raw material for new, reused or reconstituted products that meet the quality standards necessary to be used in the marketplace.

“Recycling facility” means a facility or operation that receives, processes, and transfers source-separated recyclable materials.

“Source-separated C&D debris” means recyclable C&D debris that is separately sorted and containerized at the site of generation by individual material type and segregated from mixed C&D debris prior to collection and transporting.

“Waste log” means a record detailing the management of C&D debris generated by the covered project, including the date and weight/volume of material by type that was salvaged, reused, recycled or disposed.

2. **Waste Management Plan.** A completed WMP (see **Attachment 1**) must be submitted to and approved by the City prior to commencing any work on the project. The WMP must specify the types of C&D debris that will be generated from the project; the manner in which C&D debris will be managed and/or stored on the project site; the manner in which recyclable C&D debris generated from the project will be recycled or reuse; the person who will haul, collect or transport the recyclable C&D debris from the project site; and the certified C&D sorting facility or recycling facility where recyclable C&D debris will be delivered. The WMP must be approved by the City prior to commencing any work on the project.

3. Contractor shall be solely responsible for diverting the recyclable C&D materials specified on the WMP. Mixed C&D debris shall be delivered to a SWA-certified C&D sorting facility only. Only the permit holder, the person who generates the waste, a franchised waste hauler, or the City of Sacramento can transport or haul mixed C&D debris. Source-separated C&D debris may be delivered by any person to any recycling facility that accepts such materials. (See **Attachment 2** for list of C&D Debris Haulers and Facilities).

4. During the course of the project, Contractor shall maintain a waste log (see **Attachment 3**), and keep all weight tickets or weight receipts, for all C&D debris hauled away from the project. At a minimum, the waste log shall specify the C&D debris generated by the project; the manner in which C&D debris was recycled or re-used; and the facility where the C&D debris was delivered.

5. Within 30 days after final inspection of the project, Contractor shall submit to the City a completed waste log. Contractor shall maintain and keep accurate and complete records of all bills, weight receipts or weight tickets that were issued for the collection, transport or disposal of C&D debris for a period of one-year after submittal of the waste log. The records shall be made available for inspection, examination and audit by the City during the one-year retention period to validate the information provided in the WMP and in the waste log. If the City determines noncompliance by the Contractor after an audit has been conducted, Contractor shall reimburse the City for all costs incurred in performing the audit.

6. Failure by Contractor to comply with any provisions specified herein will subject Contractor to possible suspension and/or termination of this Contract for cause; repayment of any or all of the Contract amount disbursed by the City; imposition of a penalty, payable to the City (\$50-\$250 for first offense, \$251-\$500 for second offense, and \$501-\$1500 for subsequent offenses); and/or submission of a performance security deposit fee when submitting a permit application to the City for a project within one year of imposition of the penalty.

For questions or to obtain more information about the Recycling Requirements for C&D debris, contact the City of Sacramento, Solid Waste Services Division, 2812 Meadowview Road, Building 1, Sacramento, CA 95832, or telephone (916) 808-4833, or email C&D@cityofsacramento.org

<h1 style="margin: 0;">C&D Debris Waste Management Plan</h1>	<p>C&D Debris Waste Management Plan City of Sacramento Solid Waste Services 2812 Meadowview Road, Building 1 Sacramento, CA 95832 Phone: (916) 808-4833 / Fax: (916) 808-4999 C&D@cityofsacramento.org</p>
--	---

Submission Date: _____ Building Permit Number: _____
This may be a range of sequential permits.

This Waste Management Plan must be submitted and approved before your Building Permit will be issued. The accompanying Waste Log must be submitted after your final inspection or probationary measures will be imposed. See Section G.

A. Building Project Identification Parcel No.: _____ Lot No. _____
Job Address: _____
Contractor: _____ Phone: _____
Address: _____
Owner: _____ Phone: _____
Address: _____

B. Type of Work Residential Commercial Estimated Total Construction costs: \$ _____
____sq. ft. New construction (including ____sq. ft. Addition) ____sq. ft. Alteration ____sq. ft. Whole Structure Demolition
Briefly describe the project:

C. Materials Required to be Recycled. Please check all the recyclable materials you anticipate will be generated during the project.

These are the materials required to be recycled (5 materials total below):	
<input type="checkbox"/> Scrap metal items (examples: structural steel, ductwork, gutters, pipes, appliances, fixtures, fencing & railing, sinks, tubs, roofing material); <input type="checkbox"/> Inert materials (dirt, soil, rocks, concrete, asphalt paving, brick & block); <input type="checkbox"/> Corrugated cardboard (mostly from packaging);	<input type="checkbox"/> Wooden pallets (whole or broken); <input type="checkbox"/> Clean wood waste (unpainted, untreated dimensional lumber and plywood; fasteners OK for recycling);

You can either source-separate them or mix them and send the load to a **Certified Mixed C&D Sorting Facility**.

C&D Debris Haulers & Facilities

C&D Debris Waste Management Plan
 City of Sacramento Solid Waste Services
 2812 Meadowview Road, Building 1
 Sacramento, CA 95832
 Phone: (916) 808-4833 / Fax: (916) 808-4999
C&D@cityofsacramento.org

Certified Mixed C&D Sorting Facilities

TBD	(916) 555-1212	TBD	(916) 555-1212
TBD	(916) 555-1212	TBD	(916) 555-1212
TBD	(916) 555-1212	TBD	(916) 555-1212

Franchised Haulers

ACES Waste Services, Inc.	(866) 488-8837	Mini Drops, Inc.	(916) 686-8785
Allied Waste Services	(916) 631-0600	Norcal Waste Services of Sacramento	(916) 381-5300
All Waste Systems, Inc.	(916) 456-1555	North West Recyclers	(916) 686-8575
Atlas Disposal Industries, LLC	(916) 455-2800	Waste Management of Sacramento	(916) 387-1400
California Waste Recovery Systems	(916) 441-1985	Waste Removal & Recycling	(916) 453-1400
Central Valley Waste Services, Inc.	(209) 369-8274	Western Strategic Materials, Inc.	(916) 388-1076
City of Sacramento Solid Waste	(916) 808-4839	\$99 Debris Box	(916) 429-9900
Elk Grove Waste Management, LLC	(916) 689-4052		

Recyclers for source-separated materials

Recovery Stations & Landfills

C & C Paper Recycling	(916) 920-2673	Elder Creek Recovery & Transfer Station	(916) 387-8425
Green Fiber	(916) 803-4601	Kiefer Landfill	(916) 875-5555
International Paper	(916) 371-4634	L & D Landfill	(916) 383-9420
Modern Waste Solutions	(916) 447-6800	North Area Recovery Station	(916) 875-5555
PRIDE Industries, Inc.	(916) 640-1300	Sacramento Recycling & Transfer Station	(916) 379-0500
Recycling Industries, Inc.	(916) 452-3961	WMCR	(916) 452-0142
Sacramento Local Conservation Corps	(916) 386-8394		
Smurfit-Stone Container Corporation	(916) 381-3340		
Southside Art Center	(916) 387-8080		
Spencer Building Maintenance, Inc.	(916) 922-1900		



DEPARTMENT OF TRANSPORTATION
ENGINEERING SERVICES DIVISION
915 I Street, Room 2000
Sacramento, CA 95814

PAY REQUEST APPLICATION

PROJECT NAME:	_____	
CONTRACTOR: <i>(per agreement)</i>	_____	
CONTRACTOR REMITTANCE ADDRESS:	_____	
PHONE NUMBER: ()	_____	
INVOICE NO.:	_____	CITY PROJECT NUMBER: _____
		PERIOD ENDING DATE: _____
ESCROW AGENT (Bank Name):	_____	
ESCROW#:	_____	
ESCROW AGENT REMITTANCE ADDRESS:	_____	

ORIGINAL CONTRACT AMOUNT:	_____
	CHANGE ORDER NO. 1 _____
	CHANGE ORDER NO. 2 _____
	CHANGE ORDER NO. 3 _____
	CHANGE ORDER NO. 4 _____
	CHANGE ORDER NO. 5 _____
	CHANGE ORDER NO. 6 _____
	CHANGE ORDER NO. 7 _____
	CHANGE ORDER NO. 8 _____
	CHANGE ORDER NO. 9 _____
TOTAL CHANGE ORDERS:	_____
CONTRACT AMOUNT TO DATE:	_____
TOTAL WORK COMPLETED TO DATE:	_____
RETENTION WITHHOLDING TO DATE:	_____
LABOR COMPLIANCE WITHHOLDING TO DATE:	_____
STOP NOTICE WITHHOLDING TO DATE:	_____
LESS PREVIOUS PAYMENTS:	_____
AMOUNT DUE THIS INVOICE:	_____
TOTAL COMPLETED LESS RETENTION:	_____

**CITY OF SACRAMENTO – DEPARTMENT OF PUBLIC WORKS
SCHEDULE OF VALUES**

Remit To:
Department of Public Works
Engineering Design

**PROJECT NAME: 5th Street, 5th Street Viaduct
and Railyards Boulevard at Sacramento Railyards Project**

915 I Street, Room 2000
Sacramento, CA 95814-2604

PROJECT NO: T15135800

CONTRACTOR:

FUNDING: 1C-TOD and 1C-INFILL

Payment No. _____
Work Performed Thru _____
Date Payment Submitted _____
Days Expended on Contract _____

ADDRESS:

PHONE NO:

CONTRACT NO:

Item No.	Item Description	Estimated Quantity	Unit	Unit Price	Authorized Amount	This Estimate		Total Work Completed	
						Quantity	\$Amount	Quantity	\$Amount
1	Mobilization	1	LS						
2	Furnish Field Office	10	MOS						
3	Implement Storm Water Pollution Prevention Plan (SWPPPP)	1	LS						
4	Demolition (5 TH Street South)	1	LS						
5	Demolition (5 th Street North)	1	LS						
6	Demolition (Railyards Boulevard)	1	LS						
7	Surcharge Fill Removal (South)	12,500	CY						
8	Surcharge Fill Removal (North)	14,500	CY						
9	Overexcavate and Recompact	76,700	CY						
10	Roadway Embankment (Import Material)	86,700	CY						
11	Structure Excavation (Retaining Walls 3 And 4)	552 (F)	CY						

12	Structure Backfill (Retaining Walls 3 And 4)	1,396 (F)	CY							
13	North Retention Pond Grading	11,300	CY							
14	Excavate, Haul, And Stockpile Suspect Or Impacted Soil	5,500	CY							
15	Concrete Crushing	8,500	CY							
16	Cellular Concrete Backfill (Mix No. 1)	1,840 (F)	CY							
17	Cellular Concrete Backfill (Mix No. 2)	16,200 (F)	CY							
18	Earth Retaining Structure, Wall 1	5,208 (F)	SF							
19	Earth Retaining Structure, Wall 2	7,415 (F)	SF							
20	Structural Concrete Retaining Wall	449 (F)	CY							
21	Bar Reinforcing Steel (Retaining Wall)	55,787 (F)	LBS							
22	Structural Concrete Barrier Slab	241 (F)	CY							
23	Minor Concrete, Sidewalk	272 (F)	CY							
24	Architectural Treatment (Retaining Wall)	11,861 (F)	SF							
25	Prepare and Paint Concrete (Retaining Wall)	15,863 (F)	SF							
26	California ST-40 Bridge Rail (Mod), Retaining Wall	943 (F)	LF							
27	Structural Concrete, Approach Slab Type N(30S)	81 (F)	CY							
28	Joint Seal (Type B-MR=2")	92	LF							
29	Joint Seal (Type A-MR=1")	10	LF							
30	Concrete Barrier (Type 26 Modified)	14 (F)	LF							
31	Chain Link Railing	14 (F)	LF							

32	Architectural Treatment (Barrier)	58 (F)	SF							
33	Prepare and Paint Concrete (Barrier)	58 (F)	SF							
34	Architectural Treatment (Retaining Wall 3 and 4)	3,756	SF							
35	8" PVC SDR-35 Sanitary Sewer Pipe	2,065	LF							
36	30" PVC PS46 Sanitary Sewer Pipe	1,009	LF							
37	36" PVC PS46 Sanitary Sewer Pipe	1,801	LF							
38	48" Diameter Standard Manhole 3A (Sewer)	7	EA							
39	60" Diameter Standard Manhole 4 (Sewer)	12	EA							
40	Outside Drop Connection	1	EA							
41	18" Steel Casing Pipe	1	LS							
42	Flusher Branch	10	EA							
43	12" PVC PS46 Storm Drain Pipe	1,387	LF							
44	18" PVC PS46 Storm Drain Pipe	884	LF							
45	24" PVC PS46 Storm Drain Pipe	256	LF							
46	30" PVC PS46 Storm Drain Pipe	355	LF							
47	36" PVC PS46 Storm Drain Pipe	138	LF							
48	42" RGRCP Storm Drain Pipe	409	LF							
49	48" RGRCP Storm Drain Pipe	330	LF							
50	54" RGRCP Storm Drain Pipe	80	LF							
51	60" RGRCP Storm Drain Pipe	1,171	LF							

52	66" RCP Storm Drain Pipe	422	LF							
53	72" RCP Storm Drain Pipe	462	LF							
54	8" PVC SDR35 Storm Drain Pipe	192	LF							
55	6" PVC SDR35 Storm Drain Pipe	303	LF							
56	8" Storm Drain Clean Out	4	EA							
57	48" Diameter Standard Manhole No. 3A (Storm Drain)	4	EA							
58	48" Diameter Standard Manhole No. 3 (Storm Drain)	4	EA							
59	48" Diameter Standard Manhole No. 3 with Slotted Cover (Storm Drain)	4	EA							
60	60" Diameter Standard Manhole No. 4 (Storm Drain)	5	EA							
61	60" Diameter Standard Saddle Type Manhole (Storm Drain)	5	EA							
62	96" Diameter Manhole (Storm Drain)	14	EA							
63	6.5' x 7' Concrete Junction Box	1	EA							
64	Drop Inlet with Grated Top	20	EA							
65	Stormwater Quality Inlet (6' x 8')	8	EA							
66	Stormwater Quality Inlet (6' x 10')	3	EA							
67	Stormwater Quality Inlet (6' x 12')	2	EA							
68	Stormwater Quality Inlet (6' x 15')	3	EA							
69	Type "B" Drain Inlet	2	EA							
70	Stormwater Quality Vault (4 Cartridge)	1	EA							
71	Stormwater Quality Vault (8'x6')	1	EA							

131	Irrigation System (Railyards Boulevard)	1	LS							
132	1-Gallon Shrub	1,014	EA							
133	15-Gallon Shrub	28	EA							
134	24" Box Tree – "Emerald Sunshine" Elm	52	EA							
135	Not Used									
136	24" Box Tree – "Redpoint" Maple	72	EA							
137	8'x6' Tree Box	9	EA							
138	Topsoil Mix (Tree Wells)	400	CY							
139	Bark	66	CY							
140	Furnish/Install 6' Aluminum Bench	47	EA							
141	Furnish/Install Trash Receptacles	48	EA							
142	Furnish/Install 6'x8' Tree Grate w/ Cast in Place Frame	52	EA							
143	Furnish/Install 8'x8' Tree Grate w/ Cast in Place Frame	72	EA							
144	Furnish and Install Tree Guard	124	EA							
145	Furnish/Install Bike Racks	56	EA							
146	Furnish and Install Bus Shelter	1	EA							
147	1" Irrigation Water Service, Meter, Backflow Preventer and Enclosure	2	EA							
148	2" Irrigation Water Service, Meter, Backflow Preventer and Enclosure	4	EA							
149	Stabilized Construction Entrance	300	SY							

150	Inlet Sediment Control and Filter Bags	44	EA							
151	Install Sand Bags to Control Drainage Velocity	40	EA							
152	Install Silt Fence	3,457	LF							
153	Install Rock Rip Rap at Manholes with Slotted Covers	2,560	SF							
154	Install Embankment Slope Fiber Rolls	800	LF							
155	Apply Hydro-Seed Mix	17,700	SY							
156	6' Chain Link Fence	6,640	LF							
157	16' Gate	1	EA							
158	Bridge Removal (Portion)	1	LS							
159	Structure Excavation (Bridge)	326 (F)	CY							
160	Structure Backfill (Bridge)	370 (F)	CY							
161	Furnish Piling (Class 200) (Alternative W)	8479	LF							
162	Driving Pile (Class 200) (Alternative W)	76	EA							
163	Prestressing Cast-in-Place Concrete (MOD)	1	LS							
164	Structural Concrete, Bridge Footing	176 (F)	CY							
165	Structural Concrete, Bridge	2,045 (F)	CY							
166	Structural Concrete, Approach Slab Type EQ(10)	20 (F)	CY							
167	Architectural Treatment (Bridge)	775 (F)	SF							
168	Joint Seal (Type B MR=2") (Bridge)	80	LF							

169	Joint Seal Assembly (MR=6") (MOD)	45	LF							
170	WABO Seismic Span II	29	LF							
171	Bar Reinforcing Steel (Bridge)	538,599 (F)	LBS							
172	Bar Reinforcing Steel (Epoxy Coated) (Bridge)	2,802 (F)	LBS							
173	Prepare and Paint Concrete (Bridge)	775 (F)	SF							
174	Bridge Deck Drainage System	4,050 (F)	LBS							
175	California ST-40 Bridge Rail (MOD) (Bridge)	798 (F)	LF							
176	Utility Conduits (Bridge)	1	LS							
177	Waterline (Bridge)	394 (F)	LF							
178	Vibration Monitoring	1	LS							
179	Joint Utility Trench – Excavation, Backfill, and Compaction (5 th Street South)	1	LS							
180	Joint Utility Trench – Excavation, Backfill, and Compaction (5 th Street North, Railyards Boulevard)	1	LS							
181	SMUD Conduit System (5 th Street South)	1	LS							
182	SMUD Conduit System (5 th Street North, Railyards Boulevard)	1	LS							
183	SMUD Splice Box (17"x30")	12	EA							
184	SMUD Splice Box (24"x36")	3	EA							
185	SMUD Splicing Vault (6'x8')	7	EA							
186	SMUD Primary Splicing Enclosure (8'x14'x8')	14	EA							
187	SMUD 3 Phase Transformer Pad	4	EA							



CERTIFICATE OF LIABILITY INSURANCE

OP ID: C8

DATE (MM/DD/YYYY)

09/23/2013

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER James C Jenkins Ins Srvs Concd License No. 0545478 P.O. Box 5668 Concord, CA 94524 Curt Perata	Phone: 925-798-3334 Fax: 925-609-5381	CONTACT NAME: _____ PHONE (A/C, No, Ext): _____ E-MAIL ADDRESS: _____ PRODUCER CUSTOMER ID#: OCJON-1	FAX (A/C, No): _____																				
	INSURED O.C. Jones & Sons, Inc. Lisa Larratt 1520 Fourth Street Berkeley, CA 94710		<table border="1"> <thead> <tr> <th colspan="2">INSURER(S) AFFORDING COVERAGE</th> <th>NAIC #</th> </tr> </thead> <tbody> <tr> <td>INSURER A:</td> <td>National Union Fire Ins Co PA</td> <td>19445</td> </tr> <tr> <td>INSURER B:</td> <td>Allied World Assurance Company</td> <td>19489</td> </tr> <tr> <td>INSURER C:</td> <td></td> <td></td> </tr> <tr> <td>INSURER D:</td> <td></td> <td></td> </tr> <tr> <td>INSURER E:</td> <td></td> <td></td> </tr> <tr> <td>INSURER F:</td> <td></td> <td></td> </tr> </tbody> </table>	INSURER(S) AFFORDING COVERAGE		NAIC #	INSURER A:	National Union Fire Ins Co PA	19445	INSURER B:	Allied World Assurance Company	19489	INSURER C:			INSURER D:			INSURER E:			INSURER F:	
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COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDITIONAL SUBR INSR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> Geni Agg per endt GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC	X	GL5094637 XCU & CONTRACTUAL INC \$10,000,000	04/01/2013	04/01/2014	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 500,000 MED EXP (Any one person) \$ 25,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000
	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS	X	CA5196394	04/01/2013	04/01/2014	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$ \$
B	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> DEDUCTIBLE <input checked="" type="checkbox"/> RETENTION \$ 10,000	X	03054473	04/01/2013	04/01/2014	EACH OCCURRENCE \$ 25,000,000 AGGREGATE \$ 25,000,000 \$ \$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N <input type="checkbox"/>	N/A X WC033575541	04/01/2013	04/01/2014	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
 RE: 5th Street Viaduct & Railyards Blvd (PN: T15135800)

City of Sacramento; IA Sacramento Holdings, LLC and their officials, employees and volunteers are additional for General, Automobile and Excess Liability per attached endorsements. Coverage is Primary (SEE NEXT PAGE)

CERTIFICATE HOLDER**CANCELLATION**

SACCITY City of Sacramento Department of Transportation Engineering Services Division 915 I Street, Room 2000 Sacramento, CA 95814	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE 
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NOTEPAD:

HOLDER CODE **SACCITY**
INSURED'S NAME **O.C. Jones & Sons, Inc.**

OCJON-1
OP ID: C8

PAGE 2
DATE 09/23/13

Waiver of Subrogation applies to Workers Compensation per attached endorsement. 60 Day Notice of Cancellation applies per the attached endorsement.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**ADDITIONAL INSURED - OWNERS, LESSEES OR
CONTRACTORS - SCHEDULED PERSON OR
ORGANIZATION**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s):	Location(s) Of Covered Operations
<p>Any Person or Organization contractually requiring status as an Additional Insured for ongoing operations you perform for them</p>	
<p>Information required to complete this Schedule, if not shown above, will be shown in the Declarations.</p>	

A. Section II - Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:

1. Your acts or omissions; or
2. The acts or omissions of those acting on your behalf;

in the performance of your ongoing operations for the additional insured(s) at the location(s) designated above.

B. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to "bodily injury" or "property damage" occurring after:

1. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
2. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED - OWNERS, LESSEES OR CONTRACTORS - COMPLETED OPERATIONS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s):	Location And Description Of Completed Operations
As Required by written contract	
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

Section II - Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by "your work" at the location

designated and described in the schedule of this endorsement performed for that additional insured and included in the "products-completed operations hazard."

ENDORSEMENT

This endorsement, effective 12:01 A.M. **4-1-13** forms a part of

policy No. **GL 5094637** issued to **O.C. Jones & Sons, Inc.**

by

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**PRIMARY COVERAGE FOR SPECIFIED PERSONS OR
ORGANIZATIONS NAMED AS ADDITIONAL INSURED -
ONGOING AND COMPLETED OPERATIONS**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE FORM

The following paragraph is added to **SECTION II - WHO IS AN INSURED** and applies only to persons or organizations we have added to your policy as additional insureds by endorsement to comply with insurance requirements of written contracts relative to: a) the performance of your ongoing operations for the additional insureds; or b) "your work" performed for the additional insureds and included in the "products-completed operations hazard":

This insurance is primary over any similar insurance available to any person or organization we have added to this policy as an additional insured. However, this insurance is primary over any other similar insurance only if the additional insured is designated as a named insured in the Declarations of the other similar insurance. We will not require contribution of limits from the other similar insurance if the insurance afforded by this endorsement is primary.

This insurance is excess over any other valid and collectible insurance, whether primary, excess, contingent or on any other basis, if it is not primary as defined in the paragraph above.

All other terms and conditions of the policy are the same.

**Authorized Representative or
Countersignature (in States Where
Applicable)**

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ENDORSEMENT

This endorsement, effective 12:01 A.M. 09/23/2013 forms a part of Policy

No. GL 509-46-37 issued to O. C. Jones & Sons, Inc.

By National Union Fire Insurance Company

(The above "attaching clause" need be completed only when this endorsement is issued subsequent to the preparation of the policy).

NOTICE OF CANCELLATION AND NONRENEWAL TO CERTIFICATE HOLDER

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE FORM
BUSINESS AUTO COVERAGE FORM
TRUCKERS COVERAGE FORM
GARAGE COVERAGE FORM

We shall provide written notice in accordance with state law in the event this policy is cancelled or nonrenewed, for any reason other than non payment of premium, to those entities set out in the schedule below.

Schedule

Notice will be mailed to:

City of Sacramento
Department of Transportation
Engineering Services Division
915 I Street, Room 2000
Sacramento, CA 95814

To the attention of:

Attn: Jose R. Ledesma

Contract, Permit or Job Number:

5th Street Viaduct & Railyards Blvd (PN: T15135800)

ENDORSEMENT

This endorsement, effective 12:01 A.M. **4/1/13** forms a part of

policy No. **CA5196394** issued to **O. C. Jones & Sons, Inc**

by **National Union Fire Insurance Company of PA**

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED - WHERE REQUIRED UNDER CONTRACT OR AGREEMENT

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM

SCHEDULE

ADDITIONAL INSURED:

Any person or organization for whom you are contractually bound to provide Additional Insured status but only to the extent of such person or organizations liability arising out of the use of a covered "auto"

I. SECTION II - LIABILITY COVERAGE, A. Coverage, 1. - Who Is Insured, is amended to add:

d. Any person or organization, shown in the schedule above, to whom you become obligated to include as an additional insured under this policy, as a result of any contract or agreement you enter into which requires you to furnish insurance to that person or organization of the type provided by this policy, but only with respect to liability arising out of use of a covered "auto". However, the insurance provided will not exceed the lesser of:

- (1) The coverage and/or limits of this policy, or
- (2) The coverage and/or limits required by said contract or agreement.

Authorized Representative or
Countersignature (in States Where
Applicable)

ENDORSEMENT

This endorsement, effective 12:01A.M. **4-1-13** forms a part of

policy No. **CA 5196394** issued to **O.C. Jones & Sons, Inc**

by

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

INSURANCE PRIMARY AS TO CERTAIN ADDITIONAL INSURED

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM

Section IV - Business Auto Conditions, B., General Conditions, 5., Other Insurance, c., is amended by the addition of the following sentence:

The insurance afforded under this policy to an additional insured will apply as primary insurance for such additional insured where so required under an agreement executed prior to the date of accident. We will not ask any insurer that has issued other insurance to such additional insured to contribute to the settlement of loss arising out of such accident.

All other terms and conditions remain unchanged.

**Authorized Representative or
Countersignature (in States Where
Applicable)**

R. Violation of Economic or Trade Sanctions

If coverage for a claim or **Suit** under this policy is in violation of any United States of America economic or trade sanctions, including but not limited to, sanctions administered and enforced by the United States Treasury Department's Office of Foreign Assets Control ("OFAC"), then coverage for that claim or **Suit** will be null and void.

VI. DEFINITIONS

A. **Advertisement** means a notice that is broadcast or published to the general public or specific market segments about your goods, products or services for the purpose of attracting customers or supporters. For the purposes of this definition:

1. notices that are published include material placed on the internet or on similar electronic means of communication; and
2. regarding web-sites, only that part of a web-site that is about your goods, products or services for the purposes of attracting customers or supporters is considered an **Advertisement**.

B. **Auto** means:

1. a land motor vehicle, trailer or semitrailer designed for travel on public roads, including any attached machinery or equipment; or
2. any other land vehicle that is subject to a compulsory or financial responsibility law in the state where it is licensed or principally garaged. However, **Auto** does not include **Mobile Equipment**.

C. **Bodily Injury** means bodily injury, sickness or disease sustained by any person, including death, mental anguish, mental injury, shock or humiliation resulting from any of these at any time.

D. **Hostile Fire** means a fire that becomes uncontrollable or breaks out from where it was intended to be.

E. **Impaired Property** means tangible property, other than **Your Product** or **Your Work**, that cannot be used or is less useful because:

1. it incorporates **Your Product** or **Your Work** that is known or thought to be defective, deficient, inadequate or dangerous; or
2. you have failed to fulfill the terms of a contract or agreement;

if such property can be restored to use by:

1. the repair, replacement, adjustment or removal of **Your Product** or **Your Work**; or
2. your fulfilling the terms of the contract or agreement.

F. **Insured** means:

1. the **Named Insured**;
2. if you are designated in the Declarations as:

- a. an individual, you and your spouse are **Insureds**, but only with respect to the conduct of a business of which you are the sole owner;
 - b. a partnership or joint venture, you are an **Insured**. Your members, your partners, and their spouses are also **Insureds**, but only with respect to the conduct of your business;
 - c. a limited liability company, you are an **Insured**. Your members are also **Insureds**, but only with respect to the conduct of your business. Your managers are **Insureds**, but only with respect to their duties as your managers;
 - d. an organization other than a partnership, joint venture or limited liability company, you are an **Insured**. Your executive officers and directors are **Insureds**, but only with respect to their duties as your officers or directors. Your stockholders are also **Insureds**, but only with respect to their liability as stockholders;
 - e. a trust, you are an **Insured**. Your trustees are also **Insureds**, but only with respect to their duties as trustees;
- 3. your employees other than your executive officers (if you are an organization other than a partnership, joint venture or limited liability company) or your managers (if you are a limited liability company), but only for acts within the scope of their employment by you or while performing duties related to the conduct of your business;
 - 4. your volunteer workers only while performing duties related to the conduct of your business;
 - 5. any person (other than your employee or volunteer worker) or organization while acting as your real estate manager;
 - 6. your legal representative if you die, but only with respect to duties as such. That representative will have all your rights and duties under this policy;
 - 7. any person or organization, other than the **Named Insured**, included as an Additional Insured under **Scheduled Underlying Insurance**, but not for broader coverage than would be afforded by such **Scheduled Underlying Insurance**.

Notwithstanding any of the above:

- a. no person or organization is an **Insured** with respect to the conduct of any current, past or newly formed partnership, joint venture or limited liability company that is not designated as a **Named Insured** in Item 1. of the Declarations; and
 - b. no person or organization is an **Insured** under this policy who is not an **Insured** under applicable **Scheduled Underlying Insurance**. This provision shall not apply to any organization set forth in the definition of **Named Insured** in subparagraphs J. 2 and 3.
- G. **Insured Contract** means that part of any contract or agreement pertaining to your business under which any **Insured** assumes the tort liability of another party to pay for **Bodily Injury** or **Property Damage** to a third person or organization. Tort liability means a liability that would be imposed by law in the absence of any contract or agreement.

Insured Contract does not include that part of any contract or agreement:

- 1. that indemnifies a railroad for **Bodily Injury** or **Property Damage** arising out of construction or demolition operations, within fifty (50) feet of any railroad property and affecting any railroad bridge or trestle, tracks, road-beds, tunnel, underpass or crossing;

BLANKET WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT

This endorsement changes the policy to which it is attached effective on the inception date of the policy unless a different date is indicated below.

(The following "attaching clause" need be completed only when this endorsement is issued subsequent to preparation of the policy).

This endorsement, effective 12:01 AM **4/1/13** forms a part of Policy No. **WC033575541**

Issued to **O.C. Jones & Sons, Inc**

By **National Union Fire Ins Co of PA**

We have a right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against any person or organization with whom you have a written contract that requires you to obtain this agreement from us, as regards any work you perform for such person or organization.

The additional premium for this endorsement shall be _____ % of the total estimated workers compensation premium for this policy.

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT
CAREFULLY.**

ENDORSEMENT

This endorsement, effective 12:01 A.M. 09/23/2013 forms a part of Policy

No. WC 335-75-541 issued to O. C. Jones & Sons, Inc.

By National Union Fire Insurance Company

(The above "attaching clause" need be completed only when this endorsement is issued subsequent to the preparation of the policy).

NOTICE OF CANCELLATION AND NONRENEWAL TO CERTIFICATE HOLDER

This endorsement modifies insurance provided under the following:

WORKERS COMPENSATION AND EMPLOYERS LIABILITY INSURANCE POLICY

We shall provide written notice in accordance with state law in the event this policy is cancelled or nonrenewed, for any reason other than non payment of premium, to those entities set out in the schedule below.

Schedule

Notice will be mailed to:

City of Sacramento
Department of Transportation
Engineering Services Division
915 I Street, Room 2000
Sacramento, CA 95814

To the attention of:

Attn: Jose R. Ledesma

Contract, Permit or Job Number:

5th Street Viaduct & Railyards Blvd (PN: T15135800)

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT
CAREFULLY.**

ENDORSEMENT

This endorsement, effective 12:01 A.M. 09/23/2013 forms a part of Policy

No. CA 519-63-94 issued to O. C. Jones & Sons, Inc.

By National Union Fire Insurance Company

(The above "attaching clause" need be completed only when this endorsement is issued subsequent to the preparation of the policy).

NOTICE OF CANCELLATION AND NONRENEWAL TO CERTIFICATE HOLDER

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE FORM
BUSINESS AUTO COVERAGE FORM
TRUCKERS COVERAGE FORM
GARAGE COVERAGE FORM

We shall provide written notice in accordance with state law in the event this policy is cancelled or nonrenewed, for any reason other than non payment of premium, to those entities set out in the schedule below.

Schedule

Notice will be mailed to:

City of Sacramento
Department of Transportation
Engineering Services Division
915 I Street, Room 2000
Sacramento, CA 95814

To the attention of:

Attn: Jose R. Ledesma

Contract, Permit or Job Number:

5th Street Viaduct & Railyards Blvd (PN: T15135800)

82541 (6/03)



CERTIFICATE OF LIABILITY INSURANCE

OCJON-1

OP ID: C8

DATE(MM/DD/YYYY)

09/23/2013

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER James C Jenkins Ins Srvc Concd License No. 0545478 P.O. Box 5668 Concord, CA 94524 Curt Perata	Phone: 925-798-3334 Fax: 925-609-5381	CONTACT NAME: PHONE (A/C, No, Ext): E-MAIL ADDRESS: INSURER(S) AFFORDING COVERAGE INSURER A: Great American E&S Ins Co INSURER B: INSURER C: INSURER D: INSURER E: INSURER F:	FAX (A/C, No): NAIC # 37532
	INSURED O.C. Jones & Sons, Inc. Lisa Larratt 1520 Fourth Street Berkeley, CA 94710		

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

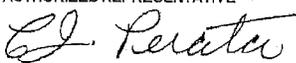
INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	GENERAL LIABILITY <input type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC					EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMP/OP AGG \$
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS					COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
	UMBRELLA LIAB <input type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$					EACH OCCURRENCE \$ AGGREGATE \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below Y/N <input type="checkbox"/> N/A					WC STATUTORY LIMITS OTH-ER E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
A	Pollution Liab	X	PCE184950703	08/15/2013	08/15/2014	Per Occ 10,000,000 Aggregate 10,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

RE: 5th treet Diaduct & Railyards Blvd (PN: T15135800)

City of Sacramento; IA Sacramento Holdings, LLC and their officials, employes and volunteers are additional insured; Primary wording applies, per the attachment endorsement.

CERTIFICATE HOLDER**CANCELLATION**

SACCITY City of Sacramento Department of Transportation Engineering Services Division 915 I Street, Room 2000 Sacramento, CA 95814	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE 
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ENDORSEMENT # 2

This endorsement, effective 12:01 a.m., 8/15/2013, forms a part of Policy No. PCE 184950703 issued to O.C. JONES & SONS, INC. By Great American E & S Insurance Company

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**PRIMARY INSURANCE FOR CLIENT WHEN REQUIRED BY WRITTEN
CONTRACT - COVERAGE B ONLY**

This endorsement modifies insurance provided under the following:

PROFESSIONAL AND CONTRACTING SERVICES ENVIRONMENTAL LIABILITY INSURANCE POLICY

The INSURED and the Company agree to the following Policy change(s):

Section II. DEFINITIONS, Item N. INSURED is deleted in its entirety and replaced with the following:

N. INSURED means:

1. the FIRST NAMED INSURED, any ADDITIONAL NAMED INSURED, and any present or former director, officer, partner, member, employee, leased or temporary worker thereof, while acting within the scope of his/her duties as such; and
2. any organization or entity in which the FIRST NAMED INSURED has an ownership interest of fifty percent (50%) or more, or otherwise has management control over, as of the inception date of this Policy; and
3. any joint ventures in which the INSURED is named as a co-venturer, but solely with regard to the INSURED's liability arising out of its CONTRACTING SERVICES provided under such joint venture; and
4. solely with regard to Coverage B under this Policy:

When required by written contract, INSURED also includes the client for whom the INSURED performs ~~CONTRACTING SERVICES~~ provided that such contract was signed by the INSURED and such client prior to the date the POLLUTION CONDITION first commenced. However, the client is included as an INSURED under this Policy solely to the extent that the client is found liable based upon CONTRACTING SERVICES negligently performed by an INSURED other than the client. Coverage for such client under this Policy shall not exceed the lesser of the following amounts:

- i. the Limit of Liability required under such written contract; or
- ii. the applicable Coverage B Limit of Liability of this Policy.

Notwithstanding Section IX. CONDITIONS, Item L. OTHER INSURANCE, and only when required by such written contract, the coverage afforded under this Policy for any entity who is an INSURED solely by



PCE 69 17 (Ed. 04 10)

reason of subparagraph 4. shall apply as primary as to any other valid and collectible insurance available to such INSURED.

All other terms and conditions remain the same.

YEAR

Withholding Exemption Certificate

CALIFORNIA FORM

2012

(This form can only be used to certify exemption from nonresident withholding under California Revenue and Taxation Code (R&TC) Section 18662. Do not use this form for exemption from wage withholding.)

590**File this form with your withholding agent.** (Please type or print)

Withholding agent's name

Payee's name

O.C. Jones & Sons, Inc.

Payee's

 SOS file no. SSN or ITIN CA corp. no. FEIN

9 4 - 3 3 2 0 1 6 4

Address (number and street, PO Box, or PMB no.)

1520 Fourth Street

Apt. no./ Ste. no.

City

Berkeley

State

C A

ZIP Code

9 4 5 7 8

Read the following carefully and check the box that applies to the payee.

I certify that for the reasons checked below, the payee named on this form is exempt from the California income tax withholding requirement on payment(s) made to the entity or individual.

 Individuals — Certification of Residency:

I am a resident of California and I reside at the address shown above. If I become a nonresident at any time, I will promptly notify the withholding agent. See instructions for General Information D, Who is a Resident, for the definition of a resident.

 Corporations:

The above-named corporation has a permanent place of business in California at the address shown above or is qualified through the California Secretary of State (SOS) to do business in California. The corporation will file a California tax return and withhold on payments of California source income to nonresidents when required. If this corporation ceases to have a permanent place of business in California or ceases to do any of the above, I will promptly notify the withholding agent. See instructions for General Information F, What is a Permanent Place of Business, for the definition of permanent place of business.

 Partnerships or limited liability companies (LLC):

The above-named partnership or LLC has a permanent place of business in California at the address shown above or is registered with the California SOS, and is subject to the laws of California. The partnership or LLC will file a California tax return and will withhold on foreign and domestic nonresident partners or members when required. If the partnership or LLC ceases to do any of the above, I will promptly inform the withholding agent. For withholding purposes, a limited liability partnership (LLP) is treated like any other partnership.

 Tax-Exempt Entities:

The above-named entity is exempt from tax under California Revenue and Taxation Code (R&TC) Section 23701 _____ (insert letter) or Internal Revenue Code Section 501(c) _____ (insert number). The tax-exempt entity will withhold on payments of California source income to nonresidents when required. If this entity ceases to be exempt from tax, I will promptly notify the withholding agent. Individuals cannot be tax-exempt entities.

 Insurance Companies, Individual Retirement Arrangements (IRAs), or Qualified Pension/Profit Sharing Plans:

The above-named entity is an insurance company, IRA, or a federally qualified pension or profit-sharing plan.

 California Trusts:

At least one trustee and one noncontingent beneficiary of the above-named trust is a California resident. The trust will file a California fiduciary tax return and will withhold on foreign and domestic nonresident beneficiaries when required. If the trustee becomes a nonresident at any time, I will promptly notify the withholding agent.

 Estates — Certification of Residency of Deceased Person:

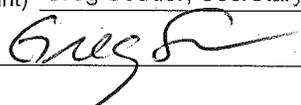
I am the executor of the above-named person's estate. The decedent was a California resident at the time of death. The estate will file a California fiduciary tax return and will withhold on foreign and domestic nonresident beneficiaries when required.

 Nonmilitary Spouse of a Military Servicemember:

I am a nonmilitary spouse of a military servicemember and I meet the Military Spouse Residency Relief Act (MSRRA) requirements. See instructions for General Information E, MSRRA.

CERTIFICATE: Please complete and sign below.

Under penalties of perjury, I hereby certify that the information provided in this document is, to the best of my knowledge, true and correct. If conditions change, I will promptly notify the withholding agent.

Payee's name and title (type or print) Greg Souder, SecretaryDaytime telephone no. 510-526-3424Payee's signature ▶ Date 9/20/13

Instructions for Form 590

Withholding Exemption Certificate

References in these instructions are to the California Revenue and Taxation Code (R&TC).

General Information

For purposes of California income tax, references to a spouse, husband, or wife also refer to a Registered Domestic Partner (RDP) unless otherwise specified. For more information on RDPs, get FTB Pub. 737, Tax Information for Registered Domestic Partners.

Private Mail Box (PMB) – Include the PMB in the address field. Write “PMB” first, then the box number. Example: 111 Main Street PMB 123.

Foreign Address – Enter the information in the following order: City, Country, Province/Region, and Postal Code. Follow the country's practice for entering the postal code. **Do not** abbreviate the country's name.

A Purpose

Use Form 590, Withholding Exemption Certificate, to certify an exemption from nonresident withholding. California residents or entities should complete and present Form 590 to the withholding agent. The withholding agent is then relieved of the withholding requirements if the agent relies in good faith on a completed and signed Form 590 unless told by the FTB that the form should not be relied upon.

The following are excluded from withholding and completing this form:

- The United States and any of its agencies or instrumentalities
- A state, a possession of the United States, the District of Columbia, or any of its political subdivisions or instrumentalities
- A foreign-government or any of its political subdivisions, agencies, or instrumentalities

Important – This form cannot be used for exemption from wage and real estate withholding.

- If you are an employee, any wage withholding questions should be directed to the FTB General Information number, 800.852.5711. Employers should call 888.745.3886 or go to edd.ca.gov.
- Sellers of California real estate use Form 593-C, Real Estate Withholding Certificate, to claim an exemption from real estate withholding.

B Requirement

R&TC Section 18662 requires withholding of income or franchise tax on payments of California source income made to nonresidents of California.

Withholding is required on the following, but is not limited to:

- Payments to nonresidents for services rendered in California.
- Distributions of California source income made to domestic nonresident S corporation

shareholders, partners and members and allocations of California source income made to foreign partners and members.

- Payments to nonresidents for rents if the payments are made in the course of the withholding agent's business.
- Payments to nonresidents for royalties with activities in California.
- Distributions of California source income to nonresident beneficiaries from an estate or trust.
- Prizes and winnings received by nonresidents for contests in California.

However, withholding is optional if the total payments of California source income are \$1,500 or less during the calendar year.

For more information on withholding get FTB Pub. 1017, Resident and Nonresident Withholding Guidelines. To get a withholding publication see General Information H, Publications, Forms, and Additional Information.

Backup Withholding – Beginning on or after January 1, 2010, with certain limited exceptions, payers that are required to withhold and remit backup withholding to the Internal Revenue Service (IRS) are also required to withhold and remit to the Franchise Tax Board (FTB). The California backup withholding rate is 7% of the payment. For California purposes, dividends, interests, and any financial institutions release of loan funds made in the normal course of business are exempt from backup withholding. For additional information on California backup withholding, go to ftb.ca.gov and search for **backup withholding**.

If a payee has backup withholding, the payee must contact the FTB to provide a valid Taxpayer Identification Number (TIN) before filing a tax return. The following are acceptable TINs: social security number (SSN); individual taxpayer identification number (ITIN); federal employer identification number (FEIN); California corporation number (CA Corp No.); or Secretary of State (SOS) file number. Failure to provide a valid TIN will result in the denial of the backup withholding credit. For more information go to ftb.ca.gov and search for **backup withholding**.

C Who Certifies this Form

Form 590 is certified by the payee. An incomplete certificate is invalid and the withholding agent should not accept it. If the withholding agent receives an incomplete certificate, the withholding agent is required to withhold tax on payments made to the payee until a valid certificate is received. In lieu of a completed certificate on the preprinted form, the withholding agent may accept as a substitute certificate a letter from the payee explaining

why the payee is not subject to withholding. The letter must contain all the information required on the certificate in similar language, including the under penalty of perjury statement and the payee's taxpayer identification number. The withholding agent must retain a copy of the certificate or substitute for at least four years after the last payment to which the certificate applies, and provide it upon request to the Franchise Tax Board.

For example, if an entertainer (or the entertainer's business entity) is paid for a performance, the entertainer's information must be provided. **Do not** submit the entertainer's agent or promoter information.

The grantor of a grantor trust shall be treated as the payee for withholding purposes. Therefore, if the payee is a grantor trust and one or more of the grantors is a nonresident, withholding is required. If all of the grantors on the trust are residents, no withholding is required. Resident grantors can check the box on Form 590 labeled “Individuals — Certification of Residency.”

D Who is a Resident

A California resident is any individual who is in California for other than a temporary or transitory purpose or any individual domiciled in California who is absent for a temporary or transitory purpose.

An individual domiciled in California who is absent from California for an uninterrupted period of at least 546 consecutive days under an employment-related contract is considered outside California for other than a temporary or transitory purpose.

An individual is still considered outside California for other than a temporary or transitory purpose if return visits to California do not total more than 45 days during any taxable year covered by an employment contract.

This provision does not apply if an individual has income from stocks, bonds, notes, or other intangible personal property in excess of \$200,000 in any taxable year in which the employment-related contract is in effect.

A spouse/RDP absent from California for an uninterrupted period of at least 546 days to accompany a spouse/RDP under an employment-related contract is considered outside of California for other than a temporary or transitory purpose.

Generally, an individual who comes to California for a purpose which will extend over a long or indefinite period will be considered a resident. However, an individual who comes to perform a particular contract of short duration will be considered a nonresident.

For assistance in determining resident status,

get FTB Pub. 1031, Guidelines for Determining Resident Status, and FTB Pub. 1032, Tax Information for Military Personnel, or call the FTB at 800.852.5711 or 916.845.6500.

E Military Spouse Residency Relief Act (MSRRA)

Generally, for tax purposes you are considered to maintain your existing residence or domicile. If a military servicemember and nonmilitary spouse have the same state of domicile, the MSRRA provides:

- A spouse shall not be deemed to have lost a residence or domicile in any state solely by reason of being absent to be with the servicemember serving in compliance with military orders.
- A spouse shall not be deemed to have acquired a residence or domicile in any other state solely by reason of being there to be with the servicemember serving in compliance with military orders.

Domicile is defined as the one place:

- Where you maintain a true, fixed, and permanent home
- To which you intend to return whenever you are absent

A military servicemember's nonmilitary spouse is considered a nonresident for tax purposes if the servicemember and spouse have the same domicile outside of California and the spouse is in California solely to be with the servicemember who is serving in compliance with Permanent Change of Station orders.

Note: California may require nonmilitary spouses of military servicemembers to provide proof that they meet the criteria for California personal income tax exemption as set forth in the MSRRA.

Income of a military servicemember's nonmilitary spouse for services performed in California is not California source income subject to state tax if the spouse is in California to be with the servicemember serving in compliance with military orders, and the servicemember and spouse have the same domicile in a state other than California.

For additional information or assistance in determining whether the applicant meets the MSRRA requirements, get FTB Pub. 1032.

F What is a Permanent Place of Business

A corporation has a permanent place of business in California if it is organized and existing under the laws of California or if it is a foreign corporation qualified to transact intrastate business by the SOS. A corporation that has not qualified to transact intrastate business (e.g., a corporation engaged exclusively in interstate commerce) will be considered as having a permanent place of business in California only if it maintains a permanent office in California that is permanently staffed by its employees.

G Withholding Agent

Keep Form 590 for your records. **Do not** send this form to the FTB unless it has been specifically requested.

For more information, contact Withholding Services and Compliance, see General Information H.

The payee must notify the withholding agent if any of the following situations occur:

- The individual payee becomes a nonresident.
- The corporation ceases to have a permanent place of business in California or ceases to be qualified to do business in California.
- The partnership ceases to have a permanent place of business in California.
- The LLC ceases to have a permanent place of business in California.
- The tax-exempt entity loses its tax-exempt status.

The withholding agent must then withhold and report the withholding using Form 592, Resident and Nonresident Withholding Statement, and remit the withholding using Form 592-V, Payment Voucher for Resident and Nonresident Withholding. Form 592-B, Resident and Nonresident Withholding Tax Statement, is retained by the withholding agent

and a copy is given to the payee.

H Publications, Forms, and Additional Information

You can download, view, and print California tax forms and publications at ftb.ca.gov.

To have publications or forms mailed to you or to get additional nonresident withholding information, contact the Withholding Services and Compliance.

WITHHOLDING SERVICES AND COMPLIANCE MS F182
FRANCHISE TAX BOARD
PO BOX 942867
SACRAMENTO CA 94267-0651

Telephone: 888.792.4900
916.845.4900
Fax: 916.845.9512

OR to get forms by mail write to:

TAX FORMS REQUEST UNIT MS F284
FRANCHISE TAX BOARD
PO BOX 307
RANCHO CORDOVA CA 95741-0307

For all other questions unrelated to withholding or to access the TTY/TDD numbers, see the information below.

Internet and Telephone Assistance

Website: ftb.ca.gov
Telephone: 800.852.5711 from within the United States
916.845.6500 from outside the United States

TTY/TDD: 800.822.6268 for persons with hearing or speech impairments

Asistencia Por Internet y Teléfono

Sitio web: ftb.ca.gov
Teléfono: 800.852.5711 dentro de los Estados Unidos
916.845.6500 fuera de los Estados Unidos

TTY/TDD: 800.822.6268 personas con discapacidades auditivas y del habla

WORKER'S COMPENSATION CERTIFICATION

5th Street Viaduct & Railyards (PN: T15135800)

In accordance with Article 5 (commencing at Section 1860), Chapter 1, Part 7, Division 2 of the Labor Code, the below certificate must be signed and filed with the awarding body prior to performing any work under this contract. Labor Code Section 3700, inter alia, states the following:

"Every employer shall secure the payment of compensation in one or more of the following ways:

"(a) By being insured against liability to pay compensation in one or more insurers duly authorized to write compensation insurance in this State.

"(b) By securing from the Director of Industrial Relations a certificate of consent to self-insure, which may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to his employees.

To be signed by authorized corporate officer or partner or individual submitting the Proposal. If Bidder is: (example)

1. An individual using a firm name, sign: "John Doe, an individual doing business as Blank Company."
2. An individual doing business under his own name, Sign: your name only.
3. A co-partnership, sign: "John Doe and Richard Doe, co-partners doing business as Blank Company, by, John Doe, co-partner.
4. A corporation, sign: "Blank Company, by John Doe, Secretary." (or other title)

I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for worker's 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.

DATE: 9/20/13

Contractor O.C. Jones & Sons, Inc.

By  Greg Souder, Secretary
Signature

GUARANTEE

We hereby guarantee the **5th Street, 5th Street Viaduct & Railyards Blvd at Sacramento Railyards (PN: T15135800)** the City of Sacramento for one (1) year in accordance with the guarantee required in the specifications. We agree to repair or replace any or all such work, together with all or any other work which may be displaced in so doing, that may be proven defective in workmanship or material within the one-year period from the date of acceptance without any expense whatsoever to the City, ordinary wear and tear and unusual abuse or neglect excepted.

In the event of our failure to comply with the above-mentioned conditions within five (5) days time after being notified in writing, we collectively or separately, do hereby authorize the City to proceed to have the defects repaired and made good at our expense and will pay the costs and damages, including but not limited to any related attorney fees and City staff and administrative expenses, therefor immediately upon demand.

Dated: 9/20/13

Signed: 

Greg Souder, Secretary

Printed Name

O.C. Jones & Sons, Inc.

Company

1520 Fourth St., Berkeley, CA 94710

Address

Request for Taxpayer Identification Number and Certification

**Give form to the
 requester. Do not
 send to the IRS.**

Print or type
 See Specific Instructions on page 2.

Name (as shown on your income tax return) O.C. Jones & Sons, Inc.	
Business name, if different from above	
Check appropriate box: <input type="checkbox"/> Individual/Sole proprietor <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Other ▶ <input type="checkbox"/> Exempt from backup withholding	
Address (number, street, and apt. or suite no.) 1520 Fourth Street	Requester's name and address (optional)
City, state, and ZIP code Berkeley, CA 94710	
List account number(s) here (optional)	

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on Line 1 to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Social security number								
or								
Employer identification number								
9	4	3	3	2	0	1	6	4

Note. If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

Part II Certification

Under penalties of perjury, I certify that:

- The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
- I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
- I am a U.S. person (including a U.S. resident alien).

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the Certification, but you must provide your correct TIN. (See the instructions on page 4.)

Sign Here	Signature of U.S. person ▶	Date ▶ 9-24-13
------------------	----------------------------	-----------------------

Purpose of Form

A person who is required to file an information return with the IRS, must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

U.S. person. Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

- Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
- Certify that you are not subject to backup withholding, or
- Claim exemption from backup withholding if you are a U.S. exempt payee.

Note. If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

For federal tax purposes you are considered a person if you are:

- An individual who is a citizen or resident of the United States,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States, or

• Any estate (other than a foreign estate) or trust. See Regulations sections 301.7701-6(a) and 7(a) for additional information.

Foreign person. If you are a foreign person, do not use Form W-9. Instead, use the appropriate Form W-8 (see Publication 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

Nonresident alien who becomes a resident alien.

Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the recipient has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items:

- The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.
- The treaty article addressing the income.
- The article number (or location) in the tax treaty that contains the saving clause and its exceptions.

SPECIAL PROVISIONS

For

**SACRAMENTO RAILYARDS
IMPROVEMENT DRAWINGS – 5TH STREET SOUTH OF UPRR; 5TH
STREET NORTH OF UPRR; 5TH STREET VIADUCT;
RAILYARDS BOULEVARD**

IMPROVEMENT DRAWINGS - 5TH STREET SOUTH OF UPRR;
5TH STREET NORTH OF UPRR; 5TH STREET VIADUCT; RAILYARDS BOULEVARD
AT THE
SACRAMENTO RAILYARDS
IN THE CITY OF SACRAMENTO
City Project No.: T15135800

THE SPECIAL PROVISIONS CONTAINED HEREIN HAVE BEEN PREPARED BY OR
UNDER THE DIRECTION OF THE FOLLOWING REGISTERED ENGINEERS:

Submitted By:

Kimley-Horn and Associates, Inc.:



Kevin Kane, Registered Civil Engineer



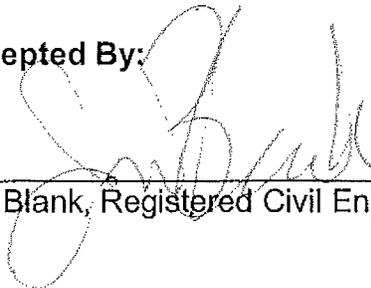
Quincy Engineering, Inc.:



Mark Reno, Registered Civil Engineer



Accepted By:



Jon Blank, Registered Civil Engineer

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**SPECIAL PROVISIONS
FOR
5TH STREET SOUTH, 5TH STREET NORTH, 5TH STREET VIADUCT AND
RAILYARDS BOULEVARD AT SACRAMENTO RAILYARDS (“Project”)**

FUNDING SOURCE: 1C-TOD AND 1C-IIG

**CITY OF SACRAMENTO
 (“Owner” or “City”)**

SECTION 1.0 - GENERAL REQUIREMENTS

DEFINITIONS OF TERMS

Whenever in the City of Sacramento Standard Specifications, State Standard Specifications, Special Provisions, Notice to Contractors, Proposal, Contract or other contract documents the following abbreviations and terms are used, the intent and meaning shall be interpreted as follows:

Department or Department of Transportation: The City of Sacramento, Department of Transportation.

Director or Director of Transportation: Director of Transportation, City of Sacramento.

Design Engineer: Kimley-Horn and Associates, Inc., acting either directly or through properly authorized agents, such agents acting within the scope of the particular duties entrusted to them.

Laboratory or Transportation Laboratory: Laboratories authorized by the Engineer to test materials and work involved in the contract.

State or State of California: IA Sacramento Holding, L.L.C. (“Owner” or “IA”)

Transportation Building Sacramento: City Hall, City of Sacramento, State of California.

State Highway Engineer: The Director of Transportation of the City of Sacramento, State of California.

State Standard Drawings: The 2006 edition of the Standard Drawings of the State of California, Department of Transportation and all updates to them.

State Standard Specifications: The 2006 edition of the Standard Specifications of the State of California, Department of Transportation and all updates to them.

City Standard Specifications: The June 2007 edition of the City of Sacramento Standard Specifications and all updates to them.

Construction Manager: Vali Cooper and Associates acting either directly or through properly authorized agents, such agents acting within the scope of the particular duties entrusted to them by the City of Sacramento.

Soil and Ground Water Management Plan: The document entitled “Soil and Ground Water Management Plan, The Railyards, Sacramento, California,” prepared by ERM, Inc., dated March 2009

Attorney General: City Attorney, City of Sacramento

Required Meetings: All bidders are encouraged to attend required meetings; however bidders who do not attend shall be responsible for all information disseminated.

1.01 SPECIFICATIONS

The contract shall be administered in accordance with Sections 1 through 8 of the City of Sacramento Standard Specifications for Public Construction, dated June 2007 and all addenda to them. The work to be performed under this contract shall be in accordance with the City of Sacramento Standard Specifications for Public Construction, dated June 2007 and the State of California Department of Transportation Standard Specifications dated May 2006 and the Special Provisions contained herein. The General Requirements of this contract shall be governed by these Special Provisions first, followed by Section 1 through Section 8 of the City Standard Specifications. Other standards or specifications specified in these Special Provisions govern only the applicable technical specifications for the items of work referenced.

Where reference is made in the City Standard Specifications or in these Special Provisions to the “State Standard Specifications” or “State Specifications”, the State of California Department of Transportation Standard Specifications dated May 2006 shall apply.

Amendments to the State Standard Specifications set forth in Appendix A of these special provisions shall be considered as part of the State Standard Specifications for the purposes set forth in Section 5-1.04, "Coordination and Interpretation of Drawings, Standard Specifications and Special Provisions," of the State Standard Specifications. Whenever either the term "Standard Specifications is amended" or the term "Standard Specifications are amended" is used in the Special Provisions, the indented text or table following the term shall be considered an amendment to the referenced Standard Specifications. In case of conflict between such amendments and the Standard Specifications, the amendments shall take precedence over and be used in lieu of the conflicting portions.

For Specifications of a technical nature not covered by the City of Sacramento Standard Specifications for Public Construction, State of California Department of Transportation Standard Specifications, or these Special Provisions, the May 2006 Standard Specifications and Standard Drawings of the State of California Business and Transportation Agency Department of Transportation shall apply. In the State Standard Specifications and the State Standard Drawings, all mention of the "State" or “Department” shall be construed to mean the “Owner”.

Please note the following items with respect to the City Standard Specifications:

Replace the following definitions and terms of Section 1:

- 1-3 “Agreement” shall mean the written agreement executed by Contractor and Owner, which constitutes one of the Contract Documents.

- 1-6 "Bid" shall mean Proposal. A "formal" Bid shall mean a Bid submitted for a Contract required to be awarded by the Owner, and "formal" bidding shall mean the bidding process used for such Contracts.
- 1-8 "Change Order" shall mean a Contract amendment approved by the Owner in accordance with applicable provisions of these Specifications, authorizing an alteration, deviation, addition to, deletion from, or other change to the Contract issued after the effective date of the Agreement.
- 1-16 "Contractor" shall mean the individual, partnership, corporation, or other entity or combination thereof, which has entered into a Contract with the Owner, or Contractor's duly authorized representative.
- 1-20 "Date of signing Contract" shall mean the date upon which the Contract, properly executed by Contractor and delivered to the Owner, is executed by the Owner.
- 1-21 "Director" shall mean the Construction Manager of the Owner administering the Contract.
- 1-22 "Division Manager" shall mean the appropriate Division Manager of the Owner, or other Owner employee designated by such Division Manager to perform any duties assigned to the Division Manager in these Specifications.
- 1-23 "Engineer" shall mean the Director as well as the Director's subordinates and other Owner representative(s) who have been duly authorized to exercise control and supervision of the Work. The Engineer generally will be either a professional engineer or architect, depending on the nature of the Work, but the Engineer is not required to be a professional engineer or architect. The "Engineer" shall not mean the Design Engineer.
- 1-30 "Inspector" shall mean an engineering or construction inspector acting within the authorized scope of the particular duties and authority delegated to such inspector by the City or Owner.
- 1-32 "Liquidated damages" shall mean the sum or sums prescribed in the Contract Documents, pursuant to the Agreement, to be paid to the Owner or to be deducted from any payment due or to become due to Contractor for delay beyond the time allowed in the Contract Documents for completing the whole, or any specified portion, of the Work.

Replace the last two paragraphs of Section 2-9 SUBCONTRACTORS with the following:

If a prime contractor fails to specify a Subcontractor, or, if a prime Contractor specifies more than one (1) Subcontractor for the same portion of work to be performed under the Contract which portion exceeds one-half of one percent of the prime contractor's total bid, the prime contractor agrees that he or she is fully qualified to perform that portion himself or herself, and that the prime contractor shall perform that portion himself or herself. If after the award of the Contract, such prime contractor shall, except as provided in Section 4107 or 4109 of the Act,

subcontract any portion of the work, such prime contractor shall be subject to the penalties specified in Section 4111 of the Act.

The Contractor shall perform with their own organization and with the assistance of workers under their immediate superintendence, work of a value not less than **twenty percent (20%)** of the value of all work in the Contract. The value of any work subcontracted shall be determined by multiplying the number of units subcontracted of any item as determined from the Engineer's Estimate by the unit price.

Replace the fifth paragraph of Section 4-4 CHANGES IN THE WORK in the City Standard Specifications with the following:

Should the total pay quantity of any item of work required under the contract exceed the Engineer's Estimate by more than 25 percent, the work in excess of 125 percent of the estimate and not covered by an executed contract change order specifying the compensation to be paid therefore, will be paid for by adjusting the contract unit price, as herein provided.

The adjustment of the contract unit price will be the difference between the contract unit price and the actual unit cost, which will be determined as hereinafter provided, of the total pay quantity of the item. If the costs applicable to the item of work include fixed costs, the fixed costs will be deemed to have been recovered by the Contractor by the payments made for 125 percent of the Design Engineer's Estimate of the quantity for the item, and in computing the actual unit cost; the fixed costs will be excluded. Subject to the above provisions, the actual unit cost will be determined by the Construction Manager in the same manner as if the work were to be paid for on a cost and percentage basis as provided in Section 8-10 of the City Standard Specifications; or the adjustment will be made as agreed by the Contractor and the Engineer.

When the compensation payable for the number of units of an item of work performed in excess of 125 percent of the Design Engineer's Estimate is less than \$5,000 at the applicable contract unit price, the Construction Manager reserves the right to make no adjustment in the contract unit price if the Engineer so elects, except that an adjustment will be made if requested in writing by the Contractor.

Should the total quantity of any item of work required under the contract be less than 75 percent of the Design Engineer's Estimate, an adjustment in compensation pursuant to this Section will not be made unless the Contractor so requests in writing. If the Contractor so requests, the quantity of the item performed, unless covered by an executed contract change order specifying the compensation payable therefore, will be paid for by adjusting the contract unit price as hereinafter provided, or at the option of the Construction Manager, payment for the quantity of the work of the item performed will be made on the basis of cost and percentage as provided in Section 8-16, provided however, that in no case shall the payment for the work be less than which would be made at the contract unit price.

The adjustment of the contract unit price will be the difference between the contract unit price and the actual unit cost, which is determined as hereinafter provided, of the total pay quantity of the item, including fixed costs. The actual unit cost will be determined by the Construction Manager in the same manner as if the work were to be paid for on a cost and percentage basis as provided in Section 8-16; or the adjustment will be as agreed to by the Contractor and the Construction Manager.

Payment for the total pay quantity of the item of work will in no case exceed the payment which would be made for the performance of 75 percent of the Design Engineer's Estimate of the quantity for the item at the original contract unit price.

Replace the last paragraph of Section 5-4 COOPERATION OF CONTRACTOR with the following:

The Contractor shall give the work the constant attention necessary to facilitate the progress thereof. The Contractor shall cooperate with the Construction Manager, inspectors and with other contractors in every way possible. The Construction Manager shall allocate the work and designate sequence of construction in case of controversy between Contractors. The Contractor shall at all times have a competent Superintendent at the site of the work and said superintendent shall be fully authorized as their agent on the work. Such Superintendent shall be capable of reading and understanding the Drawings, specifications, and Special Provisions. Such Superintendent shall be an employee of the Contractor who is responsible for providing continuous site supervision of the work and shall be fully authorized as the Contractor's agent on the work to receive and follow any instruction given by the Construction Manager and to sign change orders on behalf of the Contractor.

Not more than once a month, the Contractor shall present to the Owner a statement showing the amount of labor and materials incorporated into the work.

Wherever reference is made to City Manager, Director of Transportation, Engineer, Finance Director, Inspector, Landscape Architect, or other specifically identified individuals, it shall refer to the him or her, or their designated representative accordingly.

Section 8- In the first sentence of paragraph 1, amend "The Engineer shall determine quantities..." to read "The Contractor shall determine quantities..."

The United States Standard Measures shall apply to this project.

1.02 SCOPE AND LOCATION OF WORK

The project consists of constructing approximately 712 linear feet of roadway and utility improvements from H Street north to the existing 5th Street Overhead Bridge including accompanying retaining walls and embankments; approximately 391 linear feet of elevated viaduct structure, approximately 725 linear feet of roadway and utility improvements from the 5th Street Viaduct to Railyards Boulevard, including accompanying retaining walls and embankments; approximately 2,795 linear feet of roadway and utility improvements from Bercut Drive to 7th Street within the Railyards Development Area; and a drainage retention basin.

This property is currently access-controlled and site inspection will be provided at the pre-bid meeting. Contractor shall review the site conditions and anticipate reasonable requirements that would typically be placed on owner, IA Holdings Sacramento, L.L.C., and the Contractor when working on or adjacent to private property, such as cleanliness, public safety, railroad safety, public convenience, access, protection of existing improvements (including privately owned improvements), maintaining existing services.

1.03 PARTIAL SUSPENSION OF WORK AND EXCUSABLE DAYS

It is possible that the Construction Manager may request the Contractor suspend work or partially suspend work for the following reasons and/or during the following times including but not limited to:

- Until tests are performed, and the test results of soil to be excavated are obtained by the Construction Manager;
- In the event of discovery of cultural resources;
- In the event of delay due to implementation of environmental mitigation measures and removal of suspect soil;
- In the event of delay due to unacceptable vibration levels due to construction and historic structures.
- In the event of delay due to man made buried objects exceeded beyond those provided in the Contract Documents.

The contractor may need to accelerate the schedule, with no additional compensation, to meet milestone dates.

Non-working days will be provided for the suspension of controlling items of work, and shall be indicated on the Weekly statement of working days. Contractor shall utilize the Weekly Statement of working Days to acknowledge or dispute the number of working days provided.

1.04 PRE-BID INTERPRETATION OF CONTRACT DOCUMENTS

No oral representations or interpretation will be made to any bidder as to the meaning of the contract documents. Requests for interpretation shall be made in writing and delivered to the City of Sacramento at least seven (7) calendar days before the time announced for opening the proposals. Interpretation, where necessary, will be made by the City of Sacramento in the form of an addendum to the contract documents and, when issued, will be sent as promptly as is practicable to all parties to whom the bid documents have been issued. All such addenda shall become part of the contract. Requests for information regarding this procedure or other similar information shall be directed to City of Sacramento Representative Jon Blank, Project Manager, telephone (916) 808-7914.

It shall also be the bidder's responsibility to call to the attention of the City of Sacramento any missing pages or drawings in the contract documents including the addenda. These items shall be brought to the attention of the City at least seven (7) calendar days prior to the bid opening date.

1.05 SUPPLEMENTAL PROJECT INFORMATION

The following documents are available for information only, and may be purchased separately through Signature Reprographics:

Supplemental Project Information

Means	Description
Included in the Information Handout	Geotechnical Report for 5 TH Street South Improvements
	Geotechnical Report for 5 TH Street North and Railyards Boulevard Improvements
	Foundation Report for 5 TH Street Viaduct
	Railyards Ground Water Table 2009
	Railyards Specific Plan Final EIR
	City Resolution 2007-903: Mitigation Monitoring Program
	CPUC approval of at grade light rail crossing
	5 th Street Overhead As-Built Drawings
	Geotechnical Memorandum Open Ended PP 16x0.5 Steel Pipe Piles 5 th Street Viaduct (Bridge No. 24C-0542) by Blackburn Consulting dated February 8, 2012

1.06 PROJECT CLOSEOUT

The issuance of a punch list, final acceptance of the work, and the final payment shall be in accordance with Section 8-4 of the City Standard Specifications.

1.07 BEGINNING OF WORK, TIME OF COMPLETION AND LIQUIDATED DAMAGES

The Contractor shall complete all work within the time set forth in the Agreement and as specified in Section 7-8, "Time of Completion," of the City Standard Specifications and these Special Provisions.

The time limit for completion of all work is **Two hundred twenty (220) working days** from the tenth working day after receipt of the Notice to Proceed. The anticipated Notice to Proceed is October 9, 2013. Due to funding deadlines, certain milestones are required for this project as follows:

Substantial Completion	September 15, 2014
Completion Date	October 31, 2014
Final Invoice	December 31, 2014

Construction may be carried out during the rainy season to accomplish the time constraints. No claim of any kind will be considered due to winterization and necessary protection of all work from inclement weather. The time limits specified for the completion of Work contemplated may be insufficient to permit completion of the Work by the Contractor during the normal number of hours per day or week on a single shift basis. Where additional shifts or premium pay are necessary to ensure that the Work will be completed within the time limits specified, any resulting additional costs will be considered to be included in the Contract Price and no additional compensation shall be allowed therefor. The Contract specified working days shall include 20 working days of owner-owned float which shall belong to the City for anticipated

delays such as but not limited to differing site conditions, SMUD work, UP remediation coordination, un-anticipated excavations, and handling impacted soil. If it appears that more than 20 working days of excusable delay will occur, the Construction Manager will either direct the Contractor to add forces, compensate the Contractor for premium time to meet the milestone dates, extend the time for completion, or a combination thereof. The Construction Manager will provide the Contractor written notice of such; based on the type and duration of the delay.

Should the delays exceed 20 working days of owner-owned float and cause the contractor to not meet the milestones, in addition to any work the contractor may be compensated for, the contractor shall receive no more than \$2,500 per each day of delay exceeding the float. This compensation includes demobilization, remobilization, office overhead, and other delay costs that the contractor could incur.

No payment for work performed by the Contractor prior to Notice to Proceed shall be provided.

The Contractor shall diligently prosecute the remaining work before the expiration of two hundred twenty (220) working days beginning on the day stated in the Notice to Proceed. Should said work not be completed to the satisfaction of the City of Sacramento within said time, the Contractor shall pay to the City of Sacramento a sum of TWO THOUSAND AND FIVE HUNDRED DOLLARS (\$2,500.00) as liquidated damages for each working day delay after the expiration of the entire project until acceptance of the said work by the City of Sacramento and its delivery to the City of Sacramento.

The Construction Manager shall furnish the Contractor a weekly statement showing the number of working days charged to the contract for the preceding week and the total number of working days charged to date as specified in the Section 7-8 of the City Standard Specifications.

1.08 TIME OF AWARD

Section 3-2, "Time of Award" of the City Standard Specifications is hereby amended for this project. Time of award shall be made within **Forty five (45)** calendar days after the opening of the proposals to the lowest responsible bidder, unless otherwise stated in the Contract Agreement.

The Contractor shall provide bonds and sign the Agreement upon notice of intent to award by the Owner and prior to the scheduled award date. The Contractor shall pay a sum in the amount of five thousand dollars (\$5,000) as an administrative penalty for not providing bonds and signing Agreement prior to the pre-construction meeting to be arranged by the Owner. The penalty will be deducted from the 1st payment made to the Contractor. The Owner shall reimburse the Contractor for any costs incurred in obtaining bonds if the contract is not awarded to the Contractor.

1.09 REVIEW OF CONTRACTOR'S INFORMATION

Where specified in these Special Provisions, the Contractor shall prepare or secure, and submit for review, six (6) copies of any plan, calculation, drawing, or information regarding materials and equipment to the Construction Manager.

Within 15 working days after receipt of the submittal, the Construction Manager will coordinate with the Design Engineer and return two (2) marked copies indicating one (1) of the following four (4) actions:

1. If review and checking indicates no exceptions, copies will be returned marked "NO EXCEPTIONS TAKEN" and work may begin immediately upon incorporating the material and equipment covered by the submittal into the work.
2. If review and checking indicates limited corrections are required, copies will be returned marked "MAKE CORRECTIONS NOTED." Work may begin immediately on incorporating into the work the material and equipment covered by the corrected submittal.
3. If review and checking indicates insufficient or incorrect data has been submitted, copies will be returned marked "REVISE AND RESUBMIT." No work may begin on incorporating the material and equipment covered by this submittal into the work until the submittal is revised, resubmitted, and returned marked either "NO EXCEPTIONS TAKEN" or "MAKE CORRECTIONS NOTED."
4. If review and checking indicates the material and equipment submittal is unacceptable, copies will be returned and marked "REJECTED." No work may begin on incorporating the material and equipment covered by this submittal into the work until a new submittal is made and returned marked either "NO EXCEPTIONS TAKEN" or "MAKE CORRECTIONS NOTED."

1.10 PROGRESS SCHEDULE (CRITICAL PATH METHOD)

GENERAL

Summary

Comply with Section 8-1.04, "Progress Schedule," of the Standard Specifications, except you must:

1. Use a computer software to prepare the schedule
2. Furnish compatible software for the Construction Manager's exclusive possession and use

You are responsible for assuring that all activity sequences are logical and that each schedule shows a coordinated plan for complete performance of the work.

Definitions (For Scheduling Purposes Only)

contract completion date: The current extended date for completion of the contract shown on the weekly statement of working days furnished by the Engineer as specified in Section 8-1.06, "Time of Completion," of the Standard Specifications.

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."

float: The difference between the earliest and latest allowable start or finish times for an activity.

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.

near critical path: A chain of activities with total float exceeding that of the critical path but having no more than 10 working days of total float.

time-scaled network diagram: A graphic depiction of a CPM schedule comprised of activity bars with relationships for each activity represented by arrows. The tail of each arrow connects to the activity bar for the predecessor and points to the successor.

total float: The amount of time that an activity or chain of activities can be delayed before extending the scheduled completion date.

Submittals

General Requirements

Submit to the Construction Manager baseline, monthly updated, and final updated schedules, each consistent in all respects with the time and order of work requirements of the contract. Perform work in the sequence indicated on the current accepted schedule.

Each schedule must show:

1. Calculations using critical path method to determine controlling activities.
2. Duration activities less than 20 working days.
3. Each required constraint. Constraints other than those required by the special provisions may be included only if authorized.

The Construction Manager's review and acceptance of schedules does not waive any contract requirements and does not relieve the Contractor of any obligation or responsibility for submitting complete and accurate information. Correct rejected schedules and resubmit them within 7 days of notification by the Construction Manager, at which time a new review period of 7 days will begin.

Errors or omissions on schedules do 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 Construction Manager, either the Contractor or the Construction Manager discover that any aspect of the schedule has an error or omission, you must correct it on the next updated schedule.

Computer Software

Submit to the Construction Manager for review a description of proposed schedule software to be used. After the Construction Manager accepts the proposed software, furnish schedule software and all original software instruction manuals. All software must be compatible with the current version of the Windows operating system in use by the Construction Manager. The schedule software must include:

1. Latest version of Primavera P6 Project Manager for Windows, or equivalent
2. Latest version of schedule-comparing HST SureChange, or equivalent

If a schedule software equivalent to P6 is proposed, it must be capable of generating files that can be imported into P6. The schedule-comparing software must be compatible with schedule software submitted and must be able to compare two schedules and provide reports of changes in activity ID, activity description, constraints, calendar assignments, durations, and logic ties.

The schedule software and schedule-comparing software will be returned to the Contractor before the final estimate. The Owner will compensate the Contractor as specified in Section 4-1.03, "Extra Work," of the Standard Specifications for replacement of software or manuals damaged, lost, or stolen after delivery to the Construction Manager.

Instruct the Construction Manager in the use of the software and provide software support until the contract is accepted. Within 15 days of contract approval, provide a commercial 8-hour training session for two (2) of the Construction Manager employees in the use of the software at a location acceptable to the Construction Manager. It is recommended that the Contractor also send at least 2 employees to the same training session to facilitate development of similar knowledge and skills in the use of the software. If schedule software other than P6 is submitted, then the training session must be a total of 16-hours for each Department employee.

Network Diagrams, Reports, and Data

Include the following with each schedule submittal:

1. Two sets of originally plotted, time-scaled network diagrams
2. One read-only compact disk or floppy diskette containing the schedule data

The time-scaled network diagrams must conform to the following:

1. Show a continuous flow of information from left to right
2. Be based on early start and early finish dates of activities
3. Clearly show the critical path using graphical presentation
4. Be prepared on 11" x 17" or larger size
5. Include a title block and a timeline on each page

Baseline Schedule

Submit to the Construction Manager a baseline schedule within 20 days of approval of the contract. Allow 20 days for the Construction Manager's review after the baseline schedule and all support data are submitted. Beginning the week the baseline schedule is first submitted, meet with the Construction Manager weekly to discuss and resolve schedule issues until the baseline schedule is accepted.

The baseline schedule must include the entire scope of work and must show how you plan to complete all work contemplated. Multiple critical paths and near-critical paths must be kept to a minimum. A total of not more than 50 percent of the baseline schedule activities must be critical or near critical, unless otherwise authorized by the Construction Manager.

The baseline schedule must not extend beyond the number of working days originally provided in these special provisions.

Updated Schedule

Submit an updated schedule and meet with the Construction Manager to review contract progress on or before the 1st day of each month, beginning one month after the baseline schedule is accepted. Allow 15 days for the Construction Manager's review after the updated schedule and all support data are submitted, except that the review period will not start until any previous

month's required schedule is accepted. Updated schedules that are not accepted or rejected within the review period are considered accepted by the Construction Manager.

The updated schedule must show:

1. Data date of the 21st day of the month or other date established by the Construction Manager
2. Changes from approved revised schedules

Final Updated Schedule

Submit a final updated schedule with actual start and finish dates for the activities within 30 days after completion of contract work. Provide a written certificate with this submittal signed by your project manager or an officer of the company stating, "To my knowledge and belief, the enclosed final updated 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.

PAYMENT

Full compensation for furnishing software is considered as included in the contract prices paid for the various items of work involved and no additional compensation will be allowed.

1.11 RECORD DRAWINGS

Contractor shall be required to provide redline drawings to the Construction Manager at the time of completion of the project. Once the project is complete the contractor shall submit these redline drawings to the Construction Manager to create record drawings. The Contractor and all of its subcontractors shall maintain, at the jobsite, a neatly and accurately marked redline set of the approved engineering drawings recording changes made in the field in accordance with Section 5-8 of the City Standard Specifications. The redline drawings shall include locations for all manholes, drop inlets, street light poles, traffic signal poles and equipment, valves, fire hydrants, blow-offs, air release valves, and all other appurtenances placed.

Drawings shall be kept current weekly, showing all work instructions, field modifications and change orders. Drawings shall be subject to the inspection of the Construction Manager and Design Engineer at all times. Progress payments may be withheld, or portions thereof, if drawings are not accurate and current.

No separate payment will be made to the Contractor for maintaining record drawings. Upon the completion of the project, the Contractor shall submit two sets (2) of "as-built" drawings to the Construction Manager. The drawings shall completely reflect the work done on site and to the Construction Manager's satisfaction. If the Contractor fails to submit the drawings or fails to complete the drawings in a satisfactory manner, the Construction Manager may hold back retention release and reduce an appropriate amount at the Construction Manager's sole direction to prepare the "as built" drawings. The cost of such work shall be included in the prices paid for the various contract items of work, and no separate payment will be made therefore.

1.12 CERTIFICATE OF COMPLIANCE

The Contractor shall provide the Construction Manager with a manufacturer's "Certificate of Compliance" at the Construction Manager's request. The Certificate of Compliance shall clearly

show that the material equipment and/or work are in compliance with the tests and specifications set forth in the contract documents.

The Certificate of Compliance shall be provided to the Construction Manager at the Contractor's expense. Failure to provide certifications of compliance will be cause to withhold payment for items of work requiring material certification.

1.13 WORK AFFECTING THE PUBLIC RIGHTS OF WAY

The Contractor shall refer to the City of Sacramento, Ordinance No. 2002-004, recently adopted and in effect as of March 19, 2002. Knowledge of, and compliance with, the provisions of this ordinance is required. Copies of this ordinance are available at the reception desk on the 2nd floor of 915 I Street, Sacramento, CA 95814-2702. The provisions of this contract require compliance with all City, State and Federal laws. Reference is made to this particular ordinance only because it may have significant impacts to construction operations, and associated traffic control. The ordinance establishes criteria and restrictions as it relates to maintenance, damage, traffic control, construction noise, and various other issues on, or related to, a construction project or other permitted work within the City limits. It further establishes administrative penalties, in the order of \$500, for each violation of the provisions of the ordinance.

1.14 AREAS FOR CONTRACTOR'S USE

Attention is directed to the provisions in Section 7-1.19, "Rights in Land and Improvements," of the State Standard Specifications and these special provisions.

The railyard area shall be used only for purposes that are necessary to perform the required work. The Contractor shall not occupy the railyard area, or allow others to occupy the railyard area, for purposes which are not necessary to perform the required work.

No area is available within the contract limits for the exclusive use of the Contractor. However, temporary storage of equipment and materials on the property may be arranged with the Construction Manager, subject to the prior demands of other forces and to other contract requirements. Use of the Contractor's work areas and other property shall be at the Contractor's own risk, and the Owner shall not be held liable for damage to or loss of materials or equipment located within such areas.

Residence trailers will not be allowed within the railyard area, except that one trailer will be allowed for yard security purposes.

The Contractor shall remove equipment, materials, and rubbish from the work areas and other property which the Contractor occupies. The Contractor shall leave the areas in a presentable condition in conformance with the provisions in Section 4-1.02, "Final Cleaning Up," of the State Standard Specifications.

The Contractor shall secure, at the Contractor's own expense, areas required for plant sites, storage of equipment or materials or for other purposes, if sufficient area is not available to the Contractor within the contract limits.

1.15 INDEMNIFICATION

Attention is directed to Section 7-1.12A, "Indemnification," of the Standard Specifications and these special provisions. For purposes of the Contractor's obligation to defend, indemnify, and save harmless as defined in Section 7-1.12A, "Indemnification," of the Standard Specifications, the term State shall have the following meaning:

**The City of Sacramento
Kimley-Horn and Associates, Inc.
Quincy Engineering, Inc.
IA Sacramento Holdings, L.L.C.
Vali Cooper Associates, Inc.**

including their officers, directors, employees, agents, and design professionals.

1.16 STORAGE OF MATERIALS AND EQUIPMENT

Materials and equipment shall be stored so as to insure the preservation of their quality and fitness for the work. Equipment and materials shall be located so as to facilitate inspection. The Contractor shall be responsible for all damages that occur in connection with the care and protection of all materials and equipment until the completion and final acceptance of the work by the City.

The Contractor shall submit a plan to the Construction Manager for approval prior to commencing work, which shows where materials and equipment will be stored on-site during work and non-work hours. The plan shall minimize impacts to residents and the general public and shall be approved by the Construction Manager prior to commencing work.

- The Contractor shall restrict all construction activities to the project region, as shown on the Drawings.
- The Contractor shall prepare an Accidental Spill Prevention and Cleanup Plan to be included in the Storm Water Pollution Prevention Plan to address the refueling and maintenance of equipment as specified in Water Pollution Control in these Special Provisions. This plan will include requiring that spill control absorbent materials be present onsite and available at all times.
- The Contractor shall inspect all equipment for leaks on a daily basis. Any equipment found to be leaking oil or gasoline or other fluid will be immediately removed from the work site and leaked oil or gasoline will be cleaned up.
- In order to minimize fluid leaks during operation, refueling, and maintenance of stationary equipment, the Contractor shall place spill control absorbent material under all stationary equipment to capture all potential leaks.

The "Protection of Trees" provision of these specifications shall apply to storage of materials and equipment on private property.

1.17 MATERIALS

PREQUALIFIED AND TESTED SIGNING AND DELINEATION MATERIALS

The Department maintains the following list of Prequalified and Tested Signing and Delineation Materials. The Construction Manager shall not be precluded from sampling and testing products on the list of Prequalified and Tested Signing and Delineation Materials.

The manufacturer of products on the list of Prequalified and Tested Signing and Delineation Materials shall furnish the Construction Manager a Certificate of Compliance in conformance with the provisions in Section 6-1.07, "Certificates of Compliance," of the State Standard Specifications for each type of traffic product supplied.

For those categories of materials included on the list of Prequalified and Tested Signing and Delineation Materials, only those products shown within the listing may be used in the work. Other categories of products, not included on the list of Prequalified and Tested Signing and Delineation Materials, may be used in the work provided they conform to the requirements of the State Standard Specifications.

Materials and products may be added to the list of Prequalified and Tested Signing and Delineation Materials if the manufacturer submits a New Product Information Form to the New Product Coordinator at the Transportation Laboratory. Upon a Departmental request for samples, sufficient samples shall be submitted to permit performance of required tests. Approval of materials or products will depend upon compliance with the specifications and tests the Department may elect to perform.

PAVEMENT MARKERS, PERMANENT TYPE

Retroreflective With Abrasion Resistant Surface (ARS)

1. Apex, Model 921AR (4" x 4")
2. Ennis Paint, Models C88 (4" x 4"), 911 (4" x 4") and C80FH
3. Ray-O-Lite, Models "AA" ARC II (4" x 4") and ARC Round Shoulder (4" x 4")
4. 3M Series 290 (3.5" x 4")
5. 3M Series 290 PSA
6. Glowlite, Inc Model 988AR (4" x 4")

Retroreflective With Abrasion Resistant Surface (ARS)

(for recessed applications only)

1. Ennis Paint, Model 948 (2.3" x 4.7")
2. Ennis Paint, Model 944SB (2" x 4")*
3. Ray-O-Lite, Model 2002 (2" x 4.6")
4. Ray-O-Lite, Model 2004 (2" x 4")*

*For use only in 4.5 inch wide (older) recessed slots

Non-Reflective, 4-inch Round

1. Apex Universal (Ceramic)
2. Apex Universal, Models 929 (ABS) and 929PP (Polypropylene)
3. Glowlite, Inc. (Ceramic) and PP (Polypropylene)

4. Hi-Way Safety, Inc., Models P20-2000W and 2001Y (ABS)
5. Interstate Sales, "Diamond Back" (Polypropylene)
6. Novabrite Models Cdot (White) Cdot-y (Yellow), Ceramic
7. Novabrite Models Pdot-w (White) Pdot-y (Yellow), Polypropylene
8. Three D Traffic Works TD10000 (ABS), TD10500 (Polypropylene)
9. Ray-O-Lite, Ray-O-Dot (Polypropylene)

PAVEMENT MARKERS, TEMPORARY TYPE

Temporary Markers For Long Term Day/Night Use (180 days or less)

1. Vega Molded Products "Temporary Road Marker" (3" x 4")
2. Pexco LLC, Halftrack model 25, 26 and 35

Temporary Markers For Short Term Day/Night Use (14 days or less)

(For seal coat or chip seal applications, clear protective covers are required)

1. Apex Universal, Model 932
2. Pexco LLC, Models T.O.M., T.R.P.M., and "HH" (High Heat)
3. Hi-Way Safety, Inc., Model 1280/1281
4. Glowlite, Inc., Model 932

STRIPING AND PAVEMENT MARKING MATERIAL

Permanent Traffic Striping and Pavement Marking Tape

1. Advanced Traffic Marking, Series 300 and 400
2. Brite-Line, Series 1000
3. Brite-Line, "DeltaLine XRP"
4. Swarco Industries, "Director 35" (For transverse application only)
5. Swarco Industries, "Director 60"
6. 3M, "Stamark" Series 380 and 270 ES
7. 3M, "Stamark" Series 420 (For transverse application only)

Temporary (Removable) Striping and Pavement Marking Tape (180 days or less)

1. Advanced Traffic Marking, Series 200
2. Brite-Line, Series 100
3. Garlock Rubber Technologies, Series 2000
4. P.B. Laminations, Aztec, Grade 102
5. Swarco Industries, "Director-2"
6. Trelleborg Industries, R140 Series
7. 3M Series 620 "CR", and Series 780
8. 3M Series A145, Removable Black Line Mask
(Black Tape: for use only on Hot mix asphalt surfaces)
9. Advanced Traffic Marking Black "Hide-A-Line"
(Black Tape: for use only on Hot mix asphalt surfaces)
10. Brite-Line "BTR" Black Removable Tape
(Black Tape: for use only on Hot mix asphalt surfaces)
11. Trelleborg Industries, RB-140
(Black Tape: for use only on Hot mix asphalt surfaces)

Preformed Thermoplastic (Heated in place)

1. Flint Trading Inc., "Hot Tape"

2. Flint Trading Inc., "Premark Plus"
3. Ennis Paint Inc., "Flametape"

Ceramic Surfacing Laminate, 6" x 6"

1. Highway Ceramics, Inc.

CLASS 1 DELINEATORS

One Piece Driveable Flexible Type, 66-inch

1. Pexco LLC, "Flexi-Guide Models 400 and 566"
2. Carsonite, Curve-Flex CFRM-400
3. Carsonite, Roadmarker CRM-375
4. FlexStake, Model 654 TM
5. GreenLine Model CGD1-66

Special Use Type, 66-inch

1. Pexco LLC, Model FG 560 (with 18-inch U-Channel base)
2. Carsonite, "Survivor" (with 18-inch U-Channel base)
3. Carsonite, Roadmarker CRM-375 (with 18-inch U-Channel base)
4. FlexStake, Model 604
5. GreenLine Model CGD (with 18-inch U-Channel base)
6. Impact Recovery Model D36, with #105 Driveable Base
7. Safe-Hit with 8-inch pavement anchor (SH248-GP1)
8. Safe-Hit with 15-inch soil anchor (SH248-GP2) and with 18-inch soil anchor (SH248-GP3)
9. Safe-Hit RT 360 Post with Soil Mount Anchor (GPS)
10. Shur-Tite Products, Shur-Flex Drivable

Surface Mount Type, 48-inch

1. Bent Manufacturing Company, Masterflex Model MFEX 180-48
2. Carsonite, "Channelizer"
3. FlexStake, Models 704, 754 TM, and EB4
4. Impact Recovery Model D48, with #101 Fixed (Surface-Mount) Base
5. Three D Traffic Works "Channelflex" ID No. 522248W
6. Flexible Marker Support, Flexistiff Model C-9484
7. Safe-Hit, SH 248 SMR

CHANNELIZERS

Surface Mount Type, 36-inch

1. Bent Manufacturing Company, Masterflex Models MF-360-36 (Round) MF-180-36 (Flat) and MFEX 180—36
2. Pexco LLC, Flexi-Guide Models FG300PE, FG300UR, and FG300EFX
3. Carsonite, "Super Duck" (Round SDR-336)
4. Carsonite, Model SDCF03601MB "Channelizer"
5. FlexStake, Models 703, 753 TM, and EB3
6. GreenLine, Model SMD-36
7. Hi-way Safety, Inc. "Channel Guide Channelizer" Model CGC36
8. Impact Recovery Model D36, with #101 Fixed (Surface-Mount) Base
9. Safe-Hit, Guide Post, Model SH236SMA and Dura-Post, Model SHL36SMA

10. Three D Traffic Works "Boomerang" 5200 Series
11. Flexible Marker Support, Flexistiff Model C-9484-36
12. Shur-Tite Products, Shur-Flex

Lane Separation System

1. Pexco LLC, "Flexi-Guide (FG) 300 Curb System"
2. Qwick Kurb, "Klemmfix Guide System"
3. Dura-Curb System
4. Tuff Curb
5. FG 300 Turnpike Curb

CONICAL DELINEATORS, 42-inch

(For 28-inch Traffic Cones, see Standard Specifications)

1. Bent Manufacturing Company "T-Top"
2. Plastic Safety Systems "Navigator-42"
3. Traffix Devices "Grabber"
4. Three D Traffic Works "Ringtop" TD7000, ID No. 742143
5. Three D Traffic Works, TD7500
6. Work Area Protection Corp. C-42

OBJECT MARKERS

Type "K", 18-inch

1. Pexco LLC, Model FG318PE
2. Carsonite, Model SMD 615
3. FlexStake, Model 701 KM
4. Safe-Hit, Model SH718SMA

Type "Q" Object Markers, 24-inch

1. Bent Manufacturing "Masterflex" Model MF-360-24
2. Pexco LLC, Model FG324PE
3. Carsonite, "Channelizer"
4. FlexStake, Model 701KM
5. Safe-Hit, Models SH824SMA_WA and SH824GP3_WA
6. Three D Traffic Works ID No. 531702W and TD 5200
7. Three D Traffic Works ID No. 520896W
8. Safe-Hit, Dura-Post SHLQ-24 inch

CONCRETE BARRIER MARKERS AND TEMPORARY RAILING (TYPE K) REFLECTORS

Impactable Type

1. ARTUK, "FB"
2. Pexco LLC, Models PCBM-12 and PCBM-T12
3. Duraflex Corp., "Flexx 2020" and "Electriflexx"
4. Hi-Way Safety, Inc., Model GMKRM100
5. Plastic Safety Systems "BAM" Models OM-BARR and OM-BWAR
6. Three D Traffic Works "Roadguide" Model TD 9300

Non-Impactable Type

1. ARTUK, JD Series
2. Plastic Safety Systems "BAM" Models OM-BITARW and OM-BITARA
3. Vega Molded Products, Models GBM and JD
4. Plastic Vacuum Forming, "Cap-It C400"

METAL BEAM GUARD RAIL POST MARKERS

(For use to the left of traffic)

1. Pexco LLC, "Mini" (3" x 10")
2. Creative Building Products, "Dura-Bull, Model 11201"
3. Duraflex Corp., "Railrider"
4. Plastic Vacuum Forming, "Cap-It C300"

CONCRETE BARRIER DELINEATORS, 16-inch

(For use to the right of traffic)

1. Pexco LLC, Model PCBM T-16
2. Safe-Hit, Model SH216RBM
3. Three D Traffic Works "Roadguide" Model 9400

CONCRETE BARRIER-MOUNTED MINI-DRUM (10" x 14" x 22")

1. Stinson Equipment Company "SaddleMarker"

GUARD RAILING DELINEATOR

(Place top of reflective element at 48 inches above plane of roadway)

Wood Post Type, 27-inch

1. Pexco LLC, FG 427 and FG 527
2. Carsonite, Model 427
3. FlexStake, Model 102 GR
4. GreenLine GRD 27
5. Safe-Hit, Model SH227GRD
6. Three D Traffic Works "Guardflex" TD9100
7. New Directions Mfg, NDM27
8. Shur-Tite Products, Shur-Tite Flat Mount

Steel Post Type

1. Carsonite, Model CFGR-327

RETROREFLECTIVE SHEETING

Channelizers, Barrier Markers, and Delineators

1. Avery Dennison T-6500 Series (For rigid substrate devices only)
2. Avery Dennison WR-7100 Series
3. Nippon Carbide Industries, Flexible Ultralite Grade (ULG) II
4. Reflexite, PC-1000 Metalized Polycarbonate
5. Reflexite, AC-1000 Acrylic
6. Reflexite, AP-1000 Metalized Polyester
7. Reflexite, Conformalight, AR-1000 Abrasion Resistant Coating
8. 3M, High Intensity

Traffic Cones, 4-inch and 6-inch Sleeves

1. Nippon Carbide Industries, Flexible Ultralite Grade (ULG) II
2. Reflexite, Vinyl, "TR" (Semi-transparent) or "Conformalight"
3. 3M Series 3840
4. Avery Dennison S-9000C

Drums

1. Avery Dennison WR-6100
2. Nippon Carbide Industries, Flexible Ultralite Grade (ULG) II
3. Reflexite, "Conformalight", "Super High Intensity" or "High Impact Drum Sheeting"
4. 3M Series 3810

Barricades: Type I, Medium-Intensity (Typically Enclosed Lens, Glass-Bead Element)

1. Nippon Carbide Industries, CN8117
2. Avery Dennison, W 1100 series
3. 3M Series CW 44

Barricades: Type II, Medium-High-Intensity (Typically Enclosed Lens, Glass-Bead Element)

1. Avery Dennison, W-2100 Series

Vertical Clearance Signs: Structure Mounted

1. 3M Model 4061, Diamond Grade DG3, Fluorescent Yellow

Signs: Type II, Medium-High-Intensity (Typically Enclosed Lens, Glass-Bead Element)

1. Avery Dennison, T-2500 Series
2. Nippon Carbide Industries, Nikkalite 18000

Signs: Type III, High-Intensity (Typically Encapsulated Glass-Bead Element)

1. Avery Dennison, T-5500A and T-6500 Series
2. Nippon Carbide Industries, Nikkalite Brand Ultralite Grade II
3. 3M 3870 and 3930 Series

Signs: Type IV, High-Intensity (Typically Unmetallized Microprismatic Element)

1. Avery Dennison, T-6500 Series
2. Nippon Carbide Industries, Crystal Grade, 94000 Series
3. Nippon Carbide Industries, Model No. 94847 Fluorescent Orange
4. 3M Series 3930 and Series 3924S

Signs: Type VI, Elastomeric (Roll-Up) High-Intensity, without Adhesive

1. Avery Dennison, WU-6014
2. Novabrite LLC, "Econobrite"
3. Reflexite "Vinyl"
4. Reflexite "SuperBright"

5. Reflexite "Marathon"
6. 3M Series RS20

Signs: Type VII, Super-High-Intensity (Typically Unmetallized Microprismatic Element)

1. 3M Series 3924S, Fluorescent Orange
2. 3M LDP Series 3970

Signs: Type VIII, Super-High-Intensity (Typically Unmetallized Microprismatic Element)

1. Avery Dennison, T-7500 Series
2. Avery Dennison, T-7511 Fluorescent Yellow
3. Avery Dennison, T-7513 Fluorescent Yellow Green
4. Avery Dennison, W-7514 Fluorescent Orange
5. Nippon Carbide Industries, Nikkalite Crystal Grade Series 92800
6. Nippon Carbide Industries, Nikkalite Crystal Grade Model 92847 Fluorescent Orange

Signs: Type IX, Very-High-Intensity (Typically Unmetallized Microprismatic Element)

1. 3M VIP Series 3981 Diamond Grade Fluorescent Yellow
2. 3M VIP Series 3983 Diamond Grade Fluorescent Yellow/Green
3. 3M VIP Series 3990 Diamond Grade
4. Avery Dennison T-9500 Series
5. Avery Dennison, T9513, Fluorescent Yellow Green
6. Avery Dennison, W9514, Fluorescent Orange
7. Avery Dennison, T-9511 Fluorescent Yellow

SPECIALTY SIGNS

1. Reflexite "Endurance" Work Zone Sign (with Semi-Rigid Plastic Substrate)

ALTERNATIVE SIGN SUBSTRATES

Fiberglass Reinforced Plastic (FRP) and Expanded Foam PVC

1. Fiber-Brite (FRP)
2. Sequentia, "Polyplate" (FRP)
3. Inteplast Group "InteCel" (0.5 inch for Post-Mounted CZ Signs, 48-inch or less)(PVC)

Aluminum Composite, Temporary Construction Signs and Permanent Signs up to 4 foot, 7 Inches

1. Alcan Composites "Dibond Material, 80 mils"
2. Mitsubishi Chemical America, Alpolic 350
3. Bone Safety Signs, Bone Light ACM (temporary construction signs only)

1.18 PORTLAND CEMENT CONCRETE

Portland cement concrete shall conform to the provisions in Section 90, "Portland Cement Concrete," of the State Standard Specifications and these special provisions.

STRENGTH DEVELOPMENT TIME

The time allowed to obtain the minimum required compressive strength as specified in Section 90-1.01, "Description," of the State Standard Specifications will be 56 days when the Contractor chooses cementitious material that satisfies the following equation:

$$\frac{(41 \times UF) + (19 \times F) + (11 \times SL)}{TC} \geq 7.0$$

Where:

- F = Fly ash or natural pozzolan conforming to the requirements in AASHTO Designation: M 295, Class F or N, including the amount in blended cement, pounds per cubic yard. F is equivalent to either FA or FB as defined in Section 90-2.01C, "Required Use of Supplementary Cementitious Materials," of the State Standard Specifications
- SL = GGBFS, including the amount in blended cement, pounds per cubic yard
- UF = Silica fume, metakaolin, or UFFA, including the amount in blended cement, pounds per cubic yard
- TC = Total amount of cementitious material used, pounds per cubic yard

For concrete satisfying the equation above, the Contractor shall test for the modulus of rupture or compressive strength specified for the concrete involved, at least once every 500 cubic yards, at 28, 42, and 56 days. The Contractor shall submit test results to the Construction Manager and the Transportation Laboratory, Attention: Office of Concrete Materials.

SUPPLEMENTARY CEMENTITIOUS MATERIALS

The Contractor may use rice hull ash as a supplementary cementitious material (SCM) to make minor concrete. Rice hull ash shall conform to the requirements in AASHTO Designation: M 321 and the following chemical and physical requirements:

Chemical Requirements	Percent
Silicon Dioxide (SiO ₂) ^a	90 min.
Loss on ignition	5.0 max.
Total Alkalies (as Na ₂ O) equivalent	3.0 max.

Physical Requirements	Percent
Particle size distribution	
Less than 45 microns	95
Less than 10 microns	50
Strength Activity Index with portland cement ^b	
7 days	95 (minimum % of control)
28 days	110 (minimum % of control)
Expansion at 16 days when testing job materials in conformance with ASTM C 1567 ^c	0.10 max.
Surface Area when testing by nitrogen adsorption in conformance with ASTM D 5604	40.0 m ² /g min.

Notes:

^a A maximum of 1.0% of the SiO₂ may exist in crystalline form.

^b When tested in conformance with the requirements for strength activity testing of silica fume in AASHTO Designation: M 307

^c In the test mix, Type II or Type V portland cement shall be replaced with at least 12% RHA by weight.

Rice hull ash will be considered as a Type UF SCM for the purposes of calculating cementitious material requirements in Section 90-2.01C, "Required Use of Supplementary Cementitious Materials," of the State Standard Specifications and these special provisions.

1.19 WELDING

GENERAL

Flux cored welding electrodes conforming to the requirements of AWS A5.20 E6XT-4 or E7XT-4 shall not be used to perform welding for this project.

Wherever reference is made to the following AWS welding codes in the State Standard Specifications, on the Drawings, or in these special provisions, the year of adoption for these codes shall be as listed:

AWS Code	Year of Adoption
D1.1	2006
D1.4	2005
D1.5	2002
D1.6	1999

Requirements of the AWS welding codes shall apply unless otherwise specified in the State Standard Specifications, on the Drawings, or in these special provisions. Wherever the abbreviation AWS is used, it shall be equivalent to the abbreviations ANSI/AWS or AASHTO/AWS.

Section 6.1.1.1 of AWS D1.5 is replaced with the following:

Quality Control (QC) shall be the responsibility of the Contractor. As a minimum, the Contractor shall perform inspection and testing of each weld joint prior to welding, during welding, and after welding as specified in this section and as necessary to ensure that materials and workmanship conform to the requirements of the contract documents.

Unless otherwise specified, Sections 6.1.3 through 6.1.4.3 of AWS D1.1, Section 7.1.2 of AWS D1.4, and Sections 6.1.1.2 through 6.1.3.3 of AWS D1.5 are replaced with the following:

The QC Inspector shall be the duly designated person who acts for and on behalf of the Contractor for inspection, testing, and quality related matters for all welding.

Quality Assurance (QA) is the prerogative of the Engineer. The QA Inspector is the duly designated person who acts for and on behalf of the Engineer.

The QC Inspector shall be responsible for quality control acceptance or rejection of materials and workmanship, and shall be currently certified as an AWS Certified Welding Inspector (CWI) in conformance with the requirements in AWS QC1, "Standard for AWS Certification of Welding Inspectors."

The QC Inspector may be assisted by an Assistant QC Inspector provided that this individual is currently certified as an AWS Certified Associate Welding Inspector (CAWI) in conformance with the requirements in AWS QC1, "Standard for AWS Certification of Welding Inspectors." The Assistant QC Inspector may perform inspection under the direct supervision of the QC Inspector provided the assistant is always within visible and audible range of the QC Inspector. The QC Inspector shall be responsible for signing all reports and for determining if welded materials conform to workmanship and acceptance criteria. The ratio of QC Assistants to QC Inspectors shall not exceed 5 to 1.

When the term "Inspector" is used without further qualification, it shall refer to the QC Inspector.

When any work is welded in conformance with the provisions in Section 75, "Miscellaneous Metal," of the State Standard Specifications, not including Section 75-1.035, "Bridge Joint Restrainer Units," of the State Standard Specifications, Section 6.1.4 of AWS D1.1 is replaced with the following:

The QC Inspector shall be responsible for quality control acceptance or rejection of materials and workmanship and shall be currently certified as an AWS CWI in conformance with the requirements in AWS QC1, "Standard for AWS Certification of Welding Inspectors," or as a Welding Inspector Specialist (WIS) in conformance with the requirements in AWS B5.2, "Specification for the Qualification of Welding Inspector Specialists and Welding Inspector Assistants."

Section 6.14.6, "Personnel Qualification," of AWS D1.1, Section 7.8, "Personnel Qualification," of AWS D1.4, and Section 6.1.3.4, "Personnel Qualification," of AWS D1.5 are replaced with the following:

Personnel performing nondestructive testing (NDT) shall be qualified and certified in conformance with the requirements of the American Society for Nondestructive Testing (ASNT) Recommended Practice No. SNT-TC-1A and the Written Practice of the NDT firm. The Written Practice of the NDT firm shall meet or exceed the guidelines of the ASNT Recommended Practice No. SNT-TC-1A. Individuals who perform NDT, review the results, and prepare the written reports shall be either:

- A. Certified NDT Level II technicians, or;
- B. Level III technicians who hold a current ASNT Level III certificate in that discipline and are authorized and certified to perform the work of Level II technicians.

Section 6.5.4 of AWS D1.5 is replaced with the following:

The QC Inspector shall inspect and approve each joint preparation, assembly practice, welding technique, joint fit-up, and the performance of each welder, welding operator, and tack welder to make certain that the applicable requirements of this code and the approved Welding Procedure Specification (WPS) are met. The QC Inspector shall examine the work to make certain that it meets the requirements of Sections 3 and 6.26. The size and contour of all welds shall be measured using suitable gages. Visual inspection for cracks in welds and base metal, and for other discontinuities shall be aided by strong light, magnifiers, or such other devices as may be helpful. Acceptance criteria different from those specified in this code may be used when approved by the Construction Manager.

Section 6.6.5, "Nonspecified NDT Other than Visual," of AWS D1.1, Section 7.6.5 of AWS D1.4 and Section 6.6.5 of AWS D1.5 shall not apply.

For any welding, the Construction Manager may direct the Contractor to perform NDT that is in addition to the visual inspection or NDT specified in the AWS or other specified welding codes, in the State Standard Specifications, or in these special provisions. Except as provided for in these special provisions, additional NDT required by the Construction Manager, and associated repair work, will be paid for as extra work as provided in Section 4-1.03D, "Extra Work," of the State Standard Specifications. Prior to release of welded material by the Construction Manager, if testing by NDT methods other than those originally specified discloses an attempt to defraud or reveals a gross nonconformance, all costs associated with the repair of the deficient area, including NDT of the weld and of the repair, and any delays caused by the repair, shall be at the Contractor's expense. A gross nonconformance is defined as the sum of planar type rejectable indications in more than 20 percent of the tested length.

When less than 100 percent of NDT is specified for any weld, it is expected that the entire length of weld meet the specified acceptance-rejection criteria. Should any welding deficiencies be discovered by additional NDT directed or performed by the Construction Manager that utilizes the same NDT method as that originally specified, all costs associated with the repair of the deficient area, including NDT of the weld and of the weld repair, and any delays caused by the repair, shall be at the Contractor's expense.

Repair work to correct welding deficiencies discovered by visual inspection directed or performed by the Construction Manager, and any associated delays or expenses caused to the Contractor by performing these repairs, shall be at the Contractor's expense.

The Construction Manager shall have the authority to verify the qualifications or certifications of any welder, QC Inspector, or NDT personnel to specified levels by retests or other means approved by the Construction Manager.

Inspection and approval of all joint preparations, assembly practices, joint fit-ups, welding techniques, and the performance of each welder, welding operator, and tack welder shall be

documented by the QC Inspector on a daily basis for each day welding is performed. For each inspection, including fit-up, Welding Procedure Specification (WPS) verification, and final weld inspection, the QC Inspector shall confirm and document compliance with the requirements of the AWS or other specified code criteria and the requirements of these special provisions on all welded joints before welding, during welding, and after the completion of each weld.

In addition to the requirements specified in the applicable code, the period of effectiveness for a welder's or welding operator's qualification shall be a maximum of 3 years for the same weld process, welding position, and weld type. If welding will be performed without gas shielding, then qualification shall also be without gas shielding. Excluding welding of fracture critical members, a valid qualification at the beginning of work on a contract will be acceptable for the entire period of the contract, as long as the welder's or welding operator's work remains satisfactory.

In addition to the requirements of AWS D1.1, welding procedures qualification for work welded in conformance with that code shall conform to the following:

When a nonstandard weld joint is to be made using a combination of WPSs, a single test may be conducted combining the WPSs to be used in production, provided the essential variables, including weld bead placement, of each process are limited to those established in Table 4.5.

In addition to the requirements of AWS D1.5, Section 5.12 or 5.13, welding procedures qualification for work welded in conformance with that code shall conform to the following requirements:

- A. Unless considered prequalified, fillet welds shall be qualified in each position. The fillet weld soundness test shall be conducted using the essential variables of the WPS as established by the Procedure Qualification Record (PQR).
- B. For qualification of joints that do not conform to Figures 2.4 and 2.5 of AWS D1.5, a minimum of two WPS qualification tests are required. The tests shall be conducted using both Figure 5.1 and Figure 5.3. The test conforming to Figure 5.1 shall be conducted in conformance with AWS D1.5, Section 5.12 or 5.13. The test conforming to Figure 5.3 shall be conducted using the welding electrical parameters that were established for the test conducted conforming to Figure 5.1. The ranges of welding electrical parameters established during welding per Figure 5.1 in conformance with AWS D1.5, Section 5.12, shall be further restricted according to the limits in Table 5.3 during welding per Figure 5.3.
- C. Multiple zones within a weld joint may be qualified. The travel speed, amperage, and voltage values that are used for tests conducted per AWS D1.5 Section 5.13 shall be consistent for each pass in a weld joint, and shall in no case vary by more than ± 10 percent for travel speed, ± 10 percent for amperage, and ± 7 percent for voltage as measured from a predetermined target value or average within each weld pass or zone. The travel speed shall in no case vary by more than ± 15 percent when using submerged arc welding.
- D. For a WPS qualified in conformance with AWS D1.5 Section 5.13, the values to be used for calculating ranges for current and voltage shall be based on the average of all weld passes made in the test. Heat input shall be calculated using the average of current and voltage of all weld passes made in the test for a WPS qualified in conformance with Section 5.12 or 5.13.

- E. Macroetch tests are required for WPS qualification tests, and acceptance shall be per AWS D1.5 Section 5.19.3.
- F. When a nonstandard weld joint is to be made using a combination of WPSs, a test conforming to Figure 5.3 may be conducted combining the WPSs to be used in production, provided the essential variables, including weld bead placement, of each process are limited to those established in Table 5.3.
- G. Prior to preparing mechanical test specimens, the PQR welds shall be inspected by visual and radiographic tests. Backing bar shall be 3 inches in width and shall remain in place during NDT testing. Results of the visual and radiographic tests shall comply with AWS D1.5 Section 6.26.2, excluding Section 6.26.2.2. Test plates that do not comply with both tests shall not be used.

WELDING QUALITY CONTROL

Welding quality control shall conform to the requirements in the AWS or other specified welding codes, the State Standard Specifications, and these special provisions.

Unless otherwise specified, welding quality control shall apply when any work is welded in conformance with the provisions in Section 52, "Reinforcement, or " Section 55, "Steel Structures," of the State Standard Specifications, Section 2.21, "Metal Bridge Railing," and Section 2.27, "Architecturally Exposed Steel (Bridge Canopy)" of these special provisions.

All welding will require inspection by the Construction Manager. The Contractor shall request inspection at least 3 business days prior to the beginning of welding for locations within California and 5 business days for locations outside of California. The Contractor shall request inspection at:

<http://www.dot.ca.gov/hq/esc/Translab/OSM/smbforms.htm>

Continuous inspection shall be provided when any welding is being performed. Continuous inspection, as a minimum, shall include having a QC Inspector within such close proximity of all welders or welding operators so that inspections by the QC Inspector of each welding operation at each welding location does not lapse for a period exceeding 30 minutes.

When joint weld details that are not prequalified to the details of Section 3 of AWS D1.1 or to the details of Figure 2.4 or 2.5 of AWS D1.5 are proposed for use in the work, the joint details, their intended locations, and the proposed welding parameters and essential variables, shall be approved by the Construction Manager. The Contractor shall allow the Construction Manager 15 days to complete the review of the proposed joint detail locations. In the event the Construction Manager fails to complete the review within the time allowed, and if, in the opinion of the Construction Manager, completion of the work is delayed or interfered with by reason of the Construction Manager's delay in completing the review, the Contractor will be compensated for any resulting loss, and an extension of time will be granted, in the same manner as provided for in Section 8-1.09, "Right of Way Delays," of the State Standard Specifications. Upon approval of the proposed joint detail locations and qualification of the proposed joint details, welders and welding operators using these details shall perform a qualification test plate using the WPS variables and the joint detail to be used in production. The test plate shall have the maximum thickness to be used in production and a minimum length of 18 inches. The test plate shall be mechanically and radiographically tested. Mechanical and radiographic testing and acceptance criteria shall be as specified in the applicable AWS codes.

The Construction Manager will witness all qualification tests for WPSs that were not previously approved by the Department. Unless otherwise specified, an approved independent third party will witness the qualification tests for welders or welding operators. The independent third party shall be a current CWI and shall not be an employee of the contractor performing the welding. The Contractor shall allow the Construction Manager 15 days to review the qualifications and copy of the current certification of the independent third party. In the event the Construction Manager fails to complete the review within the time allowed, and if, in the opinion of the Construction Manager, completion of the work is delayed or interfered with by reason of the Construction Manager's delay in completing the review, the Contractor will be compensated for any resulting loss, and an extension of time will be granted, in the same manner as provided for in Section 8-1.09, "Right of Way Delays," of the State Standard Specifications. The Contractor shall notify the Construction Manager 7 days prior to performing any qualification tests. Witnessing of qualification tests by the Construction Manager shall not constitute approval of the intended joint locations, welding parameters, or essential variables.

The Contractor shall designate in writing a welding Quality Control Manager (QCM). The QCM shall be responsible directly to the Contractor for the quality of welding, including materials and workmanship, performed by the Contractor and subcontractors.

The QCM shall be the sole individual responsible to the Contractor for submitting, receiving, reviewing, and approving all correspondence, required submittals, and reports to and from the Engineer. The QCM shall be a registered professional engineer or shall be currently certified as a CWI.

Unless the QCM is hired by a subcontractor providing only QC services, the QCM shall not be employed or compensated by any subcontractor, or by other persons or entities hired by subcontractors, who will provide other services or materials for the project. The QCM may be an employee of the Contractor.

Welding inspection personnel or NDT firms to be used in the work shall not be employed or compensated by any subcontractor, or by other persons or entities hired by subcontractors, who will provide other services or materials for the project, except for the following conditions:

- A. The work is welded in conformance with AWS D1.5 and is performed at a permanent fabrication or manufacturing facility that is certified under the AISC Quality Certification Program, Category Cbr, Major Steel Bridges and Fracture Critical endorsement F, when applicable.
- B. The work is welded in conformance with AWS D1.1 at a permanent pipe manufacturing or fabrication facility that maintains a QC program that is independent from production.

For welding performed at such facilities, the inspection personnel or NDT firms may be employed or compensated by the facility performing the welding provided the facility maintains a QC program that is independent from production.

Prior to submitting the Welding Quality Control Plan (WQCP) required herein, a prewelding meeting between the Construction Manager, the Contractor's QCM, and a representative from each entity performing welding or inspection for this project, shall be held to discuss the requirements for the WQCP.

The Contractor shall submit to the Construction Manager, in conformance with the provisions in Section 5-1.02, "Drawings and Working Drawings," of the State Standard Specifications, 2 copies of a separate WQCP for each subcontractor or supplier for each item of work for which welding is to be performed.

The Contractor shall allow the Construction Manager 15 days to review the WQCP submittal after a complete plan has been received. No welding shall be performed until the WQCP is approved in writing by the Construction Manager. In the event the Construction Manager fails to complete the review within the time allowed, and if, in the opinion of the Construction Manager, completion of the work is delayed or interfered with by reason of the Construction Manager's delay in completing the review, the Contractor will be compensated for any resulting loss, and an extension of time will be granted, in the same manner as provided for in Section 8-1.09, "Right of Way Delays," of the State Standard Specifications.

An amended WQCP or any addendum to the approved WQCP shall be submitted to, and approved in writing by the Construction Manager, for proposed revisions to the approved WQCP. An amended WQCP or addendum will be required for revisions to the WQCP, including but not limited to a revised WPS; additional welders; changes in NDT firms, QC, or NDT personnel or procedures; or updated systems for tracking and identifying welds. The Construction Manager shall have 7 days to complete the review of the amended WQCP or addendum. Work affected by the proposed revisions shall not be performed until the amended WQCP or addendum has been approved. In the event the Construction Manager fails to complete the review within the time allowed, and if, in the opinion of the Construction Manager, completion of the work is delayed or interfered with by reason of the Construction Manager's delay in completing the review, the Contractor will be compensated for any resulting loss, and an extension of time will be granted, in the same manner as provided for in Section 8-1.09, "Right of Way Delays," of the State Standard Specifications.

Information regarding the contents, format, and organization of a WQCP, is available at the Transportation Laboratory and at:

<http://www.dot.ca.gov/hq/esc/Translab/OSM/smbresources.htm>

After final approval of the WQCP, amended WQCP, or addendum, the Contractor shall submit 7 copies to the Construction Manager of the approved documents. A copy of the Construction Manager's approved document shall be available at each location where welding is to be performed.

A daily production log for welding shall be kept for each day that welding is performed. The log shall clearly indicate the locations of all welding. The log shall include the welders' names, amount of welding performed, any problems or deficiencies discovered, and any testing or repair work performed, at each location. The daily report from each QC Inspector shall also be included in the log.

The following items shall be included in a Welding Report that is to be submitted to the Construction Manager within 15 days following the performance of any welding:

- A. A daily production log.

- B. Reports of all visual weld inspections and NDT.
- C. Radiographs and radiographic reports, and other required NDT reports.
- D. A summary of welding and NDT activities that occurred during the reporting period.
- E. Reports of each application of heat straightening.
- F. A summarized log listing the rejected lengths of weld by welder, position, process, joint configuration, and piece number.
- G. Documentation that the Contractor has evaluated all radiographs and other nondestructive tests and corrected all rejectable deficiencies, and that all repaired welds have been reexamined using the required NDT and found acceptable.

The following information shall be clearly written on the outside of radiographic envelopes: name of the QCM, name of the nondestructive testing firm, name of the radiographer, date, contract number, complete part description, and all included weld numbers, report numbers, and station markers or views, as detailed in the WQCP. In addition, all interleaves shall have clearly written on them the part description and all included weld numbers and station markers or views, as detailed in the WQCP. A maximum of 2 pieces of film shall be used for each interleave.

Reports of all visual inspections and NDT shall be signed by the inspector or technician and submitted daily to the QCM for review and signature prior to submittal to the Construction Manager. Corresponding names shall be clearly printed or typewritten next to all signatures. Reports of all NDT, whether specified, additional, or informational, performed by the Contractor shall be submitted to the Construction Manager.

The Construction Manager will review the Welding Report to determine if the Contractor is in conformance with the WQCP. Except for steel pipe piling, the Construction Manager shall be allowed 15 days to review the report and respond in writing after the complete Welding Report has been received. Prior to receiving notification from the Construction Manager of the Contractor's conformance with the WQCP, the Contractor may encase in concrete or cover welds for which the Welding Report has been submitted. However, should the Contractor elect to encase or cover those welds prior to receiving notification from the Construction Manager, it is expressly understood that the Contractor shall not be relieved of the responsibility for incorporating material in the work that conforms to the requirements of the Drawings and specifications. Material not conforming to these requirements will be subject to rejection. Should the Contractor elect to wait to encase or cover welds pending notification by the Construction Manager, and in the event the Construction Manager fails to complete the review within the time allowed, and if, in the opinion of the Construction Manager, completion of the work is delayed or interfered with by reason of the Construction Manager's delay in completing the review, the Contractor will be compensated for any resulting loss, and an extension of time will be granted, in the same manner as provided for in Section 8-1.09, "Right of Way Delays," of the State Standard Specifications.

For steel pipe piling, including bar reinforcement in the piling, the Contractor shall allow the Engineer 2 business days to review the Welding Report and respond in writing after the required items have been received. No field welded steel pipe piling shall be installed, and no reinforcement in the piling shall be encased in concrete until the Construction Manager has approved the above requirements in writing.

In addition to the requirements in AWS D1.1 and AWS D1.5, second-time excavations of welds or base metal to repair unacceptable discontinuities, regardless of NDT method, and all repairs of cracks require prior approval of the Construction Manager.

The Construction Manager shall be notified immediately in writing when welding problems, deficiencies, base metal repairs, or any other type of repairs not submitted in the WQCP are discovered, and also of the proposed repair procedures to correct them. For requests to perform second-time repairs or repairs of cracks, the Contractor shall include an engineering evaluation of the proposed repair. The engineering evaluation, at a minimum, shall address the following:

- A. What is causing each defect?
- B. Why the repair will not degrade the material properties?
- C. What steps are being taken to prevent similar defects from happening again?

The Contractor shall allow the Construction Manager 7 days to review these procedures. No remedial work shall begin until the repair procedures are approved in writing by the Engineer. In the event the Construction Manager fails to complete the review within the time allowed, and if, in the opinion of the Construction Manager, completion of the work is delayed or interfered with by reason of the Construction Manager's delay in completing the review, the Contractor will be compensated for any resulting loss, and an extension of time will be granted, in the same manner as provided for in Section 8-1.09, "Right of Way Delays," of the State Standard Specifications.

The QCM shall sign and furnish to the Construction Manager, a Certificate of Compliance in conformance with the provisions in Section 6-1.07, "Certificates of Compliance," of the State Standard Specifications for each item of work for which welding was performed. The certificate shall state that all of the materials and workmanship incorporated in the work, and all required tests and inspections of this work, have been performed in conformance with the details shown on the Drawings, the State Standard Specifications, and these special provisions.

STEEL PIPE PILING QUALIFICATION AUDIT

The Contractor shall submit documentation that one of the following steel pipe piling qualification audits has been successfully completed before welding operations are performed, other than field welding, for steel pipe piling:

- A. "Class R Steel Pipe Piling Qualification Audit"
- B. "Class N Steel Pipe Piling Qualification Audit"

An audit shall have been completed for each pipe pile diameter, thickness, grade of steel, and class of piling to be supplied for this project. The procedures for requesting and completing the audit are available at:

<http://www.dot.ca.gov/hq/esc/Translab/OSM/smbresources.htm>

An audit that was approved by the Department no more than 3 years prior to the award of the contract will be acceptable for the entire period of this contract provided the Engineer determines the audit was for the same type of work that is to be performed on this contract.

A list of facilities that have successfully completed the audit and are authorized to provide material for this contract is available at:

http://www.dot.ca.gov/hq/esc/Translab/OSM/smdocuments/Internet_auditlisting.pdf

Successful completion of an audit shall not relieve the Contractor of the responsibility for furnishing materials or producing finished work of the quality specified in these special provisions and as shown on the plans.

PAYMENT

Full compensation for conforming to the requirements of "Welding" shall be considered as included in the contract prices paid for the various items of work involved and no additional compensation will be allowed therefore.

1.20 OPERATIONS AND MAINTENANCE OF EQUIPMENT

Construction equipment shall be maintained and tuned at the interval recommended by the manufacturers. No piece of equipment shall be left to idle for more than 5 minutes. On-site vehicle speeds shall be limited to 15-miles per hour.

The Contractor shall strictly comply with the City Code Chapter 66.02 for noise control.

This specification in no way relieves the Contractor from operations and maintenance requirements, noise standards, and responsibilities of State Specifications or Federal, State or Local regulations.

1.21 WORK HOURS

Construction activities shall comply with the City of Sacramento Noise Ordinance, which limits such activity to the hours of 7:00 AM to 6:00 PM Monday through Saturday, the hours of 9:00 AM to 6:00 PM on Sunday.

1.22 MANUFACTURER'S DIRECTION

Manufactured articles, material, and equipment shall be applied, installed, connected, erected, adjusted, tested, used, cleaned, and conditioned as recommended by the manufacturer. Copies of the manufacturer's installation instructions and procedures shall be submitted to the Engineer ten (10) working days prior to the installation of manufacturer's articles, material, and equipment.

1.23 CLEANING UP

Section 4-2 of the Standard Specifications is amended to read as follows:

The Contractor shall not allow the site of the work to become littered with trash, debris, garbage or waste material, but shall maintain the site in a neat, orderly and healthful condition until completion and acceptance of the work.

Before final inspection of the work, the Contractor shall clean the work site and all ground occupied by him in connection with the work of all rubbish, excess materials, temporary structures,

construction markings (by the Contractor or for his benefit) and equipment. Full compensation for cleaning up is included in the prices paid for the various contract items of work, and no separate or additional payment shall be made for cleaning up.

1.24 TRAFFIC CONTROL PLAN, PUBLIC SAFETY AND CONVENIENCE

The Contractor's attention is directed to Sections 6-6, 6-7, 6-8, 6-9, 6-10, and 6-11, of the Standard Specifications.

The Contractor shall take every necessary precaution including protective cover to insure that no material, equipment, tools, and debris fall onto state highway and roads.

Spillage resulting from hauling operations along or across any public traveled way shall be removed immediately by the Contractor at his expense.

Construction operations shall be conducted in such a manner as to cause as little inconvenience as possible to abutting property owners.

Water or dust palliative shall be applied as required or as directed by the Construction Manager for the alleviation and prevention of dust nuisance. This requirement shall apply for the full duration of the contract and is not limited to working days.

The Contractor will ensure that utility services to customers in the project area are maintained.

The Contractor shall be responsible for the safety of traffic on the approaches to the project.

The Contractor shall provide for the safety of the public and passengers at all times. Protective measures shall be taken to safeguard unauthorized persons that may enter the construction site, especially during times of open excavations. Contractor shall conform to the safety requirements required by the City of Sacramento, Union Pacific Railroad, Regional Transit, Capitol Corridor and Amtrak to safeguard the general public, railroad operator employees, and traveling passengers.

Traffic control plans shall provide for a safe pedestrian path of travel from the north and south side of H Street east of 5th Street to the Light Rail Platforms and Amtrak depot throughout construction. The Contractor shall also maintain bus and vehicle access from 5th Street to the north side of the Amtrak depot throughout construction.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all work involved in maintenance of traffic, public safety and convenience, and preventing material equipment, tools, and debris from falling onto roadways shall be considered as included in the prices paid for various contract items of work and no additional compensation will be allowed therefore.

1.25 PAVEMENT CUTTING AND RESTORATION

Pavement cutting and restoration shall conform to the provisions of Sections 10-7, 10-22, and 26-8 of the Standard Specifications and these Special Provisions.

Where pavement cutting takes place more than one (1) calendar day before trench excavation, the Contractor shall fill the pavement cuts with asphaltic patching mix and maintain a smooth riding surface until trenching begins. No pavement cutting shall precede trenching by more than seven (7) calendar days unless approved by the Engineer.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all work involved in Pavement Cutting and Restoration shall be considered as included in the prices paid for various contract items of work and no additional compensation will be allowed therefore.

1.26 MAINTAINING EXISTING DRAINAGE SYSTEMS

The Contractor shall be responsible for maintaining existing drainage systems within the limits of the project until any new drainage improvements to be constructed by the project are completed in-place and functioning. Any work performed by City crews to repair and maintain existing drainage systems shall be at the Contractor's expense.

No additional compensation will be paid to the Contractor for maintenance of the existing drainage facilities. The cost of such work shall be included in whatever bid item the Contractor deems appropriate.

1.27 EMERGENCY SEWER, WATER, AND DRAINAGE SERVICE

The Contractor's attention is directed to Section 5-10 "Provisions for Emergencies" of the City Standard Specifications. Whenever, in the opinion of the Engineer, there arises an emergency situation within the limits of the project that involves maintenance of sewer, water, or drainage service to existing developed properties, or a situation that poses a danger to public safety, or inconvenience and/or unreasonable nuisance to the general public, City's forces may be called upon to perform any work necessary to relieve the emergency.

If such emergency is the result of negligence by the Contractor, the cost of any corrective measures taken or work performed by City crews shall be billed directly to the Contractor or may be deducted from any payments owed to the Contractor. The performance of any such emergency work by the City forces shall not relieve the Contractor of any responsibilities, obligations, or liabilities under the contract for the project.

1.28 COORDINATION

The Contractor shall coordinate their activities in a manner that will provide the least interference with the City's operations, UPRR soil remediation contractors, other contractors, Californian State Railroad Museum (CSRM) and utility companies working in the area, and agencies exercising jurisdiction over the project area or portions thereof.

The Contractor's attention is directed to "Cooperation" of these special provisions regarding other Contractor's working within the same area.

The Contractor's attention is also directed to "Regional Transit Coordination", "SMUD Coordination", "AT&T Coordination", "PG&E Coordination", "Comcast Coordination", and "Kinder Morgan" of these special provisions.

The Contractor shall coordinate their operations with the following:

1. A minimum of seven (7) calendar days prior to commencing work, the Contractor shall coordinate operations with the City Street Division, Street Cleaning Section General Supervisor (phone 433-6333).
2. A minimum of three (3) working days prior to commencing work, the Contractor shall also be responsible for coordinating all work with the following City Divisions:

Department of Transportation Media and Communications Specialist, Linda Tucker (phone 808-5723).

Police Department Communication Center (phone 264-5721)

Fire Department Communication Center (phone 228-3035).

Traffic Signs and Markings Shop (phone 433-6363).

Office of Utility Services (phone 264-5371).

Streets Division (433-6336).

In addition, unless otherwise required by these Special Provisions, a minimum of ten (10) calendar days prior to commencing work, the Contractor shall coordinate their operations with the following as needed:

State of California

Division of Occupational Safety and Health (CALOSHA)(916) 263-2800
Central Valley Regional Water Quality Control Board (CVRWQCB)(916) 464-3291

Underground Service Alert

The Contractor shall contact Underground Service Alert (USA), at 1-800-227-2600, a minimum of three (3) working days but not more than 14 calendar days prior to any excavation or other work close to any underground pipeline, conduit, duct, wire or other structure.

In the event that the utility facilities mentioned above are not removed or relocated by the date or within the time specified and, if in the opinion of the Construction Manager, the Contractor's operations are delayed or interfered with by reason of the utility facilities not being removed or relocated, the Contractor may be granted an extension of time pursuant to the requirements of Section 7, "Prosecution and Progress," of the City Standard Specifications.

Coordination costs shall be considered as included in the prices paid for the various contract items of work involved and no separate payment or additional compensation will be allowed therefore.

1.29 UTILITIES INFORMATION AND REQUIREMENTS

The location, alignment, and depth of existing underground utilities as shown on the Drawings (if any) are taken from public records and no responsibility is assumed for the accuracy thereof.

The Contractor's attention is directed to the provisions of Chapter 3.1 "PROTECTION OF PUBLIC UTILITIES IN PUBLIC CONTRACTS" of the California Government Code concerning protecting existing overhead and underground utilities. In particular, Section 4216 "Subsurface Installations; Membership of Owners in Regional Notification Center; Notice of Excavation; Inquiry Identification Number; Marking Locations; Application of Section; Violations; Penalties" and Section 4217 "Permit to Excavate; Necessity of Inquiry Identification Number; Operative Date of Section".

The Contractor is responsible for the protection of and for damage to existing overhead and underground utility lines and services encountered during the course of construction. The Contractor shall notify the respective utility owner prior to any interruption of service.

The cost of relocating existing overhead or underground utilities not specified on the Drawings to be relocated, but which the Contractor elects to relocate or cut and reconnect for his/her own convenience, shall be borne by the Contractor.

No compensation will be paid to the Contractor for maintenance and protection of existing utilities and facilities. The cost of such work shall be included in whatever bid item the Contractor deems appropriate.

1.30 REGIONAL TRANSIT COORDINATION

At least three (3) working days prior to working on streets used as bus routes, the Contractor shall notify the Regional Transit (RT) Dispatcher at 321-2897 and notify RT that traffic restrictions will be in effect and that bus stops may be temporarily out of service.

The Contractor's activities shall be performed in such a manner as not to interfere with Light Rail Transit (LRT) service. The Contractor shall obtain an RT Metro Track Warrant (2700 Academy Way, Sacramento) for all work performed near LRT facilities. Failure of the Contractor to comply with this requirement, or violation of the terms of the Track Warrant, will result in the Contractor being required to immediately cease work until a Track Warrant is secured or violation is corrected. Any delays or costs associated with this requirement will be at the Contractor's Expense.

1.31 SMUD COORDINATION

The Contractor shall contact Kim Holder at (916) 732-5814 prior to start of his work.

Sacramento Municipal Utility District ("SMUD") will have its own forces or others performing work on some relocations of existing utility services as shown on the Drawings, including the relocation of existing overhead power lines and poles in conflict with the Project work. SMUD's work will restrict when and where the Contractor will be able to work in the project area. The Contractor shall coordinate his/her efforts with SMUD and SMUD's contractor and no additional compensation will be allowed therefore.

It is expected that SMUD will cooperate with the Contractor to the end that the work may be handled in an efficient manner, but the Contractor shall have no claim for damages or extra compensation in the event his work is held up by the work of SMUD forces.

The Contractor shall be responsible for installation of SMUD's new underground electric conduits and vaults for all work shown on the Drawings and as described elsewhere in these Special Provisions, unless such work is noted as Not In Contract.

1.32 AT&T COORDINATION

The Contractor shall contact Brian Manabe at (916) 453-7129 prior to start of his work.

The Contractor shall coordinate his/her efforts with AT&T and AT&T's contractor and no additional compensation will be allowed therefore.

It is expected that AT&T will cooperate with the Contractor to the end that the work may be handled in an efficient manner, but the Contractor shall have no claim for damages or extra compensation in the event his work is held up by the work of AT&T forces.

The Contractor shall be responsible for installation of AT&T's new underground conduit and Utility vaults as shown on the Drawings and as described elsewhere in these Special Provisions. The contractor shall be responsible for scheduling regular AT&T inspections of work in progress. Construction of AT&T facilities shall comply with AT&T Engineering standards.

1.33 PG&E COORDINATION

The Contractor shall contact Demetrius Williams at (916) 386-5013 prior to start of his work.

The Contractor shall coordinate his/her efforts with PG&E and PG&E's contractor and no additional compensation will be allowed therefore.

It is expected that PG&E will cooperate with the Contractor to the end that the work may be handled in an efficient manner, but the Contractor shall have no claim for damages or extra compensation in the event his work is held up by the work of PG&E forces.

The Contractor shall be responsible for installation of the PG&E's new underground gas lines and apputances as shown on the Drawings and as described elsewhere in these Special Provisions. The contractor shall be responsible for scheduling regular PG&E inspection of the work in progress. Construction of PG&E facilities shall comply with PG&E Engineering standards.

1.34 COMCAST COORDINATION

The Contractor shall contact Bob Angelastro at (916) 830-6732 prior to start of his work.

The Contractor shall coordinate his/her efforts with Comcast and Comcast's contractor and no additional compensation will be allowed therefore.

It is expected that Comcast will cooperate with the Contractor to the end that the work may be handled in an efficient manner, but the Contractor shall have no claim for damages or extra compensation in the event his work is held up by the work of Comcast forces.

The Contractor shall be responsible for installation of Comcast's new underground conduits and the apputances as shown on the Drawings and as described elsewhere in these Special Provisions. The contractor shall be responsible for scheduling regular Comcast inspections of work in progress. Construction of Comcast facilities shall comply with Comcast Engineering standards.

1.35 KINDER MORGAN COORDINATION

The Contractor shall contact Matt Dexter at (815) 666-8766 prior to start of his work.

The Contractor shall comply with the requirements of the agreement between the City of Sacramento and Kinder Morgan. Any delays or costs associated with this requirement will be at the Contractor's Expense.

1.36 SOIL AND GROUNDWATER MANAGEMENT

The City of Sacramento has prepared the "5th Street and Railyards Boulevard Roadway Project Soil & Groundwater Management Plan" (SGMP), included in Appendix E, which defines the required management, handling, and precautionary procedures associated with encountered material, soil and groundwater with the potential to require special handling requirements. The Contractor shall comply with all requirements of the SGMP through the duration of the Project.

No compensation will be paid to the Contractor to comply with the requirements of the SGMP unless noted otherwise in these Special Provisions. The cost of such work shall be included in whatever bid item the Contractor deems appropriate.

1.37 SALVAGE VALUE

The contractor shall provide for the salvaging of materials at the contractor's expense (storage and handling). Receipts shall be provided to show the salvage value of all of the materials that are salvaged from the project site. The salvage amounts shall be credited to the city by way of deductive change order. Materials salvaged are primarily steel. The expense to haul off-site the materials may be deducted from the raw salvage value. The contractor shall provide the necessary documentation to show that the Project is receiving the best salvage value based on cost and efficiency (salvaging of materials should not cause delay which could result in additional cost).

The cost to salvage materials shall be included in price paid for various items of work as the Contractor deems appropriate and no additional compensation will be allowed therefor.

1.38 COST BREAK-DOWN FOR LUMP SUM ITEMS

The contractor shall submit a cost break down for each lump-sum item detailing material and labor costs including profit and overhead to substantiate the total lump-sum costs. No progress payments will be made for lump sum items where the contractor has not submitted a cost break-

down. The sum of the amounts for the units of work listed in the cost break-down shall be equal to the contact lump sum price bid for the work.

The Contractor shall determine the quantities to complete the work shown on the plans. The quantities and values shall be included in the cost break-down submitted prior to construction. The Contractor shall be responsible for the accuracy of the quantities and values. No adjustment in compensation will be made in the contract lump sum prices paid for the various work items due to any differences between the quantities shown in the cost break-down furnished by the Contractor and the quantities required to complete the work as shown on the plans and as specified in these special provisions. At the Engineer's discretion, the approved cost break-down may be used to determine partial payments during the progress of the work and as the basis of calculating the adjustment in compensation for the items of work due to changes ordered by the Engineer.

When an ordered change increases or decreases the quantities of an approved cost break-down, the adjustment in compensation may be determined, at the Engineer's discretion, in the same manner specified for increases and decreases in the quantity of a contract item of work in accordance with Section 4-1.03B, "Increased or Decreased Quantities", of Caltrans Standard Specification. The cost break-down submitted by the responsive qualified low bid Contractor shall be approved by the Engineer before any partial payment for the items of work shall be made based on the cost break-down. The cost break-down shall include, but is not limited to: type of equipment, estimated quantity, and unit price (\$/LF or each). Contractor shall submit break-down in a spreadsheet format. Contractor may include overhead and profit in the items or add them in separately.

1.39 DEDUCT ITEMS/ELIMINATION OF WORK

The Owner reserves the right to deduct bid items included in the Sealed Proposal submitted by the Contractor without any compensation allowed therefore.

Additionally, the Owner reserves the right to eliminate work. The quantities of work eliminated shall be determined and agreed between the Contractor and Construction Manager. The Contractor's unit price bid shall be used in determining the total amount of work eliminated. The Contractor shall not be entitled to any compensation for elimination of the work. The contract days shall not change as a result of any deductions and elimination of work.

1.40 MEASUREMENT AND PAYMENT

Measurement and payment shall be pursuant to Section 8 of the City Standard Specifications, and the method of measurement and payment shall be as indicated in the last paragraph of each bid item described in the "ITEMS OF THE PROPOSAL" section of these special provisions.

1.41 FINAL PAY QUANTITY

Final pay quantity is designated on the sealed bid proposal sheet with "(F)". Final pay quantity shall conform to Section 9-1.015 "Final Pay Quantities" of the State Standard Specifications, except that the final pay quantity designation shall be made to the sealed bid proposal rather than the Plans.

1.42 PARTIAL PAYMENTS

Final pay quantity is designated on the sealed bid proposal sheet with "(F)". Final pay quantity shall conform.

In determining the partial payments to be made to the Contractor, only the following listed materials will be considered for inclusion in the payment as materials furnished but not incorporated in the work:

- A. Furnish Piling (Class 200) (Alternative W)
- B. Prestressing Steel, Sealed Packages Only
- C. Joint Seal (Type B MR=2")
- D. Joint Seal Assembly (MR=6") (MOD)
- E. WABO Seismic Span II
- F. Bar Reinforcing Steel (Bridge)
- G. Bar Reinforcing Steel (Retaining Wall)
- H. Bar Reinforcing Steel (Epoxy Coated) (Bridge)
- I. Bridge Deck Drainage System
- J. Chain Link Railing
- K. California ST-40 Bridge Rail

1.43 PERMITS AND EASEMENTS

All of the work to be performed is within IA Sacramento Holding, LLC ("IA") owned property and the public street right of way. The limits of the work area are shown on the drawings. The Contractor shall keep all construction activity including equipment and material storage within the work area designated on the plans unless otherwise approved in writing by IA.

Sacramento Regional Transit Utility Permit

The Contractor shall comply with all of the provisions required of the Applicant as stated in the Sacramento Regional Transit Utility Permit (Metro Authorization No. 2012030901) which includes obtaining a Track Warrant from Sacramento Regional Transit. The Contractor shall pay the required deposit stated in the permit. Full compensation for coordinating, obtaining and securing the permit, including permit fees, shall be considered as included in the prices paid for the various contract items for work involved and no additional compensation will be allowed therefor.

1.44 MATERIAL AVAILABLE ONSITE

Certain construction materials including but not limited to soil, crushed rock, crushed concrete, and recycled concrete aggregate base is stockpiled in various locations on the Railyards property and may be available for purchase from the property owner, IA Sacramento L.L.C. Contact Dean Stermer or Lynx Chan at 630-218-8000.

* END OF SECTION *

SECTION 2.0 - TECHNICAL SPECIFICATIONS

2.01 ORDER OF WORK

Order of work shall conform to the provisions in Section 5-1.05, "Order of Work," of the State Standard Specifications and these special provisions.

The Contractor shall relocate the 7th Street entrance, including paving, and construct construction access roads as a first order of work. Immediately thereafter, the Contractor shall construct a paved access road as shown on the Construction Access plan from the existing end of pavement at the existing F Street access to the existing pavement on the east side of the railroad passenger access path.

Unless otherwise approved by the Construction Manager, to minimize potential costs for mobilization from one side of the tracks to the other, the Contractor shall complete the overexcavation work south of the tracks prior to performing any site grading. Retaining wall construction shall not commence prior to completion of the prescribed surcharge settlement period or as directed by the Construction Manager.

Utility installation within fill embankments shall not commence prior to completion of the prescribed settlement period or as directed by the Construction Manager.

The Contractor shall not backfill the 5th Street OH south bridge abutment with conventional fill at any time.

Utility conduits, waterline and deck drainage within the viaduct shall be installed prior to deck pour.

The Contractor shall laterally brace the 5th Street Viaduct columns until the superstructure is poured. The Contractor's falsework system shall not rely on the 5th Street Viaduct columns to resist any lateral loads.

Work on the north side of the tracks shall commence with the excavation and construction of the Lot 10 Retention Basin prior to construction of underground utilities or roadway improvements.

Attention is directed to "Cooperation" of these special provisions.

2.02 COOPERATION

It is anticipated that work by another contractor may be in progress adjacent to or within the limits of this project during progress of the work on this contract. The following contracts are anticipated to be in progress during this contract within the Sacramento Railyards.

City of Sacramento – 6th Street (PN: T15116200)
Sacramento Railyards West Tunnel Ramps (PN: T15029030)
UPRR Soil Remediation Activities.
California State Railroad Museum Access.

Comply with Section 7-1.14, "Cooperation," of the State Standard Specifications.

2.03 CONSTRUCTION FUNDING SIGN

Construction funding sign shall be furnished, installed, maintained, and removed when no longer required in conformance with the provisions in Section 12, "Construction Area Traffic Control Devices," of the State Standard Specifications and these special provisions. Funding sign shall conform to the details shown in the Drawings. Funding sign shall have black lettering on white background and mounted on 2-4"x4" posts.

Construction funding sign shall be placed at the location shown in Drawings and as directed by the Construction Manager.

Attention is directed to the provisions in "Prequalified and Tested Signing and Delineation Materials" of these special provisions. Type II retroreflective sheeting shall not be used on construction area sign panels. Type III, IV, VII, VIII, or IX retroreflective sheeting shall be used for stationary mounted construction area sign panels.

The Contractor shall notify the appropriate regional notification center for operators of subsurface installations at least 2 business days, but not more than 14 days, prior to commencing excavation for construction funding sign posts. The regional notification centers include, but are not limited to, the following:

Notification Center	Telephone Number
Underground Service Alert	811

Excavations required to install construction funding sign shall be performed by hand methods without the use of power equipment, except that power equipment may be used if it is determined there are no utility facilities in the area of the proposed post holes. The post hole diameter, if backfilled with portland cement concrete, shall be at least 4 inches greater than the longer dimension of the post cross section.

Construction funding sign placed within 15 feet from the edge of the travel way shall be mounted on stationary mounted sign supports as specified in "Construction Area Traffic Control Devices" of these special provisions.

The Contractor shall immediately restore to the original position and location any sign that is displaced or overturned, from any cause, during the progress of work.

Full compensation for construction funding sign shall be considered as included in the various contract items of work and no separate payment will be made therefore.

2.04 CONSTRUCTION AREA TRAFFIC CONTROL DEVICES

Category 1 temporary traffic control devices are defined as small and lightweight (less than 100 pounds) devices. These devices shall be certified as crashworthy by crash testing, crash testing of similar devices, or years of demonstrable safe performance. Category 1 temporary traffic control devices include traffic cones, plastic drums, portable delineators, and channelizers.

The Contractor shall provide written self-certification for crashworthiness of Category 1 temporary traffic control devices to the Construction Manager at least 5 business days before

beginning any work using the devices or within 2 business days after the request if the devices are already in use. Self-certification shall be provided by the manufacturer or Contractor and shall include the following:

- A. Date,
- B. Federal Aid number (if applicable),
- C. Contract number, district, county, route and post mile of project limits,
- D. Company name of certifying vendor, street address, city, state and zip code,
- E. Printed name, signature and title of certifying person; and
- F. Category 1 temporary traffic control devices that will be used on the project.

The Contractor may obtain a standard form for self-certification from the Construction Manager.

Category 2 temporary traffic control devices are defined as small and lightweight (less than 100 pounds) devices that are not expected to produce significant vehicular velocity change, but may cause potential harm to impacting vehicles. Category 2 temporary traffic control devices include barricades and portable sign supports.

Category 2 temporary traffic control devices shall be on the Federal Highway Administration's (FHWA) list of Acceptable Crashworthy Category 2 Hardware for Work Zones. This list is maintained by FHWA and can be located at:

http://safety.fhwa.dot.gov/roadway_dept/road_hardware/listing.cfm?code=workzone

The Department also maintains this list at:

<http://www.dot.ca.gov/hq/traffops/signtech/signdel/pdf/Category2.pdf>

Category 2 temporary traffic control devices that have not received FHWA acceptance shall not be used. Category 2 temporary traffic control devices in use that have received FHWA acceptance shall be labeled with the FHWA acceptance letter number and the name of the manufacturer. The label shall be readable and permanently affixed by the manufacturer. Category 2 temporary traffic control devices without a label shall not be used.

The Contractor shall provide a written list of Category 2 temporary traffic control devices to be used on the project to the Construction Manager at least 5 business days before beginning any work using the devices or within 2 business days after the request if the devices are already in use.

Category 3 temporary traffic control devices consist of temporary traffic-handling equipment and devices that weigh 100 pounds or more and are expected to produce significant vehicular velocity change to impacting vehicles. Temporary traffic-handling equipment and devices include crash cushions, truck-mounted attenuators, temporary railing, temporary barrier, and end treatments for temporary railing and barrier.

Type III barricades may be used as sign supports if the barricades have been successfully crash tested, meeting the NCHRP Report 350 criteria, as one unit with a construction area sign attached.

Category 3 temporary traffic control devices shall be shown on the Drawings or on the Department's Highway Safety Features list. This list is maintained by the Division of Engineering Services and can be found at:

http://www.dot.ca.gov/hq/esc/approved_products_list/

Category 3 temporary traffic control devices that are not shown on the Drawings or not listed on the Department's Highway Safety Features list shall not be used.

Full compensation for providing self-certification for crashworthiness of Category 1 temporary traffic control devices and for providing a list of Category 2 temporary traffic control devices used on the project shall be considered as included in the prices paid for the various items of work requiring the use of the Category 1 or Category 2 temporary traffic control devices and no additional compensation will be allowed therefore.

2.05 IMPLEMENT STORM WATER POLLUTION PREVENTION PLAN

This work includes implementing the "Storm Water Pollution Prevention Plan for Sacramento Railyards: 5th Street and Railyards Blvd." provided in Appendix D.

Water pollution control work shall comply with the National Pollution Discharge Elimination System (NPDES) Permit issued to the City and the approved SWPPP and shall conform to the provisions in Section 16 "WATER QUALITY CONTROL" of the City Standard Specifications and these Special Provisions.

The Contractor shall adopt and implement the SWPPP provided in Appendix D. The Contractor is responsible to update the SWPPP as necessary to reflect the work he is responsible for. All updates to the SWPPP shall be completed by a QSD currently certified by the State of California at the Contractors expense. The Contractor is responsible for all monitoring, testing, reporting (including but not limited to weekly, event, annual), and notifications as required in the SWPPP and the NPDES General Construction Permit.

2.06 FURNISH FIELD OFFICE

This item shall be provide all labor, supervision, materials, tools and equipment and trailer(s) necessary to provide a project construction trailer/field offices and their removal at the end of the project. The minimum facility(s) shall be a standard double-wide with approximately 2,000 square feet of interior space. The office configuration and on-site location is to be pre-approved by the Engineer. This space is to provide adequate facilities for the City, Inland America Holdings and Construction Manager (CM). The facility shall be furnished with doors on each end and windows, capable of being locked and adequately secured.

The facility shall have heating and air conditioning, adequate lighting, be continuously connected to a reliable 110V power supply and communications land lines (phone/fax and high speed wireless internet). The field office shall be furnished and provided with other reasonably expected hosting facilities and equipment, including but not limited to restroom, drinking water, copier, fax machine, etc. This item also includes all work required to obtain a

building permit. The purpose of the field office is to facilitate coordination and communication between the Contractor, City inspection staff, UPRR staff, and materials testers. The size, configuration, and proposed location of the field office shall be submitted to and approved by the engineer prior to the placement of the field office/trailer(s) on site.

The facility shall receive twice weekly janitorial services to maintain the area in a clean and pest-free condition. Bottled drinking water, wash up and toilet facilities shall be provided within the facility complete with connections to temporary sewer, paper supplies, electrical, and water systems including all necessary supplies to maintain the facilities. The temporary sanitary facilities provided shall comply with State and local requirements.

The Facility shall include six desks and rolling desk chairs with arms; two drafting tables; eight 3-foot by 6-foot tables; 15 standard and stackable chairs; six 3' wide x 6' portable bookcases; three 3' wide x 4' portable bookcases; two drafting stools; one plain paper color copy/fax/scan/printer machine capable of making letter size (8-1/2 x 11), legal (8-1/2 x 14), ledger size (11 x 17) copies with sufficient paper and materials for 1500 copies per month ; one full size refrigerator/freezer ; fire extinguishers as required by local codes and to provide and maintain a 20 person first aid kit (bandages, gauze, etc.). The Contractor shall provide, install, and maintain two telephone landlines (this includes one dedicated fax line) and a high speed broadband internet connection (with wireless router) and pay all associated electric, phone and internet costs. The high speed internet connection shall include a wireless router have a minimum download speed of 10 Megabits per second (Mps) and minimum upload speed of 5 Mps. The contractor shall provide one dual line speaker phone (located in meeting area) and services desks, common spaces and conference room. Phone service shall include messaging services to at least one phone line. The contractor shall provide the necessary 5' high partitions (or suggested alternative) required to provide privacy for the each desk and a 3' x 6' table.

The Contractor shall provide for the City's exclusive possession and use: one new laptop computers and installed with a licensed copy of the Microsoft Office software suite including Word and Excel 2007 or higher and scheduling software detailed in the "PROGRESS SCHEDULE (CRITICAL PATH METHOD)" section of these special provisions. The dry plain paper copy/fax/scan/printer machine shall be a Ricoh Aficio MP3300 or approved equal, networked to all office computers and include color and black ink capabilities. It is the Contractor's responsibility to set up, maintain and repair the computer/internet/phone/fax/printer connections as well as all other office machines and equipment. The Engineer may use the furnished computer hardware and software for any purposes relating to the subject project. Before delivery and setup of the computer, the Contractor shall submit to the Engineer for approval a detailed list of all computer hardware and software the Contractor proposes to furnish. All computer hardware and software furnished shall remain the property of the Contractor and shall be removed by the Contractor upon acceptance of the contract when no claims involving contract progress are pending. After final project acceptance and prior to the return of the computer to the Contractor, the City shall be provided the opportunity to remove all City owned proprietary software, maps, work product, files and other information from the computer that may have been placed in or added to the computer during the course of the project. Failure of the City to completely or partially remove all City owned proprietary software, maps, work product, files and other information from the computer that may have been placed in or added to the computer during the course of the project does NOT constitute a waiver of exclusive City ownership of the items referenced above.

All furnishings shall be of standard quality and in new condition. The facility shall be adequately secured, such as steel bars and blinds on the windows of the trailer to deter/prevent theft of the equipment housed inside. Two 500 watt security lamps (one each side) will be provided at the facility. The field office shall be installed and ready for occupancy within thirty calendar days after the date on the notice to proceed or prior to the start of work, whichever is earlier. For each day thereafter that the field office is not ready for occupancy, the Contractor will be assessed damages in the amount of \$200.00 per calendar day. If unforeseen circumstances cause the field office to be relocated during construction the contractor must make other accommodations acceptable by the engineer so there is always a field office on site during construction.

The Contractor is required to build/repair/maintain the access roads required to access the facility from 7th Street. The access roads constructed as part of this item shall be the constructed as the minimum necessary to provide reasonable access to the project. The Construction Manager, at his sole discretion, shall determine what is reasonable while minimizing the contractor's cost.

The field office shall remain fully functional until the Construction Manager determines it is no longer needed. The Construction Manager shall provide 30 days notice of when the trailer(s) shall be removed.

2.07 EXISTING FACILITIES

The work performed in connection with various existing facilities shall conform to the provisions in Section 13, "Existing Facilities," of the City Standard Specifications and these special provisions.

Existing top of abutment backwalls for existing bridges will be protected until approach slabs are constructed.

Removal of monitoring wells, as shown on the Drawings, shall be coordinated with the County Department of Health. Contractor shall coordinate with franchise utility companies to ensure that all utilities shown to be removed are abandoned, inactive, or de-energized and safe for removal.

2.08 BRIDGE REMOVAL (PORTION)

Removing portions of bridges shall conform to the provisions in Section 15-4, "Bridge Removal," of the Standard Specifications and these special provisions.

Bridge Removal (Portion) will include the concrete removal of the existing 5th Street Overhead Structure (Bridge Number 24C0541) as required for installation of the modular joint seal at Bent 4 and as shown on these contract plans.

Removed materials that are not to be salvaged or used in the reconstruction shall become the property of the Contractor and shall be disposed of in conformance with the provisions in Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the State Standard Specifications.

2.09 EARTHWORK

Earthwork shall conform to the provisions in Section 14, "Earthwork, Excavation, Embankment and Subgrade", of the City of Sacramento Standard Specifications and Section 19, "Earthwork," of the State Standard Specifications, these special provisions, and the recommendations contained in the following project Geotechnical Reports:

- Final Geotechnical Report, 5th Street South of UPRR Improvements, Sacramento, California, prepared by Blackburn Consulting, dated December 21, 2012.
- Final Geotechnical Report, 5th Street North of UPRR / Railyards Boulevard Improvements, Sacramento, California, prepared by Blackburn Consulting, dated July 16, 2010.
- Final Foundation Report, 5th Street Viaduct (Bridge 24C-0542), Sacramento Railyards, Sacramento, California, prepared by Blackburn Consulting, dated July 9, 2010.

All soil handling shall be done in the conformance with Section 1.36, "Soil and Groundwater Management Plan," of these Special Provisions.

Temporary surcharge embankments in the area supported by MSE Retaining Walls were completed on July 28, 2012 as shown on the drawings and as described in Section 8 of the Final Geotechnical Report for 5th Street South. The surcharge embankments were monitored for settlement and have been in place a sufficient amount of time for removal.

A temporary surcharge embankment was placed near the north of the viaduct per Section 8.1 of the Final Geotechnical Report for 5th Street North/Railyards Boulevard in the spring of 2010. The required waiting period has elapsed for this surcharge embankment and it can be removed.

Following removal of the temporary surcharge embankments to original grade (assumed as elevation 30 for volume calculations), existing soils shall be over-excavated to the limits and depths as shown on the Drawings and described in these special provisions. Subgrades shall be filled and compacted to the elevations shown on the Drawings and as described in these Special Provisions.

Permanent embankments shall be placed and compacted as shown on the Drawings and allowed to settle for the following minimum waiting periods or as directed by the Construction Manager. Estimated waiting periods for permanent embankments are provided in Table 5 of the Final Geotechnical Report for 5th Street South.

The duration of the required settlement period at each location will be determined by the Construction Manager. The Construction Manager may order an increase or decrease in any settlement period. An ordered increase or decrease in any settlement period will result in an increase or decrease in the number of contract working days if the settlement period involved is considered to be the current controlling operation in conformance with the provisions in Section 8-1.06, "Time of Completion," of the State Standard Specifications. Adjustments of contract time due to increases or decreases in settlement periods will be made by contract change order.

The contractor shall submit to the Construction Manager for approval a settlement monitoring program conforming to the provisions of Section 5-1.02, "Plans and Working Drawings," of the State Standard Specifications. Settlement monitoring will be required at all

temporary surcharge embankments and permanent embankments, as specified in these Special Provisions. The Contractor shall install and maintain standard settlement monitoring platforms in accordance with California Test 112. At a minimum, settlement monitoring devices shall be installed within 15 feet of the centerline of 5th Street station 204+00.

The settlement platforms shall be installed on existing ground prior to embankment construction. Monitoring shall commence when embankment placement begins, and shall continue in accordance with the following schedule:

- | | |
|--|----------------------------------|
| A. Initial Reading | Prior to embankment Construction |
| B. During Embankment Construction | Every working day |
| C. After Completion of Embankment Construction | Once per week |

The Contractor shall notify the Construction Manager at the time monitoring platforms are set. City survey crews shall perform data collection for the settlement monitoring. The Contractor shall protect and maintain clear access to the monitoring hubs through the duration of the monitoring period.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved in installing, maintaining, and implementing the settlement monitoring program, complete in place, shall be considered as included in the contract price paid per cubic yard for placement of embankment, and no additional compensation will be allowed therefore.

Construction of asphalt and aggregate base roadway, sidewalks, concrete planters, underground utilities, light poles and other surface improvements shall not begin until completion of the waiting periods as determined by the Construction Manager.

SURFACE VEGETATION REMOVAL

Prior to site grading, strip surface vegetation to a depth of approximately 2 to 4 inches to remove surface organics. Vegetation strippings shall not be used as fill in pavement, exterior flatwork, retaining walls or other structural areas.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved in surface vegetation removal, including proper offsite disposal, shall be considered as included in the contract price paid per cubic yard for over-excavation, and no additional compensation will be allowed therefore.

SITE CLEARING, EXCAVATION AND SUBGRADE PREPARATION (INCLUDING OVER-EXCAVATION)

Given the historic use of this project site, buried manmade objects (e.g., rubble, railroad slag, railroad ties, buried structures/foundations/slabs, abandoned utilities, etc.), debris and undocumented fill will be encountered during excavation.

Prior to site grading, over-excavate the site to remove structures, slabs, foundations, debris, abandoned utilities, soft or unstable areas, or other deleterious materials to the elevations and limits denoted on the Drawings. The Contractor shall not assume that typical earthwork techniques can be used for over-excavation (ie. scrapers) due to man made buried objects. The Contractor shall have onsite at their expense adequate equipment to efficiently remove buried

man made objects encountered during excavation. Previous work has encountered unreinforced concrete, reinforced concrete, and granite objects varying in size from less than a cubic foot to 12' x 20' x 8'.

Scarify the subgrade to a depth of approximately 8 inches. Uniformly moisture condition the subgrade soil to minus 1% to 2% above optimum moisture content and compact to at least 90% relative compaction. Compact the upper 6 inches of pavement subgrade to 95% relative compaction.

FILL QUALITY AND COMPACTION

On-site soil may be used as fill provided it is free of debris, rubble, rubbish, visible concentrations of vegetation, and has a maximum particle size of 4 inches.

Imported borrow fill must meet the following requirements:

- No concentrations of organics, debris, and other deleterious materials.
- 100% passing the 3 inch sieve, 80%-100% passing the ¾-inch sieve, 50%-100% passing the No. 4 sieve, and 10%-75% passing the No. 200 sieve.
- Plasticity Index (ASTM D4318) less than 12.
- Within the upper 2 feet of finished pavement subgrade elevation, onsite and imported fill must meet the minimum design R-value of 20 (ASTM D2844).
- Asphalt and concrete rubble generated from on-site demolition and overexcavation operations may be recycled into fills for the project provided it is processed to meet a maximum particle size of 3 inches, and it is uniformly mixed with soil such that no more than 25% of recycled material by weight exists in the mixture.
- Comply with the Department of Toxic Substances Control directive entitled "Information Advisory Clean Fill Material" dated October 2001.

Place and compact fill as follows:

1. Place fill in loose lifts no thicker than 8 inches prior to compaction.
2. Uniformly moisture condition fill to minus 1% to 2% above the optimum moisture content.
3. Compact all fill place beneath MSE wall reinforced zones, and within overexcavated areas in front of MSE walls, to at least 95% relative compaction. The reinforced zone consists of all backfill from the back of wall to 1 foot beyond the ends of the reinforcing elements.
4. Compact remaining fill to at least 90% relative compaction.
5. Compact pavement aggregate base to at least 95% relative compaction.

BRIDGE EARTHWORK

Reinforcement or metal attached to reinforced concrete rubble placed in embankments shall not protrude above the grading plane. Prior to placement within 2 feet below the grading plane of embankments, reinforcement or metal shall be trimmed to no greater than ¾ inch from the face of reinforced concrete rubble. Full compensation for trimming reinforcement or metal shall be considered as included in the contract prices paid per cubic yard for the types of excavation shown in the Engineer's estimate, or the contract prices paid for furnishing and placing imported borrow or embankment material, as the case may be, and no additional compensation will be allowed therefor.

Pervious backfill material placed within the limits of payment for bridges will be measured and paid for as structure backfill (bridge).

If structure excavation or structure backfill for bridges is not otherwise designated by type and payment for the structure excavation or structure backfill has not otherwise been provided for in the State Standard Specifications or these special provisions, the structure excavation or structure backfill will be measured and paid for as structure excavation (bridge) or structure backfill (bridge), respectively.

2.10 PILING

GENERAL

Piling shall conform to the provisions in Section 49, "Piling," of the State Standard Specifications, and these special provisions.

The Contractor's attention is directed to "Vibration Monitoring" Requirements in these Special Provisions.

Unless otherwise specified, welding of any work performed in conformance with the provisions in Section 49, "Piling," of the State Standard Specifications, shall be in conformance with the requirements in AWS D1.1.

Difficult pile installation is anticipated due to the presence of dense sand and gravel layers above the specified tip elevation.

Jetting or vibratory hammers shall not be used.

When a calculated nominal driving resistance is shown on the plans for piling, that value shall be utilized in lieu of nominal resistance in Section 49, "Piling," of the State Standard Specifications, the plans, and these special provisions.

The Contractor should anticipate that the nominal driving resistance may be less than the required nominal resistance (550 kips) at End of Driving (EOD). End-of-Drive (EOD) is defined as initial pile driving that achieves 550 kips nominal driving resistance at or within 5 feet above specified tip elevation OR initial pile driving that achieves 350 kips nominal driving resistance at or below specified tip elevation. Piles must be driven to a minimum nominal driving resistance of at least 350 kips at the EOD to at or below the specified tip elevation.

At least 25 percent of the piles (rounded up) at each support that do not achieve a nominal driving resistance of 550 kips or greater at EOD must be redriven (restriking) after a minimum 12 hour setup period following EOD using the same pile driving hammer to confirm that the nominal resistance has been achieved following pile setup. The pile penetration during restrike must be at least 2 inches and the piles with the lowest nominal driving resistance at EOD must be selected for restrike. If all of the restrike piles meet or exceed the required nominal driving resistance, then the remaining piles shall be considered to have achieved the required nominal resistance.

With the approval of the Engineer, the Contractor may drive piles to a minimum nominal driving resistance of less than 350 kips to at or below the specified tip elevation and attempt to obtain the required nominal resistance (550 kips) following an extended setup period prior to restrike.

STEEL PIPE PILING

GENERAL

Summary

Steel pipe piling shall consist of unfilled steel pipe piling. Steel pipe piling shall conform to the provisions in Section 49-5, "Steel Piles," of the State Standard Specifications and these Special Provisions.

All steel pipe piling for this project shall be designated as Class R steel pipe piling.

Submittals

Steel pipe piling qualification audits shall be submitted in conformance with the provisions in "Steel Pipe Piling Qualification Audit" of these special provisions.

A Certificate of Compliance demonstrating material traceability shall be furnished in conformance with the provisions in Section 6-1.07, "Certificates of Compliance," of the State Standard Specifications, and shall be signed by the facility's authorized Quality Control Representative. The Quality Control Representative shall be on record with the Department's Office of Structural Materials. The Certificate of Compliance shall include:

1. A statement that all materials and workmanship incorporated in the work and all required tests and inspections of this work have been performed in conformance with the details shown on the plans and these special provisions.
2. An attached certified mill test report (MTR) for each heat number of steel pipe piles being furnished.
3. The carbon equivalency (CE) calculated as $CE=C + (Mn+Si)/6 + (Cr+Mo+V)/5 + (Ni+Cu)/15$. The CE shall be 0.45% maximum and may be shown on the MTR.

The Contractor shall submit a TL-38 Inspection Request form at least:

1. 48 hours before performing any field welding of steel pipe piling.

The TL-38 Inspection Request form is available at:

<http://www.dot.ca.gov/hq/esc/Translab/OSM/smbforms.htm>

Working drawings shall be submitted to the Engineer before attaching handling devices to steel pipe piling. Working drawings shall include locations, handling and fitting device details, and connection details. Attachments shall not be made to steel pipe piling until the working drawings are approved in writing by the Engineer. The Contractor shall allow the Engineer 7 days for review.

The Contractor shall pay transportation and per diem costs at current federal government rates for a site visit to the pile fabrication location for one inspector if the location is greater than 100 miles from the project site.

MATERIALS

General

The provisions of "Welding Quality Control" of these special provisions shall not apply to longitudinal, skelp end, or spiral seam welds in steel pipe piling.

Circumferential welds shall conform to "Welding Quality Control" of these special provisions and the following:

1. Circumferential welds shall be complete joint penetration welds conforming to AWS D1.1.
2. Welds shall be located at least 12 inches away from a skelp end weld.
3. Backing rings shall conform to the following:
 - 3.1. The minimum thickness shall be 1/4 inch and the backing ring shall be continuous.
 - 3.2. Splices in the backing ring shall be made by complete joint penetration welds. These welds shall be completed and inspected, including any required nondestructive testing, before final insertion into a pipe end.
 - 3.3. The attachment of backing rings to pipe ends shall be done using the minimum size and spacing of tack welds that will securely hold the backing ring in place. Tack welding shall be done in the root area of the weld splice. Cracked tack welds shall be removed and replaced before subsequent weld passes.
 - 3.4. The gap between the backing ring and the steel pipe piling wall shall not be greater than 5/64 inch. One localized portion of the backing ring fit-up, that is equal to or less than a length that is 20 percent of the outside circumference of the pipe, as determined by the Engineer, may be offset by a gap equal to or less than 1/4 inch, provided that this localized portion is first seal welded using shielded metal arc E7016 or E7018 electrodes. This localized portion shall be marked so that it can be referenced during any required NDT.
 - 3.5. Backing rings shall have sufficient width so that the backing ring will not interfere with the interpretation of the NDT.
4. For steel pipe with an outside diameter greater than 42 inches and with a wall thickness greater than 1 inch, the root opening tolerances may be increased to a maximum of 3/16 inch.
5. For welding limited to fit-up and attaching backing rings and handling devices, the preheat and interpass temperature shall be in conformance with the requirements in AWS D1.1, Section 3.5, "Minimum Preheat and Interpass Temperature Requirements," and with Table 3.2, Category C.

All steel pipe piling shall be capable of meeting the fit-up requirements of AWS D1.1, Section 5.22.3.1, "Girth Weld Alignment (Tubular)," when the material is spliced utilizing a girth weld.

For the purposes of welding and prequalification of base metal, steel pipe piling designated as ASTM A 252 shall be treated as ASTM A 572, Grade 50, or ASTM A 709, Grade 50, in conformance with the requirements in AWS D1.1, Table 3.1.

Butt welded seams subsequently formed, including skelp end welds, shall be 100 percent ultrasonically tested in the final formed and welded condition. The acceptance criteria for UT

shall conform to API 5L for API-licensed facilities or AWS D1.1 for cyclically loaded nontubular connections for welds subject to tensile stress.

Except for tack welding, gas metal arc welding (GMAW) shall not be used for the welding of steel pipe piling. When GMAW is used for tack welding, the filler metal shall not be deposited by short circuiting transfer.

The dimensional tolerances of steel pipe piling shall conform to the following:

1. Outside diameter: $\pm 0.75\%$ of the specified outside diameter
2. Wall thickness: -5% , $+10\%$ of the specified nominal wall thickness
3. Straightness: $\pm 1.0\%$ over the length of the pipe

Except for steel pipe piling marked with the API monogram, each length of steel pipe piling shall be marked as follows:

1. Name and location of the piling manufacturer
2. State Contract number
3. Heat number
4. Welding process
5. Outer diameter, nominal wall thickness, minimum wall thickness, and length
6. Year piling was produced
7. Marked as specified below for each class of steel pipe piling. Only Caltrans audited facilities are approved to mark piling for use on this project.

Class R Steel Pipe Piling

Class R steel pipe piling shall conform to one of the following:

1. Manufactured, welded, tested, and inspected in conformance with API 5L, minimum Grade X52, PSL1, and the following:
 - 1.1. Steel pipe piling shall be manufactured by a facility licensed to apply the API monogram.
 - 1.2. Hydrostatic testing, flattening tests, and the API monogram will not be required.
 - 1.3. Each length shall be marked "Caltrans Class R - API."
2. Manufactured in conformance with ASTM A 252, Grade 3, and the following:
 - 2.1. Arc welding processes shall conform to AWS D1.1.
 - 2.2. Groove welds using submerged arc welding from both sides without backgouging will require a procedure qualification record witnessed by the Engineer.
 - 2.3. Underfill will not be allowed.
 - 2.4. For electric resistance welded pipe, the outer diameter flash shall be removed to a maximum of 1/32 inch.
 - 2.5. The weld reinforcement shall not exceed 1/8 inch.
 - 2.6. The weighing of individual pipe will not be required as specified in ASTM A 252.
 - 2.7. Each length shall be marked "Caltrans Class R - A 252."

CONSTRUCTION

General

Steel pipe piling may be re-tapped to prevent pile set-up provided the field welded splice remains at least 3 feet above the work platform until that splice is approved in writing by the Engineer.

Welds used to attach handling devices to steel pipe piling shall be aligned parallel to the axis of the pile and shall conform to the requirements for field welding specified herein. Permanent bolted connections shall be corrosion resistant.

Field Welding

Field welding of steel pipe piling is defined as welding performed after the material has been transported from an audited facility.

Field welding shall conform to the requirements for circumferential welds as specified in "Materials" of this section and the following:

1. Welds made in the horizontal position where the longitudinal pipe axis is vertical shall be single-bevel groove welds.
2. The minimum preheat and interpass temperature for splice welding and for making repairs shall be 150 °F, regardless of the pipe pile wall thickness or steel grade. In the event welding is disrupted, preheating to 150 °F shall occur before welding is resumed.
3. Welds shall not be water quenched. Welds shall be allowed to cool unassisted to ambient temperature.

2.11 UTILITY CONDUITS (BRIDGE)

Conduit shall be of the sizes and materials shown on the plans, or as specified in this Section or in the Special Provisions. In addition, the Contractor may, as an option at the Contractor's expense and as approved by the Engineer, use conduit of a larger size than that shown or specified, provided the larger size is used for the entire length of the run from outlet to outlet. Reducing couplings will not be permitted.

Conduits to be installed shall be rigid steel or plastic as shown on the plans. The same type of conduit shall be used for the entire length of the run from outlet to outlet.

1. REQUIREMENTS FOR RIGID STEEL CONDUIT

Rigid steel conduit shall be hot-dip galvanized rigid steel conduit conforming to the requirements in UL Publication UL 6 for Rigid Metallic Conduit. The zinc coating will be tested in conformance with the requirements in ASTM Designation: A239.

Bonding bushings to be installed on metal conduit shall be insulated and shall be galvanized or zinc alloy type.

2. REQUIREMENTS FOR PLASTIC CONDUIT

Plastic conduit shall be Polyvinyl chloride conduit (PVC) Schedule 40 conforming to the requirements of UL Standard for Rigid Non-Metallic Conduit (Publication UL 651) and NEMA TC-2. Conduit shall be ninety degrees (90°) C rated. Conduit, fittings and cement shall be produced by the same manufacturer, who shall have at least five (5) years experience manufacturing the product. Material shall have a minimum tensile strength of 7,000 psi at 73.4° F; flexural strength of at least 11,000 psi and a minimum compressive strength of 8,600 psi. All joints shall be solvent welded in accordance with the manufacturer's recommendations.

Conduit shall be installed in conformance with the codes and regulations listed in Section 86-1.02, "Regulations and Code" of the Caltrans Standard Specifications.

The ends of all conduits, whether shop or field cut, shall be reamed to remove burrs and rough edges. Cuts shall be made square and true. Slip joints or running threads will not be permitted for coupling conduit. When a standard coupling cannot be used for coupling metal type conduit, a UL or ETL listed threaded union coupling shall be used. All couplings for metal type conduit shall be tightened to provide a good electrical connection throughout the entire length of the conduit run. Plastic conduit shall be cut with a hacksaw or other tool that will not deform the conduit. Plastic conduit connections shall be of the solvent weld type.

Conduit threads and damaged surfaces on metal conduit shall be painted with 2 applications of approved unthinned zinc-rich primer (organic vehicle type) conforming to the provisions in Section 91, "Paint" of the Caltrans Standard Specifications. Aerosol cans shall not be used.

The ends of rigid steel conduits shall be threaded and shall be capped with standard pipe caps or "pennies" to protect the raceway against dirt and concrete. The ends of plastic conduit shall be capped.

Conduit shall be laid to conform to the curve of the bridge deck without crimping or flattening.

A No. 12 copper pull wire or a pull rope shall be installed in all utility conduits. The pull rope shall consist of a flat, woven, lubricated, soft-fiber polyester tape with a minimum tensile strength of 1,800 pounds and shall have printed sequential measurement markings at least every 3 feet. At least 2 feet of pull wire or rope shall be doubled back into the conduit at each termination.

Conduit couplings shall be located at least 6 inches from the face of a bent cap or abutment.

Where conduits pass through abutment concrete or bent caps, the conduit shall be wrapped with 2 layers of asphalt-felt building paper, securely taped or wired in place. The space around conduits through bridge abutments or bent caps shall be filled with portland cement mortar conforming to the provisions in Section 51-1.135, "Mortar," of the Caltrans Standard Specifications, except that the proportion of cement to sand shall be

one to 3. When the bridge superstructure is to be prestressed, the space around conduits through abutments shall not be filled until the prestressing has been completed.

2.12 WATERLINE (BRIDGE)

1. Ductile Iron Pipe

General

Water pipe and fittings shall be 12-inch ductile iron pipe (DIP) conforming to the requirements of Section 10-28 of the City of Sacramento Standard Specifications for Public Construction. Pipe types, lining, and joint types shall be as specified in these plans and specifications. The work specified in this section includes requirements for furnishing and installing ductile iron pipe and fittings for potable water lines.

The Contractor shall submit for review and approval the following prior to construction:

- Product data on pipe material, pipe fittings, lining and coating, and accessories to be used in construction.
- Manufacturer's certificate certifying the product meets or exceeds the specified requirements.

The contractor shall store and handle all pipe material per the manufacturer's recommendations. Do not place pipe materials on private property or in areas obstructing pedestrian, vehicle or rail traffic. Block individual and stockpiled pipe lengths to prevent moving.

Prior to project closeout, the contractor shall record actual locations of piping mains, valves, connections, and invert elevations.

Materials

All ductile iron pipe shall conform to the requirements of Section 10-27 of the City of Sacramento Standard Specifications.

All pipe joints within the bridge structure shall be restrained in accordance with Section 10-27 of the City of Sacramento Standard Specifications, except "Field-Lok" gaskets are not allowed within the bridge structure.

Construction

Install pipe and fittings in accordance with AWWA C 200 and AWWA M 11. Handle and assemble pipe in accordance with manufacturer's instructions and as indicated on

drawings. Install pipe to indicated elevation to within tolerance of 5/8 inches and to have bearing along pipe supports. Prevent foreign material from entering pipe during placements. Install pipe to allow for expansion and contraction without stressing pipe or joints. Close pipe openings with watertight plugs during work stoppages. Contractor shall flush and disinfect the pipeline and perform a pressure test on the potable water distribution line prior to completion of work. After testing and disinfection, the Contractor shall seal the ends of the pipe as indicated on the drawings to prevent water from entering the pipe and to prevent damage to the pipe.

During pressure testing, Contractor shall install fully restrained end caps suitable to withstand pressures developed during testing. After pressure test has been completed, the Contractor shall remove and seal end caps per the construction drawings. Pressure test steel pipe in accordance with AWWA C200 and the following:

1. Test Pressure: Not less than 150 psi or 50 psi in excess of maximum static pressure, whichever is greater.
2. Conduct hydrostatic test for at least two-hour duration.
3. Fill section to be tested with water slowly, expel air from piping at high points. Close air vents after air is expelled. Raise pressure to specified test pressure.
4. Observe joints, fittings and valves under test. Remove and renew cracked pipe, joints, fittings, and valves showing visible leakage. Retest.
5. Correct visible deficiencies and continue testing at same test pressure for additional 2 hours to determine leakage rate. Maintain pressure within plus or minus 5.0 psig of test pressure. Leakage is defined as quantity of water supplied to piping necessary to maintain test pressure during period of test.
6. No leakage shall be allowed for welded steel pipe with welded joints.
7. When test of pipe indicates leakage greater than allowed, locate source of leakage, make corrections and retest until leakage is within allowable limits. Correct visible leaks regardless of quantity of leakage. No leakage shall be allowed for welded steel pipe with welded joints.

See City of Sacramento Construction Standards for Public Construction sections 27 for additional details. Where discrepancies occur between City of Sacramento Standard Specifications and these specifications, these specifications shall govern.

2. Steel Casing

Steel casing shall be welded steel pipe 18" outside diameter and thickness as specified herein. Steel casing pipe shall be in accordance with ASTM A139, Grade B, unless shown otherwise. The wall thickness shall be 0.375", unless shown otherwise. Any welding to be completed to fabricate steel pipe shall be pre-qualified under the provisions of ANSI-AWS D1.1. Welding procedures shall be required for, but not necessarily limited to, longitudinal and girth or special welds for pipe cylinders, casing joint welds,

reinforcing plates, and grout coupling connections. Field welding of pipe joints for welded steel pipe shall be performed in accordance with the requirements of AWWA C206, AWS D1.1 "Field Welding of Steel Water Pipe Joints" and standard Drawings W-903 and W-904 of Section 38 of the City of Sacramento Standard Construction Specifications for Public Construction. All welding shall be performed by qualified welders welding operators, and tackers who have had prior experience with the type of material to be used. Welders shall be qualified under the provisions of ANSI/AWS D1.1 by an independent local, approved testing agency not more than 6 months prior to commencing work on the casing or pipeline. Machines and electrodes similar to those used in the work shall be used in qualification tests. The Contractor shall bear full expense of qualifying welders. The exterior of the steel casing shall be coated with a liquid epoxy as specified in AWWA C210 with the following exceptions:

- No coal tar products shall be incorporated in the liquid epoxy.
- The curing agent may be an amidoamine as well as the other curing agents listed in AWWA C210. The coating shall be applied to a minimum thickness of 16 mils in not less than two coats.

Casing pipe spacers shall be installed at the intervals recommended by the manufacturer. Insulating spacers shall be Pipeline Seal and Insulator (PSI) Model A12, Calpico Model M-12 or approved equal.

Install carrier pipe as shown on the drawings in accordance with specified drawings. Remove all loose soil from casing. Provide glass reinforced plastic runners or other Engineer approved skids or blocking devices, as required to prevent movement or damage to the pipe during installation. Every individual pipe length or section should be supported per the manufacturer's recommendations.

The Contractor shall submit product data and shop drawings for review and approval on the pipe material, pipe fittings, and accessories to be used in construction.

3. Flexible Pipe Expansion Joints

Flexible expansion joints shall be installed in the locations as indicated on the drawings and shall be manufactured of ductile iron conforming to the material requirements of ASTM A536 and ANSI/AWWA C153/A21.53. Foundry certification of material shall be readily available upon request. Each flexible expansion joint shall be pressure tested prior to shipment against its own restraint to a minimum of 250 psi. A minimum 2:1 safety factor, determined from the published pressure rating, shall apply. Each flexible expansion joint shall consist of an expansion joint designed and cast as an integral part of a ball and socket type flexible joint, having a minimum per ball deflection of 20 degrees, and 6-inches minimum expansion. The flexible expansion fitting shall not expand or exert an axial imparting thrust under internal water pressure. The flexible expansion

fitting shall not increase or decrease the internal water volume as the unit expands or contracts. Flexible pipe expansion joint shall be installed considering the temperature of the pipe during installation. Contractor shall account for expansion and contraction in joint accordingly, based on the temperature of the pipe at the time of installation. All internal surfaces (wetted parts) shall be lined with a minimum of 15 mils of fusion bonded epoxy conforming to the applicable requirements of ANSI/AWWA C116/A21.16. All flexible joints shall be The Force Balanced FLEX-TEND as manufactured by EBAA Iron, or approved equal.

All changes in pipe materials shall include insulating flange kits per City of Sacramento Standard Specification Section 27-17, item 10 Flange Insulating Kits.

The Contractor shall submit product data on the flexible pipe expansion joint, pipe fittings, and accessories to be used in construction of the flexible pipe expansion joint.

4. Pipe Supports

Pipe supports shall be as shown on the Drawings.

5. Manhole lids and Frames

Casting for manhole heads, covers, and other purposes shall be tough gray iron, free from cracks, holes, swells and cold sheets, be of workmanlike finish, and conform to ASTM A48/A 48M, Class 30. The quality shall be such that a blow from a hammer will produce an indentation on a rectangular edge of the casting, without flaking or cracking the metal.

All castings are to be manufactured true to pattern and with satisfactory fit of component parts. Round frames and covers shall have machined bearing surfaces. All manhole covers which do not fit neatly and bear firmly in the ring shall be rejected. See City of Sacramento Standard Detail S140.

2.13 VIBRATION MONITORING

GENERAL

The Contractor shall be responsible for the following, including but not limited to:

A. Furnish and install vibration-monitoring instrumentation. Vibration equipment must be installed and functioning throughout the duration of construction.

B. Protect from damage and maintain instruments installed by the Contractor and repair or replace damaged or inoperative instruments.

C. Collect, interpret and report data from instrumentation specified herein.

D. Implement response actions.

E. Provide and submit historic building photo and video documentation prior to, during and following construction. Care shall be taken to document existing conditions prior to the beginning of work.

F. Provide, monitor and maintain crack monitoring devices on the historic buildings.

G. The City is not responsible for the safety of the work based on vibration-monitoring data, and compliance with this Section does not relieve the Contractor of full responsibility for damage caused by the Contractor's operations.

VIBRATION MONITORING PERSONNEL

A. The Contractor's vibration-monitoring personnel shall have the qualifications specified herein. These personnel may be on the staff of the Contractor. However, they shall not be employed nor compensated by subcontractors, or by persons or entities hired by subcontractors, who will provide other services or material for the project.

B. The Contractor's vibration-monitoring personnel shall include a qualified Vibration Instrumentation Engineer who is a registered Professional Engineer in the State of California. The Vibration Instrumentation Engineer shall:

1. Be on site and supervise the initial installation of each vibration-monitoring instrument.
2. Supervise interpretations of vibration-monitoring data.

C. Vibration monitoring personnel shall also include:

1. Responsible person with authority to stop or take remedial action
2. On-site professional engineer to satisfy reporting requirements specified below.

D. The Contractor's vibration-monitoring personnel shall be subject to the review of the Construction Manager.

SUBMITTALS

Prior to any work and prior to performing any vibration monitoring, the Contractor shall submit to the Engineer a written vibration monitoring plan, vibration monitoring equipment manufacturer's product data and the resumes of the Vibration Instrumentation Engineer and any vibration monitoring technical support personnel. The vibration monitoring equipment manufacturer's data shall describe in detail all vibration monitoring instruments. Requests for consideration of substitutions, if any, shall be submitted together with product data and instruction manuals for requested substitutions.

The resumes of the Vibration Instrumentation Engineer and any vibration monitoring support personnel shall be sufficient to define details of relevant experience.

The written vibration monitoring plan shall detail the procedures for vibration monitoring. Such details shall include, but not limited to:

1. The name of the Firm providing the vibration monitoring services.
2. Names of contractors responsible person(s) and on-site professional engineer. These persons designated by the Contractor shall have the authority to stop the work causing the vibration.
3. Description of the instrumentation and equipment to be used.
4. Measurement locations and methods for mounting the vibration sensors.
5. Procedures for data collection and analysis.
6. Means and methods of providing warning when the particle velocity equals or exceeds specified limits.
7. Generalized plans of action to be implemented in the event the particle velocity equals or exceeds specified limits. The generalized plans of action shall be positive measures by the Contractor to control vibrations (e.g. using alternative construction methods).

Within 5 days of receipt of each instrument at the site, the Contractor shall submit to the Engineer a copy of the instruction manual and the laboratory calibration and test equipment certification.

In addition, the Contractor shall submit data and reports as specified in "Data Reduction, Processing, Plotting and Reporting" in these special provisions.

The review period shall be the same as those set forth in Section 51-1.06A, Falsework Design and Drawings," of the 2006 State Standard Specifications.

VIBRATION MONITORING EQUIPMENT

The Contractor shall provide portable seismographs for monitoring the velocities of ground vibrations resulting from construction activities. Seismographs shall be Model DS-477 Blastmate II as manufactured by InstanTel Inc., Kanata (Ottawa), Ontario, Canada, Model VMS-500 as manufactured by Thomas Instruments, Inc., Spofford, NH, or Model NC5310/D, as manufactured by Nomis Inc., Birmingham, AL, or acceptable equivalent. The seismograph shall have the following minimum features:

1. Seismic range: 0.01 to 4 inches per second with an accuracy of ± 5 percent of the measured peak particle velocity or better at frequencies between 10 Hertz and 100 Hertz, and with a resolution of 0.01 inches per second or less.
2. Frequency response (± 3 dB points): 2 to 200 Hertz.
3. Three channels for simultaneous time-domain monitoring of vibration velocities in digital format on three perpendicular axes.
4. Two power sources: internal rechargeable battery and charger and 115 volts AC. Battery must be capable of supplying power to monitor vibrations continuously for up to 24 hours.

5. Capable of internal, dynamic calibration.
6. Direct on-site writing to printer or website and capability to transfer data from memory to CD-R. Instruments must be capable of producing chart recordings of readings on site within one hour of obtaining the readings. Provide computer software to perform analysis and produce reports of continuous monitoring.
7. Continuous monitoring mode must be capable of recording single-component peak particle velocities, and frequency of peaks with an interval of one minute or less.

The Contractor may request to substitute an "acceptable equivalent" vibration monitoring equipment and shall submit complete comparative data to the Construction Manager for consideration of another product. Any request from the Contractor for consideration of a substitution shall clearly state the nature of the deviation from the product specified. Substitute products shall not be used in the work unless accepted by the Construction Manager in writing. The Construction Manager will be the sole judge of the suitability and equivalency of the proposed substitution.

The Contractor's instrumentation personnel shall conduct regular maintenance of seismograph installations.

All seismographs shall have been calibrated by the manufacturer or certified calibration laboratory within one year of their use on site. A current certificate of calibration shall be submitted to the Engineer with the Contractor's data.

A record of laboratory calibration shall be provided for all vibration-monitoring instruments to be used on site.

Certification shall be provided to indicate that the instruments are calibrated and maintained in accordance with the equipment manufacturer's calibration requirements and that calibrations are traceable to the U. S. National Institute of Standards and Technology (NIST).

VIBRATION MONITORING

The Contractor shall furnish all installation tools, materials, and miscellaneous instrumentation components for vibration monitoring. At the paint shop, the easternmost building in the railyards and adjacent to 5th Street, vibration monitoring and recording shall be performed during the course of all work regardless of vibration levels produced by the work. The Contractor shall notify the Construction Manager at least one working day prior to starting work. No work shall occur unless monitoring equipment is functioning properly.

The equipment shall be set up in a manner such that an immediate warning is given when particle velocity equal to or exceeding 0.20 inches per second is produced. The warning emitted by the vibration-monitoring equipment shall be instantaneously transmitted to the responsible person designated by the Contractor by means of warning lights, audible sounds or electronic transmission.

Monitoring equipment shall be stationed within 3 feet of the exterior of designated building(s) on the side facing the Contractor's work site. The seismograph vibration sensors

shall be firmly mounted on the surface slab of concrete or asphalt, or firmly set in undisturbed soil.

When any reading on monitoring equipment equals or exceeds 0.20 inches per second, work shall immediately cease and the vibration software shall immediately notify the responsible person, Construction Manager and 4 other owner personnel via cell phone text message. Readings shall automatically reset within a 60 second interval. If directed by the Construction Manager, the Contractor shall submit within 24 hours a detailed specific plan of action so that the vibration limits are not violated. The Contractor shall take whatever action is necessary to reduce and maintain the monitoring equipment reading below a particle velocity of 0.20 inches per second. If the Contractor's operations cause this threshold to be exceeded, then the Contractor may be required to:

- Use smaller hammers/equipment or forces to reduce vibration. The vibration is expected to be inversely proportional to the square root of the ratio of force.
- Pre-drill or relief drill as needed to reduce ground vibration or reduce duration of high vibration.

In the event that the particle velocity equals or exceeds the specific limits of vibration (0.20 in/sec), the contractor will stop the work causing vibration. The responsible person as designated by the contractor will consult with the Owner and crew performing the work on a change in procedure or equipment to adjust the work process to control vibrations. The following procedure will be put in place:

0.20 in/sec < Vibration Level < 0.25 in/sec

1. Stop work causing vibration in the area where the vibration monitor has detected vibration that equals or exceeds the specified limits. The vibration levels will be confirmed via vibration software printout as soon as possible and in all cases within one hour.
2. The designated responsible person for the Contractor will meet with the crew performing the work and the City to discuss the current procedures and activities.
3. After an understanding of the current procedures are explained and vibration levels confirmed, a discussion will take place between the Contractor's responsible person, the City representative and the crew performing the work as to ideas on how to change the operation to provide better vibration control.
4. Once the best options are identified a reasonable solution is accepted, it will be tested and implemented as the new procedure to this type of work in the areas surrounding the building(s) affected by the vibration. This will be documented on a City approved alarm form and completed by the contractor.
5. Once the best options are identified, a reasonable solution will be tested and implemented as the new procedure to this type of work in the areas surrounding the building(s) affected by the vibration.

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Vibration Levels \geq 0.25 in/sec

1. Stop work causing vibration in the area where the vibration monitor has detected vibration that equals or exceeds the specified limits. The vibration levels will be confirmed via vibration software printout as soon as possible and in all cases within one hour.
2. The designated responsible person for the Contractor will meet with the crew performing the work and the City to discuss the current procedures and activities.

3. After an understanding of the current procedures are explained and vibration levels confirmed, a discussion will take place between the Contractors responsible person, the City representative and the crew performing the work as to ideas on how to change the operation to provide better vibration control.

4. Contractor and City will document on alarm form the inspection of crack monitoring devices and the survey of building settlement benchmarks. Inspection shall include visual and photo documentation.

5. If no apparent movement or damage is seen, and approved by the Contractor and City, best options will be determined to continue work. Once the best options are identified a reasonable solution is accepted, it will be tested and implemented as the new procedure to this type of work in the areas surrounding the building(s) affected by the vibration. This will be documented on a City approved alarm form and completed by the contractor.

6. If monitoring identifies damage to a resource from construction related activities, all vibration inducing activities shall cease until the contractor submits a restoration plan and additional protection plan to the City or its agent (in consultation with building owner, Caltrans, FHWA, and SHPO) and implements approved restoration and protection measures to avoid further damage.

DATA COLLECTION

Prior to any vibration-producing construction activity, the Contractor shall collect seismograph data to document background vibrations at each monitoring location. This monitoring shall consist of a continuous recording of the maximum single-component peak particle velocities for one-minute intervals, which shall be printed on a 8.5 inch by 11 inch size chart. The background monitoring shall be performed for a minimum of two non-consecutive workdays, spanning the hours during which construction activities will take place.

During the monitoring, the Contractor shall document all activities that are responsible for the measured vibration levels, and submit the documentation to the Engineer with the data as specified in section "Data Reduction, Processing, Plotting and Reporting" in these Special Provisions.

All vibration monitoring data shall be recorded contemporaneously and plotted continuously on a graph by the data acquisition equipment. Each graph shall show time-domain wave traces (particle velocity versus time) for each transducer with the same vertical and horizontal axes scale.

DATA REDUCTION, PROCESSING, PLOTTING AND REPORTING

Within 10 working days after the completion of the background vibration monitoring, the Contractor shall submit to the Engineer a hard copy report documenting the results at each of the monitoring locations.

During construction, including soil compaction and demolition, the Contractor shall provide weekly, hard copy reports summarizing any vibration monitoring data collected at the specified vibration- monitoring, locations. The reports for each week shall be submitted on or before the end of the following week.

All reports shall be signed by the approved Vibration Instrumentation Engineer, and shall include the following:

1. Project identification, including District, County, Route, Post Mile, Project Name and Bridge number as shown on the project plans.
2. Location of the monitoring equipment.
3. Location of vibration sources (e.g. train traffic, compaction equipment, etc.)
4. Summary tables indicating the date, time and magnitude and frequency of maximum single- component peak particle velocity measured during each one-hour interval of the monitoring period.
5. Field data foams (construction vibration monitoring only).
6. Appendix graphs of the charts printed during the monitoring periods.

In addition to the hard copy data specified herein, the Contractor shall provide data on compact disc with each report. Electronic data files for all instrument data shall be provided in Excel (.xls) format.

The Contractor shall not disclose any instrumentation data to third parties and shall not publish data without prior written consent of the City.

2.14 LIGHTWEIGHT EMBANKMENT MATERIAL (CELLULAR CONCRETE BACKFILL)

The work shall consist of constructing an embankment with lightweight fill (cellular concrete backfill) to the lines, grades, and dimensions shown on the Drawings in accordance with the State Standard Specifications and these special provisions and as directed by the Construction Manager.

Attention is directed to Section 2.10, "Earth Retaining Structures," of these special provisions.

The Contractor shall furnish two mix designs. Mix No. 1 shall produce a maximum cast density (at point of placement) of 45 pcf with a minimum compressive strength of 120 psi at 28 days and maximum compressive strength of 220 psi at 28 days. Mix No. 2 shall produce a maximum cast density (at point of placement) of 45 pcf with a minimum compressive strength of 60 psi at 28 days and maximum compressive strength of 220 psi at 28 days.

Mix No. 1 shall be placed within the upper 3 feet of finish cellular concrete grade. Mix No. 2 shall be placed at depths greater than 3 feet below finished cellular concrete grade. At the Contractor's option, Mix No. 1 may be substituted for Mix No. 2 and placed at depths greater than 3 feet below finish cellular concrete grade.

The Contractor shall provide the Construction Manager with a Work Plan of the equipment and procedures proposed at least 10 working days prior to placement; items in the submittal shall include:

1. Material list of items; manufacturer's specifications;

2. Mix design(s), including laboratory data using the mix design verifying mass and strength.
3. Proposed equipment and procedures.
4. Form work for installation of lightweight fill (cellular concrete backfill), including wall panels and temporary form systems. Temporary form systems shall conform to the manufacturer's specifications. Form work shall be water tight and must be capable of supporting loads of 3 times the calculated load of the lightweight fill (cellular concrete backfill).

Admixtures for accelerating the set time may be used in accordance with the manufacturer's recommendations. Chemical admixtures shall conform to the requirements in ASTM C 494 and shall be in accordance with manufacturer's recommended dosage or as determined by trial mixtures. A foaming agent shall be used and shall be tested in accordance with ASTM C 796 and ASTM C869. Mixing water shall be potable and free of deleterious amounts of acids, alkali, salts, oils, and organic materials which would adversely affect the setting or strength of the lightweight fill (cellular concrete backfill).

Portland Cement shall comply with ASTM C 150, Types I, II, or III. Pozzolans and other cementitious materials may be used when specifically approved by the manufacturer of the foaming agent.

The Contractor shall be responsible for quality control testing. The Construction Manager may perform additional testing at lesser intervals for the purposes of quality assurance. At the point of placement, the density shall be in accordance with the specified cast density. In addition to quality control density tests performed every 30 minutes and recorded onsite, a single cast density test shall represent the lesser of 300 cubic yards or one day's production.

The compressive strength and sampling for compressive strength shall be tested in accordance with ASTM C 796 and ASTM C 495 except as follows:

1. Unless otherwise approved by the Construction Manager, the specimens shall be 3-inch by 6-inch cylinders. During molding, place the concrete in two approximately equal layers, and raise and drop the cylinders approximately 1 inch three times on a hard surface after placing each layer; no rodding shall be allowed. Specimens shall be covered and protected immediately after casting to prevent damage and loss of moisture.
2. Specimens shall be moist cured in the molds for a period of seven (7) days prior to the 28-day compressive strength tests. Specimens shall not be oven dried.
3. A Minimum of four 3-inch by 6-inch cylinders shall be cast for compressive strength testing representing the lesser of 300 cubic yards or one day's production. Two specimens from each compressive strength set shall be tested for compressive strength at 28 days. The additional specimens should be held for possible compressive strength testing as directed by the Construction Manager.

Lightweight fill (cellular concrete backfill) shall be placed to the designated dimensions and grades as shown on the Drawings and as specified in Sections 19-1.03, "Grade Tolerance" of the State Standard Specifications.

Lift thickness for lightweight fill (cellular concrete backfill) shall not exceed 2.5 feet. If more than one lift is required, the layer to receive the next lift shall be placed so as to provide surface roughness for bonding of the subsequent pours. After curing for 12 hours, any crumbling area on the surface should be removed before the next layer is placed. Unless otherwise shown on the Drawings, surface stepping of the finish cellular concrete grade shall be limited to a maximum of 5 inches. Grades of up to 5 percent may be made by adding a thickening agent to the mix, in conformance with the manufacturer's recommendations.

A Minimum 12-hour waiting time between lifts shall be required. If ambient temperatures are anticipated to be below 40 degrees Fahrenheit within 24 hours after placement, the mixing water should be heated when specifically approved by the manufacturer of the foaming agent, or placement shall be prohibited during such period. Placement shall not be allowed on frozen ground.

Lightweight fill (cellular concrete backfill) shall be job site batched, mixed with the foaming agent, and placed with the specialized equipment certified by the manufacturer. Slurry coats and multilayer casting are acceptable methods of installation.

Subgrade to receive lightweight fill (cellular concrete backfill) shall be free of all loose and extraneous material. Subgrade shall be uniformly moist, and any excess water standing on the surface shall be removed prior to placing lightweight fill (cellular concrete backfill).

Construction vehicles and equipment will not be allowed on the final or top lift of the lightweight fill (cellular concrete backfill) until after the lightweight fill (cellular concrete backfill) has attained its full specified compressive strength as shown on the Drawings. Construction vehicles and equipment shall be at least 6 feet from the edge of the top layer of the lightweight fill (cellular concrete backfill) during construction. Light duty construction vehicles and equipment may be allowed on the lower lifts of the lightweight fill (cellular concrete backfill) after design strength is achieved. All traffic should be contained within the middle third and shall avoid areas of reinforcing mat placement.

The top surface of the final layer of lightweight fill (cellular concrete backfill) shall be clean, smooth, and free of depressions or sharp edges.

Placement and compaction of the pavement structural section atop the lightweight fill (cellular concrete backfill) shall not damage the lightweight fill (cellular concrete backfill) or the underlying waterproofing membrane. Damaged areas shall be removed and repaired by the Contractor at the Contractor's expense. Roadway pavement structural section shall not be placed until the lightweight fill (cellular concrete) has attained its full compressive strength. The exposed sides of the lightweight fill (cellular concrete) shall be covered with embankment material compacted to a relative compaction of not less than 90 percent.

Damage to lightweight fill (cellular concrete backfill) shall be promptly repaired by the Contractor at the Contractor's expense, as directed by the Construction Manager.

2.15 EARTH RETAINING STRUCTURES

Earth retaining structures, consisting of mechanically stabilized embankment (MSE), shall conform to the details shown on the Drawings and these special provisions.

AGREEMENT
(Construction Contract Over \$25,000)

THIS AGREEMENT, dated for identification October 15, 2013, is made and entered into between the CITY OF SACRAMENTO, a municipal corporation ("City"), and O.C. Jones & Sons, Inc. 1520 Fourth Street, Berkeley CA 94710-1774 ("Contractor").

The City and Contractor hereby mutually agree as follows:

1. CONTRACT DOCUMENTS

The Contract Documents, sometimes also referred to as the "Contract," consist of the following items, which are hereby incorporated by reference as if set forth in full in this Agreement:

- The Notice to Contractors
- The Proposal Form submitted by the Contractor
- The Instructions to Bidders
- The Emerging and Small Business Enterprise (ESBE) Requirements
- The Requirements for the Non-Discrimination in Employee Benefits by City Contractors Ordinance and the Declaration of Compliance
- The City's Reference Guide for Construction Contracts
- The Addenda, if any
- This Agreement
- The Standard Specifications
- The Special Provisions
- The Plans and Technical Specifications
- The drawings and other data and all developments thereof prepared by City pursuant to the Contract
- Any modifications of any of the foregoing made or approved by City, including but not limited to duly authorized change orders.

Unless specifically noted otherwise, references to the "Standard Specifications" shall mean and refer to the Standard Specifications for Public Construction of the City of Sacramento approved by the Sacramento City Council on June 4, 2007 (Resolution No. 2007-350), and any subsequent amendments thereto approved by the Sacramento City Council or the Sacramento City Manager. Work called for in any one Contract Document and not mentioned in another is to be performed and executed as if mentioned in all Contract Documents. The table of contents, titles and headings contained in the Contract Documents are provided solely to facilitate reference to various provisions of the Contract Documents and in no way affect or limit the interpretation of the provisions to which they refer.

2. DEFINITIONS

Unless otherwise specifically provided herein, all words and phrases defined in the Standard Specifications shall have the same meaning and intent in this Agreement.

3. AGREEMENT CONTROLS

In the event of a conflict between any of the terms and conditions set forth in this Agreement and the terms and conditions set forth in other Contract Documents, the terms and conditions set forth in this Agreement shall prevail, except that the provisions of any duly authorized change order shall prevail over any conflicting provisions of this Agreement.

4. SCOPE OF CONTRACT

Contractor agrees to furnish all tools, equipment, apparatus, facilities, labor, material and transportation necessary to perform and complete in a good and workmanlike manner to the satisfaction of City, all the Work called for in the Contract Documents entitled:

5th Street Viaduct & Railyards Blvd Project (PN: T15135800)

including the Work called for in the following alternative bid items described in the Proposal Form:

Contractor agrees to perform such Work in the manner designated in and in strict conformity with the Contract Documents.

5. CONTRACT AMOUNT AND PAYMENTS

City agrees to pay and Contractor agrees to accept, as complete payment for the above Work, in accordance with the schedule and procedures set forth in the Contract Documents and subject to deductions, withholdings and additions as specified in the Contract Documents, a total sum that shall not exceed the total bid amount set forth in Contractor's Proposal Form. In addition, subject to deductions, withholdings and additions as specified in the Contract Documents, payment for individual items of the Work shall be computed as follows:

(A) For items of the Work for which a lump sum price is specified in Contractor's Proposal Form, Contractor shall be paid the lump sum price(s) specified in Contractor's Proposal Form; and

(B) For items of the Work for which a unit price is specified in Contractor's Proposal Form, Contractor shall be paid the sum computed at such unit price, or computed at a different price if such different price is determined by City in accordance with the Standard Specifications, based on the actual amount of each such item performed and/or furnished and incorporated in the Work; provided that in no event shall the total sum for a unit price item exceed the total bid amount set forth for such item in the Contractor's Proposal Form, unless authorized by Change Order.

6. PROGRESS PAYMENTS

Subject to the terms and conditions of the Contract, City shall cause payments to be made upon demand of Contractor as follows:

(A) On or about the first of the month, the Engineer shall present to the Contractor a statement showing the amount of labor and materials incorporated in the Work through the twentieth (20) calendar day of the preceding month. , and, The City shall issue a certificate for ninety-five (95) percent of the amount it shall find to be due, subject to any deductions or withholdings authorized or required under the Contract or any applicable Laws or Regulations, if (i) both Contractor and Engineer approve the statement in writing; (ii) the City's labor compliance officer provides written approval; and, (iii) Contractor executes and submits to City a conditional waiver and release for the amount certified by the City on a form that complies with Civil Code section 8132. Not later than five (5) days after receipt of a progress payment, Contractor shall execute and submit to City an unconditional waiver and release on a form that complies with Civil Code section 8134 for an amount equal to the progress payment.

(B) No inaccuracy or error in said monthly estimates shall operate to release Contractor from damages arising from such Work or from enforcement of each and every provision of the Contract Documents, and City shall have the right subsequently to correct any error made in any estimate for payment.

(C) Contractor shall not be paid for any defective or improper Work.

(D) The remaining five (5) percent of the value of the Work performed under the Contract, if unencumbered and subject to any deductions or withholdings authorized or required under the Contract or any applicable Laws or Regulations, shall be released not later than sixty (60) days after (i) completion and final acceptance of the Work by City; and (ii) Contractor executes and submits to City a conditional waiver and release for the amount to be released on a form that complies with Civil Code section 8136. Not later than five (5) days after receipt of final payment, Contractor shall execute and submit to City an unconditional waiver and release on a form that complies with Civil Code section 8138 for an amount equal to the final payment. Acceptance by Contractor of the final payment shall constitute a waiver of all claims against the City arising under the Contract Documents, except for disputed claims in stated amounts that the Contractor specifically reserves in writing, but only to the extent that the Contractor has complied with all procedures and requirements applicable to the presentation and processing of such claim(s) under the Contract Documents. Contractor shall be entitled to substitute securities for retention or to direct that payments of retention be made into escrow, as provided in Public Contract Code Section 22300, upon execution of the City's Escrow Agreement for Security Deposits in Lieu of Retention.

(E) The parties agree that, for purposes of the timely progress payment requirements specified in Public Contract Code Section 20104.50, the date that the City receives a statement jointly approved by the Contractor and the Engineer as provided above shall be deemed to constitute the date that City receives an undisputed and properly submitted payment request from the Contractor. Progress payments not made within 30 days after this date may be subject to payment of interest as provided in Public Contract Code Section 20104.50.

7. RETENTION OF SUMS CHARGED AGAINST CONTRACTOR

When, under the provisions of this Contract or any applicable Laws or Regulations, City is authorized or required to withhold, deduct or charge any sum of money against Contractor, City may deduct and retain the amount of such charge from the amount of the next succeeding progress estimate(s), or from any other moneys due or that may become due Contractor from City. If, on completion or termination of the Contract, sums due Contractor are insufficient to pay City's charges, City shall have the right to recover the balance from Contractor or its Sureties.

8. COMMENCEMENT AND PROSECUTION OF WORK

Contractor shall commence the Work not later than fifteen (15) working days after the date of the written Notice to Proceed from City to Contractor and shall diligently prosecute the Work to final completion. The phrase "commence the Work" means to engage in a continuous program on-site including, but not limited to, site clearance, grading, dredging, land filling and the fabrications, erection, or installation of the Work. The Notice to Proceed shall be issued within fifteen (15) calendar days following execution of the Agreement by the City and the filing by Contractor of the required Bonds and proof of insurance, provided that the Engineer may delay issuance of the Notice to Proceed if the Engineer determines in the Engineer's sole discretion that conditions on the site of the Work are unsuitable for commencement of the Work. After the Notice to Proceed is issued, the continuous prosecution of Work by Contractor shall be subject only to Excusable Delays as defined in this Agreement.

9. TIME OF COMPLETION

The entire Work shall be brought to completion in the manner provided for in the Contract Documents on or before 220 Working days from the date of the Notice to Proceed (hereinafter called the "Completion Date") unless extensions of time are granted in accordance with the Contract Documents.

Failure to complete the entire Work by the Completion Date and in the manner provided for in the Contract Documents shall subject Contractor to liquidated damages as provided in this Agreement. Time is and shall be of the essence in the performance of the Contract and the Work.

10. PAYMENTS DO NOT IMPLY ACCEPTANCE OF WORK

The payment of any progress payment, or the acceptance thereof by Contractor, shall not constitute acceptance of the Work or any portion thereof and shall in no way reduce the liability of Contractor to replace unsatisfactory work or material, whether or not the unsatisfactory character of such work or material was apparent or detected at the time such payment was made.

11. ACCEPTANCE NOT RELEASE

Contractor shall correct immediately any defective or imperfect work or materials that may be discovered before final acceptance of the entire Work, whether or not such defect or imperfection was previously noticed or identified by the City. The inspection of the Work, or any part thereof, shall not relieve Contractor of any of its obligations to perform satisfactory work as herein specified.

Failure or neglect on the part of City or any of its officers, employees or authorized agents to discover, identify, condemn or reject defective or imperfect work or materials shall not be construed to imply an acceptance of such work or materials, if such defect or imperfection becomes evident at any time prior to final acceptance of the entire Work, nor shall such failure or neglect be construed as barring City from enforcing Contractor's warranty(ies) or otherwise recovering damages or such a sum of money as may be required to repair or rebuild the defective or imperfect work or materials whenever City may discover the same, subject only to any statutes of limitation that may apply to any such claim.

12. CITY'S RIGHT TO TAKE POSSESSION OF THE WORK IN WHOLE OR IN PART

The City shall have the right at any time to enter upon the Work and perform work not covered by this Contract, or to occupy and use a portion of the Work, prior to the date of the final acceptance of the Work as a whole, without in any way relieving Contractor of any obligations under this Contract.

13. NO WAIVER OF REMEDIES

Neither the inspection by City, its officers, employees or agents, nor any certificate or other approval for the payment of money, nor any payment for, nor acceptance of the whole or any part of the Work by City, nor any extensions of time, nor any position taken by City, its officers, employees or its agents shall operate as a waiver of any provision of the Contract Documents nor of any power herein reserved to City or any right to damages herein provided, nor shall any waiver of any breach of this Agreement be held to be a waiver of any other or subsequent breach. All remedies provided in the Contract Documents shall be taken and construed as cumulative; in addition to each and every other remedy herein provided, the City shall have any and all equitable and legal remedies that it would in any case have.

14. WARRANTY

Except as otherwise expressly provided in the Contract Documents, and excepting only items of routine maintenance, ordinary wear and tear and unusual abuse or neglect by City, Contractor warrants and guarantees all Work executed and all supplies, materials and devices of whatsoever nature incorporated in or attached to the Work, or otherwise provided as a part of the Work pursuant to the Contract, to be absolutely free of all defects of workmanship and materials for a period of one year after final acceptance

of the entire Work by the City. Contractor shall repair or replace all work or material, together with any other work or material that may be displaced or damaged in so doing, that may prove defective in workmanship or material within this one year warranty period without expense or charge of any nature whatsoever to City.

In the event that Contractor shall fail to comply with the conditions of the foregoing warranty within ten (10) days after being notified of the defect in writing, City shall have the right, but shall not be obligated, to repair, or obtain the repair of, the defect and Contractor shall pay to City on demand all costs and expense of such repair. Notwithstanding anything herein to the contrary, in the event that any defect in workmanship or material covered by the foregoing warranty results in a condition that constitutes an immediate hazard to public health or safety, or any property interest, or any person, City shall have the right to immediately repair, or cause to be repaired, such defect, and Contractor shall pay to City on demand all costs and expense of such repair. The foregoing statement relating to hazards to health, safety or property shall be deemed to include both temporary and permanent repairs that may be required as determined in the sole discretion and judgment of City.

In addition to the above, the Contractor shall make a written assignment of all manufacturer's and other product warranties to the City, prior to completion and final acceptance of the Work by City.

The Contractor's Performance Bond shall secure the performance of the Contractor's obligations under this Section 14, and the Contractor and its Surety shall be jointly and severally liable for these obligations.

15. LIQUIDATED DAMAGES IF WORK NOT COMPLETED ON TIME

(A) The actual fact of the occurrence of damages and the actual amount of the damages that City would suffer if the entire Work, and/or any specified portion thereof, were not completed within the time(s) specified herein are dependent upon many circumstances and conditions that could prevail in various combinations, and for this reason, it is impracticable and extremely difficult to fix the actual damages. Damages that City would suffer in the event of such delay include: loss of the use of the project; expenses of prolonged assignment to the project of an architectural and/or engineering staff; prolonged costs of administration, inspection, and supervision; increased operational expenses and/or impaired operation of other facilities dependent upon completion of the project; and the loss and inconvenience suffered by the public within the City of Sacramento by reason of the delay in the completion of the project or portion thereof. Accordingly, the parties agree, and by execution of this Agreement, Contractor acknowledges that it understands and agrees, that the amount(s) set forth herein as liquidated damages reflect the parties' best efforts at the time of entering into the Contract to estimate the damages that may be incurred by City and the public due to the Contractor's delay in completion of the Work and/or any specified portion thereof, and shall be presumed to be the amount of damages sustained by the failure of Contractor to complete the entire Work and/or any specified portion thereof within the time(s) specified herein.

(B) Contractor shall pay liquidated damages to City for failure to complete the entire Work by the Completion Date (as extended in accordance with the Contract Documents, if applicable) in the amount of **\$2,500** for each calendar day after the Completion Date (as extended in accordance with the Contract Documents, if applicable), continuing to the time at which the entire Work is completed. Such amount is the actual cash value agreed upon by the City and Contractor as the loss to City and the public resulting from Contractor's default.

The parties agree, and by execution of this Agreement, Contractor acknowledges that it understands and agrees, that the foregoing provisions provide for the imposition of liquidated damages from the Completion Date (as extended in accordance with the Contract Documents, if applicable) until the date of completion of the entire Work as determined by the Engineer in accordance with Section 8-4 of the

Standard Specifications, whether or not the Work or any portion thereof is claimed or determined to be substantially complete prior to such date of completion.

(C) In the event Contractor shall become liable for liquidated damages, City, in addition to all other remedies provided by law, shall have the right to withhold any and all payments that otherwise would be or become due Contractor until the liability of Contractor under this section is finally determined. City shall have the right to use and apply such payments, in whole or in part, to reimburse City for all liquidated damages due or to become due to City. Any remaining balance of such payments shall be paid to Contractor only after discharge in full of all liability incurred by Contractor under this section or otherwise under any provision of the Contract Documents or any applicable Law or Regulation. If the sum so retained by City is not sufficient to discharge all such liabilities of Contractor, Contractor shall continue to remain liable to City until all such liabilities are satisfied in full. No failure by City to withhold any payment as specified above shall in any manner be construed to constitute a release of any such liabilities nor a waiver of the City's right to withhold payment for such liabilities.

16. INDEMNITY AND HOLD HARMLESS

(A) Contractor shall defend, hold harmless and indemnify the City, its officers, employees, and agents, and each and every one of them, from and against any and all actions, damages, costs, liabilities, claims, demands, losses, judgments, penalties, costs and expenses of every type and description, whether arising on or off the site of the Work, including, but not limited to, any fees and/or costs reasonably incurred by City's staff attorneys or outside attorneys and any fees and expenses incurred in enforcing this provision (hereafter collectively referred to as "Liabilities"), including but not limited to Liabilities arising from personal injury or death, damage to personal, real or intellectual property or the environment, contractual or other economic damages, or regulatory penalties, arising out of or in any way connected with performance of or failure to perform the Work by the Contractor, any subcontractor or agent, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, whether or not (i) such Liabilities are caused in part by a party indemnified hereunder, or (ii) such Liabilities are litigated, settled or reduced to judgment; provided that the foregoing indemnity does not apply to liability for damages for death or bodily injury to persons, injury to property, or other loss, damage or expense to the extent arising from (i) the sole negligence or willful misconduct of, or defects in design furnished by, City, its agents, servants, or independent contractors who are directly responsible to City, or (ii) the active negligence of City.

(B) The existence or acceptance by City of any of the insurance policies or coverages described in this Agreement shall not affect or limit any of City's rights under this Section 16, nor shall the limits of such insurance limit the liability of Contractor hereunder. The provisions of this Section 16 shall survive any expiration or termination of the Contract.

17. CONTRACTOR SHALL ASSUME RISKS

Until the completion and final acceptance by City of all Work under this Contract, the Work shall be under Contractor's responsible care and charge, and Contractor, at no cost to City, shall rebuild, repair, restore and make good all injuries, damages, re-erections, and repairs occasioned or rendered necessary by accidental causes of any nature, to all or any portions of the Work.

18. GENERAL LIABILITY OF CONTRACTOR

Except as otherwise herein expressly stipulated, Contractor shall perform all the Work and furnish all the labor, materials, tools, equipment, apparatus, facilities, transportation, power and light, and appliances, necessary or proper for performing and completing the Work herein required in the manner

and within the time herein specified. The mention of any specific duty or liability of Contractor shall not be construed as a limitation or restriction of any general liability or duty of Contractor, and any reference to any specific duty or liability shall be construed to be solely for the purpose of explanation.

19. INSURANCE

During the entire term of this Contract and until completion and final acceptance of the Work as provided in the Contract Documents, Contractor shall maintain in full force and effect the insurance coverage described in this section.

Full compensation for all premiums that Contractor is required to pay for the insurance coverage described herein shall be included in the compensation specified for performance of the Work under the Contract. No additional compensation will be provided for Contractor's insurance premiums.

It is understood and agreed by the Contractor that its liability to the City shall not in any way be limited to or affected by the amount of insurance coverage required of or carried by the Contractor.

(A) Minimum Scope and Limits of Insurance Coverage

(1) Commercial General Liability Insurance, providing coverage at least as broad as ISO CGL Form 00 01 on an occurrence basis for bodily injury, including death, of one or more persons, property damage and personal injury, with limits of not less than two million dollars (\$2,000,000) per occurrence and two million dollars (\$2,000,000) per project aggregate. The policy shall provide contractual liability and products and completed operations coverage for the term of the policy.

(2) Automobile Liability Insurance providing coverage at least as broad as ISO Form CA 00 01 on an occurrence basis for bodily injury, including death, of one or more persons, property damage and personal injury, with limits of not less than two million dollars (\$2,000,000) per occurrence. The policy shall provide coverage for owned, non-owned and/or hired autos as appropriate to the operations of the Contractor.

(3) Workers' Compensation Insurance with statutory limits, and Employers' Liability Insurance with limits of not less than one million dollars (\$1,000,000). The Worker's Compensation policy shall include a waiver of subrogation in favor of the City of Sacramento, IA Sacramento Holdings, L.L.C. In the event Contractor is self-insured, it shall furnish City with a certificate of consent to self-insure issued by the director of the California Department of Industrial Relations.

(4) Pollution Legal Liability Insurance (including asbestos and lead paint) providing coverage on an occurrence form with limits of not less than \$10,000,000 per occurrence.

(5) Umbrella/Excess Liability Insurance providing coverage at least as broad as the underlying policies and with limits of not less than \$25,000,000 per occurrence on an occurrence basis in excess of the underlying insurance coverage limits.

(6) Builder's Risk Property Insurance

- i. Contractor shall purchase and maintain Builder's Risk Insurance with a company or companies lawfully authorized to do business in the State of California. Such policy shall be written in the amount of the total bid amount set forth in Contractor's Proposal Form, plus the value of subsequent Contract

modifications, comprising the total value Work at the project site on a replacement cost basis. Such insurance shall be maintained, unless otherwise provided in the Contract Documents or otherwise agreed upon in writing by all persons and entities who are beneficiaries of such insurance, until final payment has been made as provided in the Contract Documents or until no persons or entities other than the Contractor has an insurable interest in the Work required to be covered, whichever is later. This insurance shall include the City, IA Holdings, and all subcontractors working on the Work as primary additional insureds. Contractor shall be responsible to pay any deductible under the policy.

- ii. Such policy or policies shall provide waivers of all subrogation rights against the City of Sacramento, IA Holdings, and all subcontractors working on the Work, even if their negligence causes a covered loss, and regardless of the extent of their insurable interest in the covered property.
- iii. Such Builder's Risk Insurance shall be on an "all risk" or equivalent policy form and shall include, without limitation, insurance against the perils of fire (with extended coverage), flood, theft, vandalism, malicious mischief, collapse, windstorm, testing and startup and debris removal.
- iv. Such policy or policies shall cover portions of the materials for the Work that are stored off of the project site and also portions in transit.

(B) Additional Insured Coverage

(1) Commercial General Liability Insurance: The City, IA Sacramento Holdings, L.L.C., and their officials, employees and volunteers shall be covered by policy terms or endorsement as additional insureds as respects general liability arising out of activities performed by or on behalf of Contractor, products and completed operations of Contractor, and premises owned, leased or used by Contractor. The general liability additional insured endorsement must be signed by an authorized representative of the insurance carrier.

If the policy includes a blanket additional insured endorsement or contractual additional insured coverage, the above signature requirement may be fulfilled by submitting that document with a signed declaration page referencing the blanket endorsement or policy form.

(2) Automobile Liability Insurance: The City, IA Sacramento Holdings, L.L.C., and their officials, employees and volunteers shall be covered by policy terms or endorsement as additional insureds under the automobile liability insurance, pollution legal liability insurance, and umbrella/excess liability insurance policies.

(C) Other Insurance Provisions

The policies are to contain, or be endorsed to contain, the following provisions:

(1) Contractor's insurance coverage shall be primary insurance as respects City, IA Sacramento Holdings, L.L.C., and their officials, employees and volunteers. Any insurance or self-insurance maintained by City, IA Sacramento Holdings, L.L.C., and their officials, employees or volunteers shall be in excess of Contractor's insurance and shall not contribute with it.

(2) Any failure to comply with reporting provisions of the policies shall not affect coverage provided to City, IA Sacramento Holdings, L.L.C., and their officials, employees or volunteers.

(3) Coverage shall state that Contractor's insurance 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.

(4) City will be provided with sixty (60) days written notice of cancellation or material change in the policy language or terms.

(D) Acceptability of Insurance

Insurance shall be placed with insurers with a Bests' rating of not less than A:V. Self-insured retentions, policy terms or other variations that do not comply with the requirements of this Section 19 must be declared to and approved by the City Risk Management Division in writing prior to execution of this Agreement.

(E) Verification of Coverage

(1) Contractor shall furnish City with certificates and required endorsements evidencing the insurance required. The certificates and endorsements shall be forwarded to the City representative designated by City. Copies of policies shall be delivered to the City on demand. Certificates of insurance shall be signed by an authorized representative of the insurance carrier.

(2) The City may withdraw its offer of contract or cancel the Contract if the certificates of insurance and endorsements required have not been provided prior to execution of this Agreement. The City may withhold payments to Contractor and/or cancel the Contract if the insurance is canceled or Contractor otherwise ceases to be insured as required herein.

(F) Subcontractors

Contractor shall require and verify that all subcontractors maintain insurance coverage that meets the minimum scope and limits of insurance coverage specified in subsections A(1), A(2) and A(3) above.

20. FAILURE TO MAINTAIN BONDS OR INSURANCE

If, at any time during the performance of this Contract, Contractor fails to maintain any item of the bonds and/or insurance required under the Contract in full force and effect, Contractor shall immediately suspend all work under the Contract and notify City in writing of such failure. After such notice is provided, or if City discovers such failure and notifies Contractor, the City thereafter may withhold all Contract payments due or that become due until notice is received by City that such bonds and/or insurance have been restored in full force and effect and that the premiums therefor have been paid for a period satisfactory to the Division of Risk Management. Contractor shall not resume work until notified by City to do so, and the City shall have no responsibility or liability for any costs incurred by Contractor as a result of such suspension of Work.

In addition to the foregoing, any failure to maintain any item of the required bonds and/or insurance at any time during the performance of this Contract will be sufficient cause for termination of the Contract by City.

The Contractor shall be solely responsible for, and shall defend, indemnify and hold harmless the City, its officers, employees and agents against and from, any and all damages, claims, losses, actions, costs or other expenses of any kind incurred by any party as a direct or indirect result of any suspension of Work or termination of the Contract under the provisions of this Section.

21. EXCUSABLE DELAYS

For the purpose of these Contract Documents, the term "Excusable Delay" shall mean, and is limited to, delay caused directly by: acts of God; acts of a public enemy; fires; inclement weather as determined by the Engineer; riots; insurrections; epidemics; quarantine restrictions; strikes; lockouts; sitdowns; acts of a governmental agency; priorities or privileges established for the manufacture, assemble, or allotment of materials necessary in the Work by order, decree or otherwise of the United States or by any department, bureau, commission, committee, agent, or administrator of any legally constituted public authority; changes in the Work ordered by City insofar as they necessarily require additional time in which to complete the Work; the prevention of Contractor from commencing or prosecuting the Work because of the acts of others, excepting Contractor's subcontractors or suppliers; or the prevention of Contractor from commencing or prosecuting the Work because of a Citywide failure of public utility service.

The term "Excusable Delay" shall specifically not include: (i) any delay that could have been avoided by the exercise of care, prudence, foresight and diligence on the part of Contractor; (ii) any delay in the prosecution of any part of the Work that does not constitute a Controlling Operation, whether or not such delay is unavoidable; (iii) any reasonable delay resulting from time required by City for review of any Contractor submittals and for the making of surveys, measurements and inspection; and, (iv) any delay arising from an interruption in the prosecution of the Work on account of reasonable interference by other Contractors employed by City that does not necessarily prevent the completion of the entire Work within the time specified. Excusable Delays, if any, shall operate only to extend the Completion Date (not in excess of the period of such delay as determined by City) and shall not under any circumstances increase the amount City is required to pay Contractor except as otherwise provided in these Contract Documents.

22. CONTRACTOR TO SERVE NOTICE OF DELAYS

Whenever Contractor foresees any delay in the prosecution of the Work, and in any event as soon as possible (not to exceed a period of ten (10) calendar days) after the initial occurrence of any delay that Contractor regards as or may later claim to be an Excusable Delay, the Contractor shall notify the Engineer in writing of such delay and its cause, in order that the Engineer: (i) may take immediate steps to prevent if possible the occurrence or continuance of the delay; or (ii) if this cannot be done, may determine whether the delay is to be considered excusable, how long it continues, and to what extent the prosecution and completion of the Work are delayed thereby. Said written notice shall constitute an application for an extension of time only if the notice requests such an extension and sets forth the Contractor's estimate of the additional time required together with a full description of the cause of the delay relied upon.

After the completion of any part or whole of the Work, the Engineer, in estimating the amount due Contractor, will assume that any and all delays that may have occurred in its prosecution and completion were not Excusable Delays, except for such delays for which the Contractor has provided timely written notice as required herein, and that the Engineer has found to be excusable. Contractor shall not be entitled to claim Excusable Delay for any delay for which the Contractor failed to provide such timely written notice.

23. EXTENSION OF TIME

If the Contractor complies with Section 22, above, and the Engineer finds a delay claimed by the Contractor to be an Excusable Delay, the Contractor shall be allowed an extension of time to complete the Work that is proportional to the period of Excusable Delay determined by the Engineer, subject to the approval by City of a change order granting such time extension. During a duly authorized extension for an Excusable Delay, City shall not charge liquidated damages against the Contractor for such delay.

If the City extends the time to complete the Work as provided herein, such extension shall in no way release any warranty or guarantee given by Contractor pursuant to the provisions of the Contract Documents, nor shall such extension of time relieve or release the sureties of the Bonds provided pursuant to the Contract Documents. By executing such Bonds, the Sureties shall be deemed to have expressly agreed to any such extension of time. The granting of any extension of time as provided herein shall in no way operate as a waiver on the part of City of its rights under this Contract, excepting only extension of the Completion Date for such period of Excusable Delay as may be determined by the Engineer and approved by a duly authorized change order.

24. NO PAYMENT FOR DELAYS

No damages or compensation of any kind shall be paid to Contractor or any subcontractor because of delays in the progress of the Work whether or not such delays qualify for extension of time under this Agreement; except that this provision shall not preclude the recovery of damages for a delay caused by the City that is unreasonable under the circumstances and that is not within the contemplation of the parties, provided that the Contractor timely submits all such written notice(s) and fully complies with such other procedures as may be specified in the Contract Documents or any Laws or Regulations for Contractor to claim damages for such delay.

25. CHANGES IN THE WORK

Changes in the Work authorized or directed in accordance with the Contract Documents and extensions of time of completion made necessary by reason thereof shall not in any way release any warranty or guarantee given by Contractor pursuant to the provisions of the Contract Documents, nor shall such changes in the Work relieve or release the Sureties on Bonds provided pursuant to the Contract Documents. By executing such Bonds, the Sureties shall be deemed to have expressly agreed to any such change in Work and to any extension of time made by reason thereof.

26. TERMINATION AFTER COMPLETION DATE

In addition to any other rights City may have, if any services or work required under the Contract (including but not limited to punch list items) are not completed as of the Completion Date (as adjusted by any extensions of time for Excusable Delays granted pursuant to the Contract Documents), City may terminate the Contract at any time after the Completion Date (as adjusted by any extensions of time for Excusable Delays granted pursuant to the Contract Documents), by providing a written notice to Contractor specifying the date of termination. Such notice also may specify conditions or requirements that Contractor must meet to avoid termination of the Contract on such date. If Contractor fails to fulfill all such conditions and requirements by such termination date, or, if no such conditions or requirements are specified, Contractor shall cease rendering services and performing work on such termination date, and shall not be entitled to receive any compensation for services rendered or work performed after such termination date. In the event of such termination, Contractor shall remain liable to City for liquidated damages incurred for any period of time prior to the termination date.

In addition to any other charges, withholdings or deductions authorized under the Contract or any Laws or Regulations, if City terminates the Contract pursuant to this section, City may withhold and deduct from any payment and/or retention funds otherwise due Contractor any sum necessary to pay the City's cost of completing or correcting, or contracting for the completion or correction of, any services or work under the Contract that are not completed to the satisfaction of the City or that otherwise are

deficient or require correction as of such termination date, including but not limited to incomplete punch list items. Such costs shall include all of the City's direct and indirect costs incurred to complete or correct such services or work, including the City's administrative and overhead costs. If the amount of payment(s) and/or retention funds otherwise due the Contractor are insufficient to pay such costs, City shall have the right to recover the balance of such costs from the Contractor and/or its Surety(ies).

27. TERMINATION FOR CONVENIENCE

Upon written notice to the Contractor, the City may at any time, without cause and without prejudice to any other right or remedy of the City, elect to terminate the Contract for the convenience of City. In such case, the Contractor shall be paid (without duplication of any items, and after deduction and/or withholding of any amounts authorized to be deducted or withheld by the Contract Documents or any Laws or Regulations):

(A) For Work executed in accordance with the Contract Documents prior to the effective date of termination and determined to be acceptable by the Engineer, including fair and reasonable sums for overhead and profit on such Work;

(B) For reasonable claims, costs, losses, and damages incurred in settlement of terminated contracts with subcontractors, suppliers, and others; and

(C) For reasonable expenses directly attributable to termination.

Contractor shall not be paid for any loss of anticipated profits or revenue for any Work not performed prior to termination, nor for any economic loss arising out of or resulting from such termination, except for the payments listed in this section. Contractor's warranty under Section 14 of this Agreement shall apply, and Contractor shall remain responsible for all obligations related to such warranty, with respect to all portions of the Work performed prior to the effective date of the termination for convenience pursuant to this section. The City shall be entitled to have any or all remaining Work performed by other contractors or by any other means at any time after the effective date of a termination for convenience pursuant to this section.

28. TERMINATION FOR BREACH OF CONTRACT

If Contractor abandons the Work under this Contract, or if the Contract or any portion of the Contract is sublet or assigned without the consent of the City, or if the Engineer determines in the Engineer's sole discretion that the conditions of the Contract in respect to the rate of progress of the Work are not being fulfilled or any part thereof is unnecessarily delayed, or if Contractor violates or breaches, or fails to execute in good faith, any of the terms or conditions of the Contract, or if Contractor refuses or fails to supply enough properly skilled labor or materials or refuses or fails to make prompt payment to subcontractors for material or labor, or if Contractor disregards any Laws or Regulations or proper instruction or orders of the Engineer, then, notwithstanding any provision to the contrary herein, the City may give Contractor and its Sureties written notification to immediately correct the situation or the Contract shall be terminated.

In the event that such notice is given, and, in the event such situation is not corrected, or arrangements for correction satisfactory to the City are not made, within ten (10) calendar days from the date of such notice or within such other period of time as may be specified by the City in the notice, the Contract shall upon the expiration of said period cease and terminate. In the event of any such termination, City may take over the Work and prosecute the Work to completion, or otherwise, and the Contractor and its Sureties shall be liable to City for any cost occasioned City thereby, as hereinafter set forth.

In the event City completes the Work, or causes the Work to be completed, no payment of any kind shall be made to Contractor until the Work is complete. The cost of completing the Work, including but not limited to, extra costs of project administration and management incurred by City, both direct or indirect, shall be deducted from any sum then due, or that becomes due, to Contractor from City. If sums due to Contractor from City are less than the cost of completing the Work, Contractor and its Sureties shall pay City a sum equal to this difference on demand. In the event City completes the Work, and there is a sum remaining due to Contractor after City deducts the costs of completing the Work, then City shall pay such sum to Contractor. The Contractor and Contractor's Sureties shall be jointly and severally liable for all obligations imposed on Contractor hereunder.

No act by City before the Work is finally accepted, including, but not limited to, exercise of other rights under the Contract, actions at law or in equity, extensions of time, payments, assessments of liquidated damages, occupation or acceptance of any part of the Work, waiver of any prior breach of the Contract or failure to take action pursuant to this section upon the happening of any prior default or breach of Contractor, shall be construed to be a waiver or estoppel of the City's right to act pursuant to this Section upon any subsequent event, occurrence or failure by Contractor to fulfill the terms and conditions of the Contract. The rights of City to terminate the Contract pursuant to this Section and pursuant to Sections 26 and 27 are cumulative and are in addition to all other rights of City pursuant to the Contract and at law or in equity.

29. CONTRACTOR BANKRUPT

If Contractor should commence any bankruptcy proceeding, or if Contractor is adjudged a bankrupt, or if Contractor makes any assignment for the benefit of creditors, or if a receiver is appointed on account of Contractor's insolvency, then the City may, without prejudice to any other right or remedy, terminate the Contract and complete the work by giving notice as provided in Section 28 above.

30. SURETIES' OBLIGATIONS UPON TERMINATION

If the City terminates the Contract pursuant to Section 28 or Section 29 above:

(A) The Surety under Contractor's performance bond shall be fully responsible for all of the Contractor's remaining obligations of performance under the Contract as if the Surety were a party to the Contract, including without limitation Contractor's obligations, as provided in the Contract Documents, to complete and provide a one-year warranty of the entire Work, pay liquidated damages and indemnify, defend and hold harmless City, up to the full amount of the performance bond.

(B) The Surety under Contractor's payment bond shall be fully responsible for the performance of all of the Contractor's remaining payment obligations for work, services, equipment or materials performed or provided in connection with the Work or any portion thereof, up to the full amount of the payment bond.

31. ACCOUNTING RECORDS OF CONTRACTOR

During performance of the Contract and for a period of three (3) years after completing the entire Work, Contractor shall maintain all accounting and financial records related to the Contract and performance of the Work in accordance with generally accepted accounting practices, and shall keep and make such records available for inspection and audit by representatives of the City upon reasonable written notice.

32. USE TAX REQUIREMENTS

During the performance of this Agreement, CONTRACTOR, for itself, its assignees and successors in interest, agrees as follows:

(A) Use Tax Direct Payment Permit: For all leases and purchases of materials, equipment, supplies, or other tangible personal property used to perform the Agreement and shipped from outside California, the Contractor and any subcontractors leasing or purchasing such materials, equipment, supplies or other tangible personal property shall obtain a Use Tax Direct Payment Permit from the California State Board of Equalization ("SBE") in accordance with the applicable SBE criteria and requirements.

(B) Sellers Permit: For any construction contract and any construction subcontract in the amount of \$5,000,000 or more, Contractor and the subcontractor(s) shall obtain sellers permits from the SBE and shall register the jobsite as the place of business for the purpose of allocating local sales and use tax to the City. Contractor and its subcontractors shall remit the self-accrued use tax to the SBE, and shall provide a copy of each remittance to the City.

(C) The above provisions shall apply in all instances unless prohibited by the funding source for the Agreement.

IN WITNESS WHEREOF, the parties hereto have signed this Agreement on the date set for opposite their names.

CONTRACTOR

Under penalty of perjury, I certify that the taxpayer identification number and all other information provided here are correct.

DATE 9/24/13

BY *Robert Pelascini*
Robert Pelascini

Print Name
Chairman of the Board

Title

BY *Greg Souder*
Greg Souder

Print Name
Secretary

Title

94-3320164

Federal ID#

44722346

State ID#

1002689

City of Sacramento Business Operation Tax Certificate No. (City will not award contract until Certificate Number is obtained)

- Type of Business Entity (*check one*):
- Individual/Sole Proprietor
 - Partnership
 - Corporation
 - Limited Liability Company
 - Other (*please specify:* _____)

CITY OF SACRAMENTO
a municipal corporation

DATE _____

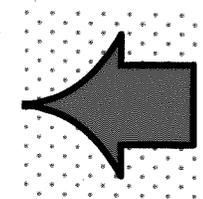
BY _____
For: _____
City Manager

Original Approved As To Form:

Attest: _____

City Attorney

City Clerk



HERE

CITY OF SACRAMENTO
PERFORMANCE BOND
Department of Public Works
Page 1 of 1

Bond No. 070015023
Premium: \$85,152.00

WHEREAS, the City of Sacramento, State of California, hereinafter called City, has conditionally awarded to O.C. Jones & Sons, 1520 Fourth Street, Berkeley, CA 94710 as principal, hereinafter called Contractor, a contract for construction of:

**5TH STREET, 5TH STREET VIADUCT AND RAILYARDS BOULEVARD AT SACRAMENTO
RAILYARDS**

(PN: T15135800)

which contract is by reference incorporated herein and made a part hereof as if the Surety named below were a party to the contract, and is hereinafter referred to as the Contract; and

WHEREAS, under the terms of the Contract, Contractor is required to furnish a bond for the faithful performance of the Contract.

NOW, THEREFORE, we the Contractor and *(here insert full name and address of Surety):*

Liberty Mutual Insurance Company, 1340 Treat Blvd, Suite 550, Walnut Creek, CA 94597,
a corporation duly authorized and admitted to transact business and issue surety bonds in the State of California, hereinafter called Surety, are held and firmly bound unto the City, as obligee, in the sum of:

NINETEEN MILLION SEVEN HUNDRED EIGHTY TWO THOUSAND SIX HUNDRED FIFTEEN DOLLARS FORTY CENTS (\$19,782,615.40), for the payment of which sum well and truly to be made, we the Contractor and Surety bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally. The condition of this obligation is such that, if the Contractor, Contractor's heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and fully perform all covenants, conditions and agreements required to be kept and performed by Contractor in the Contract and any changes, additions or alterations made thereto, to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meanings, and shall indemnify and save harmless the City, its officers, employees and agents, as therein provided, then the Surety's obligations under the Contract and this bond shall be null and void; otherwise they shall be and remain in full force and effect. This obligation shall remain in full force and effect through the end of the Contract warranty period, which will expire one year after the completion of work date specified in the Notice of Completion filed for the above-named project.

As part of the obligations secured hereby and in addition to the sum specified above, there shall be included all costs, expenses and fees, including attorney's fees, reasonably incurred by City in successfully enforcing such obligations, all to be taxed as costs and included in any judgment rendered.

The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed hereunder or to the specifications accompanying the same shall in any way affect its obligations on this bond, and it does hereby give notice of any such change, extension, alteration or addition.

IN WITNESS WHEREOF, this instrument has been duly executed by authorized representatives of the Contractor and Surety
SIGNED AND SEALED on September 25, 2008

O.C. Jones & Sons, Inc.
By [Signature] (Contractor) (Seal)

Liberty Mutual Insurance Company
By [Signature] (Surety) (Seal)

Title Greg Souder, Secretary

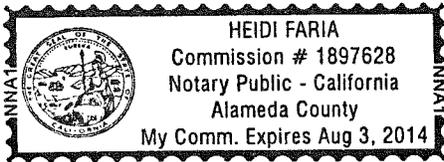
Title Susan Peragallo, Attorney-in-Fact

ORIGINAL APPROVED AS TO FORM:

City Attorney

**CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT
CIVIL CODE § 1189**

State of California }
 County of Alameda }
 On 9/27/13 before me, Heidi Faria, Notary Public,
Date Here Insert Name and Title of the Officer
 personally appeared Greg Souder
Name(s) of Signer(s)



Place Notary Seal Above

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature: Heidi Faria
Signature of Notary Public

OPTIONAL

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: Performance Bond Document Date: 9/25/13
 Number of Pages: 1 Signer(s) Other Than Named Above: Susan Peragallo

Capacity(ies) Claimed by Signer(s)

Signer's Name: Greg Souder
 Corporate Officer — Title(s): Secretary
 Partner — Limited General
 Individual Attorney in Fact
 Trustee Guardian or Conservator
 Other: _____

Signer's Name: _____
 Corporate Officer — Title(s): _____
 Partner — Limited General
 Individual Attorney in Fact
 Trustee Guardian or Conservator
 Other: _____

Signer Is Representing: O.C. Jones & Sons, Inc.

Signer Is Representing: _____

THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON RED BACKGROUND.

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Certificate No. 6116176

American Fire and Casualty Company
The Ohio Casualty Insurance Company

Liberty Mutual Insurance Company
West American Insurance Company

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That American Fire & Casualty Company and The Ohio Casualty Insurance Company are corporations duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Billy G. Bergan; Kathleen Beck; Patricia L. Drew; Susan Peragallo

all of the city of Concord, state of CA each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 8th day of May, 2013



American Fire and Casualty Company
The Ohio Casualty Insurance Company
Liberty Mutual Insurance Company
West American Insurance Company

By: Gregory W. Davenport
Gregory W. Davenport, Assistant Secretary

STATE OF WASHINGTON ss
COUNTY OF KING

On this 8th day of May, 2013, before me personally appeared Gregory W. Davenport, who acknowledged himself to be the Assistant Secretary of American Fire and Casualty Company, Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Seattle, Washington, on the day and year first above written.



By: KD Riley
KD Riley, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV – OFFICERS – Section 12. Power of Attorney. Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII – Execution of Contracts – SECTION 5. Surety Bonds and Undertakings. Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation – The President of the Company, acting pursuant to the Bylaws of the Company, authorizes Gregory W. Davenport, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization – By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, David M. Carey, the undersigned, Assistant Secretary, of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 25th day of September, 2013.



By: David M. Carey
David M. Carey, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

To confirm the validity of this Power of Attorney call 1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.

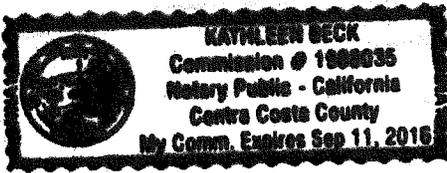
CALIFORNIA ALL-PURPOSE ACKNOWLEDGEMENT

State of California
County of Contra Costa

On September 25, 2013, before me, Kathleen Beck, Notary Public personally appeared Susan Peragallo

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 following paragraph is true and correct



WITNESS my hand and official seal.

Kathleen Beck
Signature of Notary Public

Optional

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of attached Document

Title or Type of Document: Payment Bond

Document Date September 25, 2013

Number of Pages: 1

Signer(s) Other Than Named Above: _____

Capacity(ies) claimed by Signer(s)

Signer's Name:

- Individual
- Corporate Officer

Title(s):

- Partner- Limited General
- Attorney-in-Fact
- Trustee
- Guardian or Conservator
- Other : _____

Guardian or Conservator

Other : _____

Signer is Representing:

Signer is Representing:

Liberty Mutual Insurance Company

Signer's Name:

- Individual
- Corporate Officer

Title(s):

- Partner- Limited General
- Attorney-in-Fact
- Trustee

RIGHT THUMBPRINT OF SIGNER
Top of Thumb Here

RIGHT THUMBPRINT OF SIGNER

Top of Thumb Here

CITY OF SACRAMENTO
PAYMENT BOND
Department of Public Works
Page 1 of 1

Bond No.: 070015023
Premium: Included in
Performance Bond

WHEREAS, the City of Sacramento, in the State of California, hereinafter called City, has conditionally awarded to: O.C. Jones & Sons, 1520 Fourth Street, Berkeley, CA 94710

hereinafter called Contractor, a contract for construction of:

**5TH STREET, 5TH STREET VIADUCT AND RAILYARDS BOULEVARD AT
SACRAMENTO RAILYARDS (PN: T15135800)**

Which contract is by reference incorporated herein and made a part hereof, and is hereinafter referred to as the Contract; and

WHEREAS, under the terms of the Contract and pursuant to Chapter 5 of Title 3 of Part 6 of Division 4 of the California Civil Code (commencing with Civil Code Section 9550), Contractor is required to furnish a good and sufficient payment bond to secure payment of the claims to which reference is made in Civil Code Section 9554.

NOW, THEREFORE, we the Contractor and *(here insert full name and address of Surety):*
Liberty Mutual Insurance Company, 1340 Treat Blvd, Suite 550, Walnut Creek, CA 94597,
a corporation duly authorized and admitted to transact business and issue surety bonds in the State of California, hereinafter called Surety, are held and firmly bound unto the City, and unto all persons or entities entitled to assert a claim against a payment bond under any of the aforesaid Civil Code provisions in the sum of Nineteen Million Seven Hundred Eighty Two Thousand Six Hundred Fifteen and no/100s DOLLARS (\$19,782,615.00***), on the condition that if Contractor shall fail to pay for any materials or equipment furnished or used in performance of the Contract, or for any work or labor thereon of any kind, or for amounts due under the Unemployment Insurance Act with respect to such work or labor, or for any amounts required to be deducted, withheld, and paid over to the Franchise Tax Board or the Employment Development Department from the wages of employees of the Contractor and all subcontractors with respect to such work or labor, then the Surety shall pay the same in an amount not exceeding the sum specified above. If suit is brought upon this bond, Surety shall pay, in addition to the above sum, all costs, expenses and fees, including attorney's fees, reasonably incurred by any party in successfully enforcing the obligation secured hereby, all to be taxed as costs and included in any judgment rendered. Should the condition of this bond be fully performed, then this obligation shall become null and void, otherwise it shall be and remain in full force and effect, and shall bind Contractor, Surety, their heirs, executors, administrators, successors and assigns, jointly and severally.

It is hereby stipulated and agreed that this bond shall inure to the benefit of all persons, companies, corporations, political subdivisions, State agencies and other entities entitled to assert a claim against a payment bond under any of the aforesaid Civil Code provisions, so as to give a right of action to them or their assigns in any suit brought upon this bond. The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder or to the specifications accompanying the same shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension, alteration or addition.

IN WITNESS WHEREOF, this instrument has been duly executed by authorized representatives of the Contractor and Surety. SIGNED AND SEALED on September, 2013

O.C. Jones & Sons, Inc.
(Contractor) (Seal)
By Greg Souder
Title Secretary

Liberty Mutual Insurance Company
(Surety) (Seal)
By Susan Peragallo
Title Attorney-in-Fact

ORIGINAL APPROVED AS TO FORM:

City Attorne

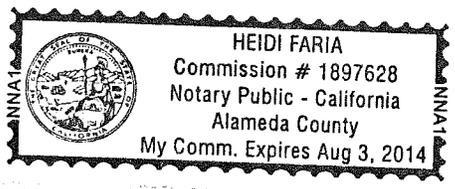
CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT
CIVIL CODE § 1189

State of California

County of Alameda }

On 9/27/13 before me, Heidi Faria, Notary Public,
 Date Here Insert Name and Title of the Officer

personally appeared Greg Souder
 Name(s) of Signer(s)



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.

Place Notary Seal Above

Signature: Heidi Faria
 Signature of Notary Public

OPTIONAL

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: Payment Bond Document Date: 9/25/13
 Number of Pages: 1 Signer(s) Other Than Named Above: Susan Peragallo

Capacity(ies) Claimed by Signer(s)

Signer's Name: <u>Greg Souder</u>	Signer's Name: _____
<input checked="" type="checkbox"/> Corporate Officer — Title(s): <u>Secretary</u>	<input type="checkbox"/> Corporate Officer — Title(s): _____
<input type="checkbox"/> Partner — <input type="checkbox"/> Limited <input type="checkbox"/> General	<input type="checkbox"/> Partner — <input type="checkbox"/> Limited <input type="checkbox"/> General
<input type="checkbox"/> Individual <input type="checkbox"/> Attorney in Fact	<input type="checkbox"/> Individual <input type="checkbox"/> Attorney in Fact
<input type="checkbox"/> Trustee <input type="checkbox"/> Guardian or Conservator	<input type="checkbox"/> Trustee <input type="checkbox"/> Guardian or Conservator
<input type="checkbox"/> Other: _____	<input type="checkbox"/> Other: _____

Signer Is Representing: O.C. Jones + Sons, Inc.

Signer Is Representing: _____

THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON RED BACKGROUND.

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Certificate No. 6116175

American Fire and Casualty Company
The Ohio Casualty Insurance Company

Liberty Mutual Insurance Company
West American Insurance Company

POWER OF ATTORNEY

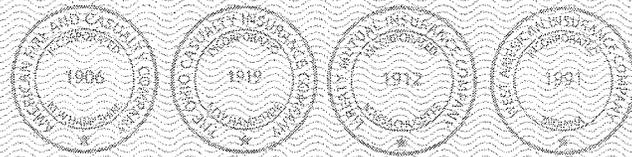
KNOWN ALL PERSONS BY THESE PRESENTS: That American Fire & Casualty Company and The Ohio Casualty Insurance Company are corporations duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Billy G. Bergan; Kathleen Beck; Patricia L. Drew; Susan Peragallo

all of the city of Concord, state of CA each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 8th day of May, 2013.

American Fire and Casualty Company
The Ohio Casualty Insurance Company
Liberty Mutual Insurance Company
West American Insurance Company

By: Gregory W. Davenport
Gregory W. Davenport, Assistant Secretary



STATE OF WASHINGTON ss
COUNTY OF KING

On this 8th day of May, 2013, before me personally appeared Gregory W. Davenport, who acknowledged himself to be the Assistant Secretary of American Fire and Casualty Company, Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Seattle, Washington, on the day and year first above written.



By: KD Riley
KD Riley, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV – OFFICERS – Section 12. Power of Attorney. Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII – Execution of Contracts – SECTION 5. Surety Bonds and Undertakings. Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation – The President of the Company, acting pursuant to the Bylaws of the Company, authorizes Gregory W. Davenport, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization – By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, David M. Carey, the undersigned, Assistant Secretary, of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 25th day of September, 2013.

By: David M. Carey
David M. Carey, Assistant Secretary



Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

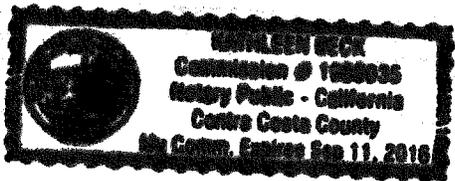
To confirm the validity of this Power of Attorney call 1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.

CALIFORNIA ALL-PURPOSE ACKNOWLEDGEMENT

State of California
County of Contra Costa

On September 25, 2013, before me, Kathleen Beck, Notary Public personally appeared Susan Peragallo

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 following paragraph is true and correct

WITNESS my hand and official seal.

Kathleen Beck
Signature of Notary Public

Optional

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of attached Document

Title or Type of Document: Performance Bond

Document Date September 25, 2013

Number of Pages: 1

Signer(s) Other Than Named Above: _____

Capacity(ies) claimed by Signer(s)

Signer's Name:

- Individual
- Corporate Officer

Title(s):

- Partner- Limited General
- Attorney-in-Fact
- Trustee
- Guardian or Conservator
- Other : _____

Guardian or Conservator

Other : _____

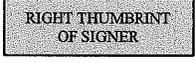
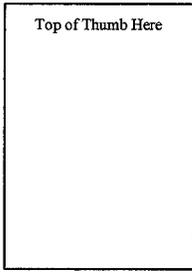
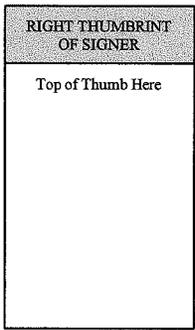
Signer is Representing:

Signer is Representing:

Liberty Mutual Insurance Company

Signer's Name:

- Individual
 - Corporate Officer
- Title(s):
- Partner- Limited General
 - Attorney-in-Fact
 - Trustee





O.C. Jones & Sons, Inc.
General Engineering Contractor

Page 2 of 2

Ladies and Gentlemen:

We are planning to prepare bids on the general contract for the listed project(s). It is our responsibility to make a sufficient portion of the work available to subcontractors and suppliers so as to assure meeting the goals for **DBE** participation. We at **O. C. Jones & Sons, Inc.** are assuring an effort to comply with the above goals, but in order to be successful in achieving these goals, your participation is necessary. We, therefore, would appreciate your assistance in the identifications of any interested and qualified subcontractor and material suppliers who would be interested in submitting a subbid to us on the work we have made available which is indicated on the opposite page.

The listed projects are subject to Part 23, title 49, Code of Federal Regulation entitled "Participation by Minority Business Enterprise in Department of Transportation Programs". Effective immediately, greater effort must be made by prime contractors toward meeting or exceeding the DBE program requirements implemented by the California Dept. of Transportation.

We at **O.C. Jones & Sons, Inc.** encourage the use of subcontractors/contractors in utilizing small, local, minority, female and veteran contractors/suppliers whenever feasible, and to utilize services offered by banks owned and controlled by minorities or women.

The insurance requirements relating to this project (s) may be different than those of O.C. Jones & Sons, Inc. Please refer to the Specifications. Assistance in obtaining insurance and Bonding will be provided by contacting Heidi Faria @ (510) 526-3424, or through the Small Business Administration website at www.sba.gov or the U.S. Department of Transportation, Office of Small and Disadvantaged Business Utilization website at www.osdbu.dot.gov or the Office of Minority Business Enterprise of the U.S. Department of Commerce website at www.commerce.gov/os/ogc/minority-business-development-agency.

O.C. Jones & Sons, Inc. bond requirements are as follows: 100% Performance and 100% payment for full amounts of the subcontract price. O.C. Jones & Sons, Inc. will pay bond premium up to 1.5%. Bid packages can be made available from **O. C. Jones & Sons, Inc.** to assist you in the bonding process.

O.C. Jones & Sons, Inc. Insurance requirements are as follows: **CERTIFICATE OF COMMERCIAL GENERAL LIABILITY INSURANCE** with the following provisions: (a.) Minimum limits: \$1,000,000 Combined Single Limit Bodily Injury and Property Damage. (b.) **O.C. Jones & Sons, Inc.** shall always be named as Additional Insured by specific endorsement on all policies. Others, such as Owner, General, City, etc., may also need to be named Additional Insured (Refer to the specifications). (c.) Policy shall cover on an "Occurrence" basis. (d.) Policy shall provide coverage for Bodily Injury and Property Damage including Premises/Operations Liability, Products/Completed Operation Liability, Personal Injury, Blanket Contractual and Broad Form Property Damage. (e.) Included shall be Thirty (30) days Cancellation Clause (See Below), Primary Insurance Clause, and a Standard Cross Liability Clause. (f.) So-Called "X C U Exclusion" shall be deleted. All insurance companies must have a best's rating of B+6 or better unless specification requires a higher rating.

CERTIFICATE OF AUTOMOBILE LIABILITY. with the following provision: (a.) Minimum Limits: \$1,000,000 Combined Single Limit Bodily Injury and Property Damage. (b.) Coverage afforded for Owned, Non-owned, and Hired Vehicles.

CERTIFICATE OF WORKER' COMPENSATION/EMPLOYERS LIABILITY. with statutory limits. (a.) If required, USL&H coverage shall be provided.

CANCELLATION CLAUSE: "Thirty (30) days written notice of any policy cancellation will be mailed to O.C. Jones & Sons, Inc.. Delete clauses like.. "endeavor to" and.. "but failure to mail such notice shall impose no obligation or liability of any kind upon the company". These clauses are unacceptable!

Please contact **O.C. Jones & Sons, Inc.** if you should have any questions or need assistance concerning the bid package, cost estimates, bonding requirement, insurance etc. Plans and specifications for all the above projects may be examined at our office in Berkeley, through Builders Exchanges, which can be found at www.constructionweblinks.com/industry, or at Small Business Development Centers at www.sba.gov/localresources/district/ca/index.html.

Heidi Faria
O.C. Jones & Sons, Inc.

1520 Fourth Street, Berkeley, California 94710-1774 Phone: (510)526-3424

FAX: Estimating – (510) 526-0990; Engineering – (510) 525-0457

AN EQUAL OPPORTUNITY EMPLOYER

275 of 577



CERTIFICATE OF LIABILITY INSURANCE

OP ID: C8

DATE (MM/DD/YYYY)
09/23/2013

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER James C Jenkins Ins Srvs Concd License No. 0545478 P.O. Box 5668 Concord, CA 94524 Curt Perata	Phone: 925-798-3334 Fax: 925-609-5381	CONTACT NAME: PHONE (A/C, No, Ext): E-MAIL ADDRESS: PRODUCER CUSTOMER ID#: OCJON-1	FAX (A/C, No):
	INSURED O.C. Jones & Sons, Inc. Lisa Larratt 1520 Fourth Street Berkeley, CA 94710		INSURER(S) AFFORDING COVERAGE INSURER A: National Union Fire Ins Co PA NAIC # 19445 INSURER B: Allied World Assurance Company NAIC # 19489 INSURER C: INSURER D: INSURER E: INSURER F:

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

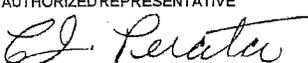
INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> Genl Agg per endt GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC	X	GL5094637 XCU & CONTRACTUAL INC \$10,000,000	04/01/2013	04/01/2014	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 500,000 MED EXP (Any one person) \$ 25,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000
	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS	X	CA5196394	04/01/2013	04/01/2014	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$ \$
B	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DEDUCTIBLE <input checked="" type="checkbox"/> RETENTION \$ 10,000	X	03054473	04/01/2013	04/01/2014	EACH OCCURRENCE \$ 25,000,000 AGGREGATE \$ 25,000,000 \$ \$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below Y/N <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	N/A	WC033575541	04/01/2013	04/01/2014	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
 RE: 5th Street Viaduct & Railyards Blvd (PN: T15135800)

City of Sacramento; IA Sacramento Holdings, LLC and their officials, employees and volunteers are additional for General, Automobile and Excess Liability per attached endorsements. Coverage is Primary (SEE NEXT PAGE)

CERTIFICATE HOLDER

CANCELLATION

City of Sacramento Department of Transportation Engineering Services Division 915 I Street, Room 2000 Sacramento, CA 95814	SACCITY SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE 
--	--

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NOTEPAD:

HOLDER CODE **SACCITY**
INSURED'S NAME **O.C. Jones & Sons, Inc.**

OCJON-1
OP ID: C8

PAGE **2**
DATE **09/23/13**

Waiver of Subrogation applies to Workers Compensation per attached endorsement. 60 Day Notice of Cancellation applies per the attached endorsement.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED - OWNERS, LESSEES OR CONTRACTORS - SCHEDULED PERSON OR ORGANIZATION

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s):	Location(s) Of Covered Operations
<p>Any Person or Organization contractually requiring status as an Additional Insured for ongoing operations you perform for them</p>	
<p>Information required to complete this Schedule, if not shown above, will be shown in the Declarations.</p>	

A. Section II - Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:

1. Your acts or omissions; or
 2. The acts or omissions of those acting on your behalf;
- in the performance of your ongoing operations for the additional insured(s) at the location(s) designated above.

B. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to "bodily injury" or "property damage" occurring after:

1. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
2. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**ADDITIONAL INSURED - OWNERS, LESSEES OR
CONTRACTORS - COMPLETED OPERATIONS**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s):	Location And Description Of Completed Operations
As Required by written contract	
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

Section II - Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by "your work" at the location

designated and described in the schedule of this endorsement performed for that additional insured and included in the "products-completed operations hazard."

ENDORSEMENT

This endorsement, effective 12:01 A.M. **4-1-13** forms a part of

policy No. **GL5094637** issued to **O.C. Jones & Sons, Inc.**

by

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**PRIMARY COVERAGE FOR SPECIFIED PERSONS OR
ORGANIZATIONS NAMED AS ADDITIONAL INSURED -
ONGOING AND COMPLETED OPERATIONS**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE FORM

The following paragraph is added to **SECTION II - WHO IS AN INSURED** and applies only to persons or organizations we have added to your policy as additional insureds by endorsement to comply with insurance requirements of written contracts relative to: a) the performance of your ongoing operations for the additional insureds; or b) "your work" performed for the additional insureds and included in the "products-completed operations hazard":

This insurance is primary over any similar insurance available to any person or organization we have added to this policy as an additional insured. However, this insurance is primary over any other similar insurance only if the additional insured is designated as a named insured in the Declarations of the other similar insurance. We will not require contribution of limits from the other similar insurance if the insurance afforded by this endorsement is primary.

This insurance is excess over any other valid and collectible insurance, whether primary, excess, contingent or on any other basis, if it is not primary as defined in the paragraph above.

All other terms and conditions of the policy are the same.

**Authorized Representative or
Countersignature (in States Where
Applicable)**

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ENDORSEMENT

This endorsement, effective 12:01 A.M. 09/23/2013 forms a part of Policy

No. GL 509-46-37 issued to O. C. Jones & Sons, Inc.

By National Union Fire Insurance Company

(The above "attaching clause" need be completed only when this endorsement is issued subsequent to the preparation of the policy).

NOTICE OF CANCELLATION AND NONRENEWAL TO CERTIFICATE HOLDER

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE FORM
BUSINESS AUTO COVERAGE FORM
TRUCKERS COVERAGE FORM
GARAGE COVERAGE FORM

We shall provide written notice in accordance with state law in the event this policy is cancelled or nonrenewed, for any reason other than non payment of premium, to those entities set out in the schedule below.

Schedule

Notice will be mailed to:

City of Sacramento
Department of Transportation
Engineering Services Division
915 I Street, Room 2000
Sacramento, CA 95814

To the attention of:

Attn: Jose R. Ledesma

Contract, Permit or Job Number:

5th Street Viaduct & Railyards Blvd (PN: T15135800)

ENDORSEMENT

This endorsement, effective 12:01 A.M. **4/1/13** forms a part of

policy No. **CA5196394** issued to **O. C. Jones & Sons, Inc**

by **National Union Fire Insurance Company of PA**

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED - WHERE REQUIRED UNDER CONTRACT OR AGREEMENT

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM

SCHEDULE

ADDITIONAL INSURED:

Any person or organization for whom you are contractually bound to provide Additional Insured status but only to the extent of such person or organizations liability arising out of the use of a covered "auto"

I. SECTION II - LIABILITY COVERAGE, A. Coverage, 1. - Who Is Insured, is amended to add:

d. Any person or organization, shown in the schedule above, to whom you become obligated to include as an additional insured under this policy, as a result of any contract or agreement you enter into which requires you to furnish insurance to that person or organization of the type provided by this policy, but only with respect to liability arising out of use of a covered "auto". However, the insurance provided will not exceed the lesser of:

- (1) The coverage and/or limits of this policy, or
- (2) The coverage and/or limits required by said contract or agreement.

Authorized Representative or
Countersignature (in States Where
Applicable)

ENDORSEMENT

This endorsement, effective 12:01A.M. **4-1-13** forms a part of

policy No. **CA 5196394** issued to **O.C. Jones & Sons, Inc**

by

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

INSURANCE PRIMARY AS TO CERTAIN ADDITIONAL INSURED

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM

Section IV - Business Auto Conditions, B., General Conditions, 5., Other Insurance, c., is amended by the addition of the following sentence:

The insurance afforded under this policy to an additional insured will apply as primary insurance for such additional insured where so required under an agreement executed prior to the date of accident. We will not ask any insurer that has issued other insurance to such additional insured to contribute to the settlement of loss arising out of such accident.

All other terms and conditions remain unchanged.

**Authorized Representative or
Countersignature (in States Where
Applicable)**

R. Violation of Economic or Trade Sanctions

If coverage for a claim or **Suit** under this policy is in violation of any United States of America economic or trade sanctions, including but not limited to, sanctions administered and enforced by the United States Treasury Department's Office of Foreign Assets Control ("OFAC"), then coverage for that claim or **Suit** will be null and void.

VI. DEFINITIONS

A. **Advertisement** means a notice that is broadcast or published to the general public or specific market segments about your goods, products or services for the purpose of attracting customers or supporters. For the purposes of this definition:

1. notices that are published include material placed on the internet or on similar electronic means of communication; and
2. regarding web-sites, only that part of a web-site that is about your goods, products or services for the purposes of attracting customers or supporters is considered an **Advertisement**.

B. **Auto** means:

1. a land motor vehicle, trailer or semitrailer designed for travel on public roads, including any attached machinery or equipment; or
2. any other land vehicle that is subject to a compulsory or financial responsibility law in the state where it is licensed or principally garaged. However, **Auto** does not include **Mobile Equipment**.

C. **Bodily Injury** means bodily injury, sickness or disease sustained by any person, including death, mental anguish, mental injury, shock or humiliation resulting from any of these at any time.

D. **Hostile Fire** means a fire that becomes uncontrollable or breaks out from where it was intended to be.

E. **Impaired Property** means tangible property, other than **Your Product** or **Your Work**, that cannot be used or is less useful because:

1. it incorporates **Your Product** or **Your Work** that is known or thought to be defective, deficient, inadequate or dangerous; or
2. you have failed to fulfill the terms of a contract or agreement;

if such property can be restored to use by:

1. the repair, replacement, adjustment or removal of **Your Product** or **Your Work**; or
2. your fulfilling the terms of the contract or agreement.

F. **Insured** means:

1. the **Named Insured**;
2. if you are designated in the Declarations as:

- a. an individual, you and your spouse are **Insureds**, but only with respect to the conduct of a business of which you are the sole owner;
 - b. a partnership or joint venture, you are an **Insured**. Your members, your partners, and their spouses are also **Insureds**, but only with respect to the conduct of your business;
 - c. a limited liability company, you are an **Insured**. Your members are also **Insureds**, but only with respect to the conduct of your business. Your managers are **Insureds**, but only with respect to their duties as your managers;
 - d. an organization other than a partnership, joint venture or limited liability company, you are an **Insured**. Your executive officers and directors are **Insureds**, but only with respect to their duties as your officers or directors. Your stockholders are also **Insureds**, but only with respect to their liability as stockholders;
 - e. a trust, you are an **Insured**. Your trustees are also **Insureds**, but only with respect to their duties as trustees;
- 3. your employees other than your executive officers (if you are an organization other than a partnership, joint venture or limited liability company) or your managers (if you are a limited liability company), but only for acts within the scope of their employment by you or while performing duties related to the conduct of your business;
 - 4. your volunteer workers only while performing duties related to the conduct of your business;
 - 5. any person (other than your employee or volunteer worker) or organization while acting as your real estate manager;
 - 6. your legal representative if you die, but only with respect to duties as such. That representative will have all your rights and duties under this policy;
 - 7. any person or organization, other than the **Named Insured**, included as an Additional Insured under **Scheduled Underlying Insurance**, but not for broader coverage than would be afforded by such **Scheduled Underlying Insurance**.

Notwithstanding any of the above:

- a. no person or organization is an **Insured** with respect to the conduct of any current, past or newly formed partnership, joint venture or limited liability company that is not designated as a **Named Insured** in Item 1. of the Declarations; and
 - b. no person or organization is an **Insured** under this policy who is not an **Insured** under applicable **Scheduled Underlying Insurance**. This provision shall not apply to any organization set forth in the definition of **Named Insured** in subparagraphs J. 2 and 3.
- G. **Insured Contract** means that part of any contract or agreement pertaining to your business under which any **Insured** assumes the tort liability of another party to pay for **Bodily Injury** or **Property Damage** to a third person or organization. Tort liability means a liability that would be imposed by law in the absence of any contract or agreement.

Insured Contract does not include that part of any contract or agreement:

- 1. that indemnifies a railroad for **Bodily Injury** or **Property Damage** arising out of construction or demolition operations, within fifty (50) feet of any railroad property and affecting any railroad bridge or trestle, tracks, road-beds, tunnel, underpass or crossing;

BLANKET WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT

This endorsement changes the policy to which it is attached effective on the inception date of the policy unless a different date is indicated below.

(The following "attaching clause" need be completed only when this endorsement is issued subsequent to preparation of the policy).

This endorsement, effective 12:01 AM **4/1/13** forms a part of Policy No. **WC033575541**

Issued to **O.C. Jones & Sons, Inc**

By **National Union Fire Ins Co of PA**

We have a right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against any person or organization with whom you have a written contract that requires you to obtain this agreement from us, as regards any work you perform for such person or organization.

The additional premium for this endorsement shall be _____ % of the total estimated workers compensation premium for this policy.

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT
CAREFULLY.**

ENDORSEMENT

This endorsement, effective 12:01 A.M. 09/23/2013 forms a part of Policy

No. WC 335-75-541 issued to O. C. Jones & Sons, Inc.

By National Union Fire Insurance Company

(The above "attaching clause" need be completed only when this endorsement is issued subsequent to the preparation of the policy).

NOTICE OF CANCELLATION AND NONRENEWAL TO CERTIFICATE HOLDER

This endorsement modifies insurance provided under the following:

WORKERS COMPENSATION AND EMPLOYERS LIABILITY INSURANCE POLICY

We shall provide written notice in accordance with state law in the event this policy is cancelled or nonrenewed, for any reason other than non payment of premium, to those entities set out in the schedule below.

Schedule

Notice will be mailed to:

City of Sacramento
Department of Transportation
Engineering Services Division
915 I Street, Room 2000
Sacramento, CA 95814

To the attention of:

Attn: Jose R. Ledesma

Contract, Permit or Job Number:

5th Street Viaduct & Railyards Blvd (PN: T15135800)

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT
CAREFULLY.**

ENDORSEMENT

This endorsement, effective 12:01 A.M. 09/23/2013 forms a part of Policy

No. CA 519-63-94 issued to O. C. Jones & Sons, Inc.

By National Union Fire Insurance Company

(The above "attaching clause" need be completed only when this endorsement is issued subsequent to the preparation of the policy).

NOTICE OF CANCELLATION AND NONRENEWAL TO CERTIFICATE HOLDER

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE FORM
BUSINESS AUTO COVERAGE FORM
TRUCKERS COVERAGE FORM
GARAGE COVERAGE FORM

We shall provide written notice in accordance with state law in the event this policy is cancelled or nonrenewed, for any reason other than non payment of premium, to those entities set out in the schedule below.

Schedule

Notice will be mailed to:

City of Sacramento
Department of Transportation
Engineering Services Division
915 I Street, Room 2000
Sacramento, CA 95814

To the attention of:

Attn: Jose R. Ledesma

Contract, Permit or Job Number:

5th Street Viaduct & Railyards Blvd (PN: T15135800)

82541 (6/03)



CERTIFICATE OF LIABILITY INSURANCE

OCJON-1

OP ID: C8

DATE (MM/DD/YYYY)

09/23/2013

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER James C Jenkins Ins Srvc Concd License No. 0545478 P.O. Box 5668 Concord, CA 94524 Curt Perata	Phone: 925-798-3334 Fax: 925-609-5381	CONTACT NAME: _____ PHONE (A/C, No, Ext): _____ FAX (A/C, No): _____ E-MAIL ADDRESS: _____													
	<table border="1"> <thead> <tr> <th>INSURER(S) AFFORDING COVERAGE</th> <th>NAIC #</th> </tr> </thead> <tbody> <tr> <td>INSURER A: Great American E&S Ins Co</td> <td>37532</td> </tr> <tr> <td>INSURER B:</td> <td></td> </tr> <tr> <td>INSURER C:</td> <td></td> </tr> <tr> <td>INSURER D:</td> <td></td> </tr> <tr> <td>INSURER E:</td> <td></td> </tr> <tr> <td>INSURER F:</td> <td></td> </tr> </tbody> </table>		INSURER(S) AFFORDING COVERAGE	NAIC #	INSURER A: Great American E&S Ins Co	37532	INSURER B:		INSURER C:		INSURER D:		INSURER E:		INSURER F:
INSURER(S) AFFORDING COVERAGE	NAIC #														
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INSURER C:															
INSURER D:															
INSURER E:															
INSURER F:															
INSURED O.C. Jones & Sons, Inc. Lisa Larratt 1520 Fourth Street Berkeley, CA 94710															

COVERAGES**CERTIFICATE NUMBER:****REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	GENERAL LIABILITY <input type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR _____ GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC						EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMP/OP AGG \$ \$
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS						COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	<input type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input type="checkbox"/> RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below						<input type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
A	Pollution Liab		X	PCE184950703	08/15/2013	08/15/2014	Per Occ 10,000,000 Aggregate 10,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

RE: 5th treet Diaduct & Railyards Blvd (PN: T15135800)

City of Sacramento; IA Sacramento Holdings, LLC and their officials, employes and volunteers are additional insured; Primary wording applies, per the attachment endorsement.

CERTIFICATE HOLDER**CANCELLATION**

SACCITY City of Sacramento Department of Transportation Engineering Services Division 915 I Street, Room 2000 Sacramento, CA 95814	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE 
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PCE 69 17 (Ed. 04 10)

ENDORSEMENT # 2

This endorsement, effective 12:01 a.m., 8/15/2013, forms a part of Policy No. PCE 184950703 issued to O.C. JONES & SONS, INC. By Great American E & S Insurance Company

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**PRIMARY INSURANCE FOR CLIENT WHEN REQUIRED BY WRITTEN
CONTRACT - COVERAGE B ONLY**

This endorsement modifies insurance provided under the following:

PROFESSIONAL AND CONTRACTING SERVICES ENVIRONMENTAL LIABILITY INSURANCE POLICY

The INSURED and the Company agree to the following Policy change(s):

Section II. DEFINITIONS, Item N. INSURED is deleted in its entirety and replaced with the following:

N. INSURED means:

1. the FIRST NAMED INSURED, any ADDITIONAL NAMED INSURED, and any present or former director, officer, partner, member, employee, leased or temporary worker thereof, while acting within the scope of his/her duties as such; and
2. any organization or entity in which the FIRST NAMED INSURED has an ownership interest of fifty percent (50%) or more, or otherwise has management control over, as of the inception date of this Policy; and
3. any joint ventures in which the INSURED is named as a co-venturer, but solely with regard to the INSURED's liability arising out of its CONTRACTING SERVICES provided under such joint venture; and
4. solely with regard to Coverage B under this Policy:

When required by written contract, INSURED also includes the client for whom the INSURED performs ~~CONTRACTING SERVICES~~ provided that such contract was signed by the INSURED and such client prior to the date the POLLUTION CONDITION first commenced. However, the client is included as an INSURED under this Policy solely to the extent that the client is found liable based upon CONTRACTING SERVICES negligently performed by an INSURED other than the client. Coverage for such client under this Policy shall not exceed the lesser of the following amounts:

- i. the Limit of Liability required under such written contract; or
- ii. the applicable Coverage B-Limit of Liability of this Policy.

Notwithstanding Section IX. CONDITIONS, Item L. OTHER INSURANCE, and only when required by such written contract, the coverage afforded under this Policy for any entity who is an INSURED solely by



PCE 69 17 (Ed. 04 10)

reason of subparagraph 4. shall apply as primary as to any other valid and collectible insurance available to such INSURED.

All other terms and conditions remain the same.

YEAR

Withholding Exemption Certificate

CALIFORNIA FORM

2012

(This form can only be used to certify exemption from nonresident withholding under California Revenue and Taxation Code (R&TC) Section 18662. Do not use this form for exemption from wage withholding.)

590**File this form with your withholding agent.** (Please type or print)

Withholding agent's name

Payee's name

O.C. Jones & Sons, Inc.

Payee's
 SOS file no. SSN or ITIN
 CA corp. no. FEIN

9 4 - 3 3 2 0 1 6 4

Address (number and street, PO Box, or PMB no.)

1520 Fourth Street

Apt. no./ Ste. no.

City

Berkeley

State

C A

ZIP Code

9 4 5 7 8

Read the following carefully and check the box that applies to the payee.

I certify that for the reasons checked below, the payee named on this form is exempt from the California income tax withholding requirement on payment(s) made to the entity or individual.

 Individuals — Certification of Residency:

I am a resident of California and I reside at the address shown above. If I become a nonresident at any time, I will promptly notify the withholding agent. See instructions for General Information D, Who is a Resident, for the definition of a resident.

 Corporations:

The above-named corporation has a permanent place of business in California at the address shown above or is qualified through the California Secretary of State (SOS) to do business in California. The corporation will file a California tax return and withhold on payments of California source income to nonresidents when required. If this corporation ceases to have a permanent place of business in California or ceases to do any of the above, I will promptly notify the withholding agent. See instructions for General Information F, What is a Permanent Place of Business, for the definition of permanent place of business.

 Partnerships or limited liability companies (LLC):

The above-named partnership or LLC has a permanent place of business in California at the address shown above or is registered with the California SOS, and is subject to the laws of California. The partnership or LLC will file a California tax return and will withhold on foreign and domestic nonresident partners or members when required. If the partnership or LLC ceases to do any of the above, I will promptly inform the withholding agent. For withholding purposes, a limited liability partnership (LLP) is treated like any other partnership.

 Tax-Exempt Entities:

The above-named entity is exempt from tax under California Revenue and Taxation Code (R&TC) Section 23701 _____ (insert letter) or Internal Revenue Code Section 501(c) _____ (insert number). The tax-exempt entity will withhold on payments of California source income to nonresidents when required. If this entity ceases to be exempt from tax, I will promptly notify the withholding agent. Individuals cannot be tax-exempt entities.

 Insurance Companies, Individual Retirement Arrangements (IRAs), or Qualified Pension/Profit Sharing Plans:

The above-named entity is an insurance company, IRA, or a federally qualified pension or profit-sharing plan.

 California Trusts:

At least one trustee and one noncontingent beneficiary of the above-named trust is a California resident. The trust will file a California fiduciary tax return and will withhold on foreign and domestic nonresident beneficiaries when required. If the trustee becomes a nonresident at any time, I will promptly notify the withholding agent.

 Estates — Certification of Residency of Deceased Person:

I am the executor of the above-named person's estate. The decedent was a California resident at the time of death. The estate will file a California fiduciary tax return and will withhold on foreign and domestic nonresident beneficiaries when required.

 Nonmilitary Spouse of a Military Servicemember:

I am a nonmilitary spouse of a military servicemember and I meet the Military Spouse Residency Relief Act (MSRRA) requirements. See instructions for General Information E, MSRRA.

CERTIFICATE: Please complete and sign below.

Under penalties of perjury, I hereby certify that the information provided in this document is, to the best of my knowledge, true and correct. If conditions change, I will promptly notify the withholding agent.

Payee's name and title (type or print) Greg Souder, SecretaryDaytime telephone no. 510-526-3424Payee's signature ▶ Date 9/20/13

Instructions for Form 590

Withholding Exemption Certificate

References in these instructions are to the California Revenue and Taxation Code (R&TC).

General Information

For purposes of California income tax, references to a spouse, husband, or wife also refer to a Registered Domestic Partner (RDP) unless otherwise specified. For more information on RDPs, get FTB Pub. 737, Tax Information for Registered Domestic Partners.

Private Mail Box (PMB) – Include the PMB in the address field. Write “PMB” first, then the box number. Example: 111 Main Street PMB 123.

Foreign Address – Enter the information in the following order: City, Country, Province/Region, and Postal Code. Follow the country's practice for entering the postal code. **Do not** abbreviate the country's name.

A Purpose

Use Form 590, Withholding Exemption Certificate, to certify an exemption from nonresident withholding. California residents or entities should complete and present Form 590 to the withholding agent. The withholding agent is then relieved of the withholding requirements if the agent relies in good faith on a completed and signed Form 590 unless told by the FTB that the form should not be relied upon.

The following are excluded from withholding and completing this form:

- The United States and any of its agencies or instrumentalities
- A state, a possession of the United States, the District of Columbia, or any of its political subdivisions or instrumentalities
- A foreign government or any of its political subdivisions, agencies, or instrumentalities

Important – This form cannot be used for exemption from wage and real estate withholding.

- If you are an employee, any wage withholding questions should be directed to the FTB General Information number, 800.852.5711. Employers should call 888.745.3886 or go to edd.ca.gov.
- Sellers of California real estate use Form 593-C, Real Estate Withholding Certificate, to claim an exemption from real estate withholding.

B Requirement

R&TC Section 18662 requires withholding of income or franchise tax on payments of California source income made to nonresidents of California.

Withholding is required on the following, but is not limited to:

- Payments to nonresidents for services rendered in California.
- Distributions of California source income made to domestic nonresident S corporation

shareholders, partners and members and allocations of California source income made to foreign partners and members.

- Payments to nonresidents for rents if the payments are made in the course of the withholding agent's business.
- Payments to nonresidents for royalties with activities in California.
- Distributions of California source income to nonresident beneficiaries from an estate or trust.
- Prizes and winnings received by nonresidents for contests in California.

However, withholding is optional if the total payments of California source income are \$1,500 or less during the calendar year.

For more information on withholding get FTB Pub. 1017, Resident and Nonresident Withholding Guidelines. To get a withholding publication see General Information H, Publications, Forms, and Additional Information.

Backup Withholding – Beginning on or after January 1, 2010, with certain limited exceptions, payers that are required to withhold and remit backup withholding to the Internal Revenue Service (IRS) are also required to withhold and remit to the Franchise Tax Board (FTB). The California backup withholding rate is 7% of the payment. For California purposes, dividends, interests, and any financial institutions release of loan funds made in the normal course of business are exempt from backup withholding. For additional information on California backup withholding, go to ftb.ca.gov and search for **backup withholding**.

If a payee has backup withholding, the payee must contact the FTB to provide a valid Taxpayer Identification Number (TIN) before filing a tax return. The following are acceptable TINs: social security number (SSN); individual taxpayer identification number (ITIN); federal employer identification number (FEIN); California corporation number (CA Corp No.); or Secretary of State (SOS) file number. Failure to provide a valid TIN will result in the denial of the backup withholding credit. For more information go to ftb.ca.gov and search for **backup withholding**.

C Who Certifies this Form

Form 590 is certified by the payee. An incomplete certificate is invalid and the withholding agent should not accept it. If the withholding agent receives an incomplete certificate, the withholding agent is required to withhold tax on payments made to the payee until a valid certificate is received. In lieu of a completed certificate on the preprinted form, the withholding agent may accept as a substitute certificate a letter from the payee explaining

why the payee is not subject to withholding. The letter must contain all the information required on the certificate in similar language, including the under penalty of perjury statement and the payee's taxpayer identification number. The withholding agent must retain a copy of the certificate or substitute for at least four years after the last payment to which the certificate applies, and provide it upon request to the Franchise Tax Board.

For example, if an entertainer (or the entertainer's business entity) is paid for a performance, the entertainer's information must be provided. **Do not** submit the entertainer's agent or promoter information.

The grantor of a grantor trust shall be treated as the payee for withholding purposes.

Therefore, if the payee is a grantor trust and one or more of the grantors is a nonresident, withholding is required. If all of the grantors on the trust are residents, no withholding is required. Resident grantors can check the box on Form 590 labeled “Individuals — Certification of Residency.”

D Who is a Resident

A California resident is any individual who is in California for other than a temporary or transitory purpose or any individual domiciled in California who is absent for a temporary or transitory purpose.

An individual domiciled in California who is absent from California for an uninterrupted period of at least 546 consecutive days under an employment-related contract is considered outside California for other than a temporary or transitory purpose.

An individual is still considered outside California for other than a temporary or transitory purpose if return visits to California do not total more than 45 days during any taxable year covered by an employment contract.

This provision does not apply if an individual has income from stocks, bonds, notes, or other intangible personal property in excess of \$200,000 in any taxable year in which the employment-related contract is in effect.

A spouse/RDP absent from California for an uninterrupted period of at least 546 days to accompany a spouse/RDP under an employment-related contract is considered outside of California for other than a temporary or transitory purpose.

Generally, an individual who comes to California for a purpose which will extend over a long or indefinite period will be considered a resident. However, an individual who comes to perform a particular contract of short duration will be considered a nonresident.

For assistance in determining resident status,

get FTB Pub. 1031, Guidelines for Determining Resident Status, and FTB Pub. 1032, Tax Information for Military Personnel, or call the FTB at 800.852.5711 or 916.845.6500.

E Military Spouse Residency Relief Act (MSRRA)

Generally, for tax purposes you are considered to maintain your existing residence or domicile. If a military servicemember and nonmilitary spouse have the same state of domicile, the MSRRA provides:

- A spouse shall not be deemed to have lost a residence or domicile in any state solely by reason of being absent to be with the servicemember serving in compliance with military orders.
- A spouse shall not be deemed to have acquired a residence or domicile in any other state solely by reason of being there to be with the servicemember serving in compliance with military orders.

Domicile is defined as the one place:

- Where you maintain a true, fixed, and permanent home
- To which you intend to return whenever you are absent

A military servicemember's nonmilitary spouse is considered a nonresident for tax purposes if the servicemember and spouse have the same domicile outside of California and the spouse is in California solely to be with the servicemember who is serving in compliance with Permanent Change of Station orders.

Note: California may require nonmilitary spouses of military servicemembers to provide proof that they meet the criteria for California personal income tax exemption as set forth in the MSRRA.

Income of a military servicemember's nonmilitary spouse for services performed in California is not California source income subject to state tax if the spouse is in California to be with the servicemember serving in compliance with military orders, and the servicemember and spouse have the same domicile in a state other than California.

For additional information or assistance in determining whether the applicant meets the MSRRA requirements, get FTB Pub. 1032.

F What is a Permanent Place of Business

A corporation has a permanent place of business in California if it is organized and existing under the laws of California or if it is a foreign corporation qualified to transact intrastate business by the SOS. A corporation that has not qualified to transact intrastate business (e.g., a corporation engaged exclusively in interstate commerce) will be considered as having a permanent place of business in California only if it maintains a permanent office in California that is permanently staffed by its employees.

G Withholding Agent

Keep Form 590 for your records. **Do not** send this form to the FTB unless it has been specifically requested.

For more information, contact Withholding Services and Compliance, see General Information H.

The payee must notify the withholding agent if any of the following situations occur:

- The individual payee becomes a nonresident.
- The corporation ceases to have a permanent place of business in California or ceases to be qualified to do business in California.
- The partnership ceases to have a permanent place of business in California.
- The LLC ceases to have a permanent place of business in California.
- The tax-exempt entity loses its tax-exempt status.

The withholding agent must then withhold and report the withholding using Form 592, Resident and Nonresident Withholding Statement, and remit the withholding using Form 592-V, Payment Voucher for Resident and Nonresident Withholding. Form 592-B, Resident and Nonresident Withholding Tax Statement, is retained by the withholding agent

and a copy is given to the payee.

H Publications, Forms, and Additional Information

You can download, view, and print California tax forms and publications at ftb.ca.gov.

To have publications or forms mailed to you or to get additional nonresident withholding information, contact the Withholding Services and Compliance.

WITHHOLDING SERVICES AND
COMPLIANCE MS F182
FRANCHISE TAX BOARD
PO BOX 942867
SACRAMENTO CA 94267-0651

Telephone: 888.792.4900
916.845.4900

Fax: 916.845.9512

OR to get forms by mail write to:

TAX FORMS REQUEST UNIT MS F284
FRANCHISE TAX BOARD
PO BOX 307
RANCHO CORDOVA CA 95741-0307

For all other questions unrelated to withholding or to access the TTY/TDD numbers, see the information below.

Internet and Telephone Assistance

Website: ftb.ca.gov

Telephone: 800.852.5711 from within the
United States
916.845.6500 from outside the
United States

TTY/TDD: 800.822.6268 for persons with
hearing or speech impairments

Asistencia Por Internet y Teléfono

Sitio web: ftb.ca.gov

Teléfono: 800.852.5711 dentro de los
Estados Unidos
916.845.6500 fuera de los Estados
Unidos

TTY/TDD: 800.822.6268 personas con
discapacidades auditivas
y del habla

WORKER'S COMPENSATION CERTIFICATION

5th Street Viaduct & Railyards (PN: T15135800)

In accordance with Article 5 (commencing at Section 1860), Chapter 1, Part 7, Division 2 of the Labor Code, the below certificate must be signed and filed with the awarding body prior to performing any work under this contract. Labor Code Section 3700, inter alia, states the following:

"Every employer shall secure the payment of compensation in one or more of the following ways:

"(a) By being insured against liability to pay compensation in one or more insurers duly authorized to write compensation insurance in this State.

"(b) By securing from the Director of Industrial Relations a certificate of consent to self-insure, which may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to his employees.

To be signed by authorized corporate officer or partner or individual submitting the Proposal. If Bidder is: (example)

1. An individual using a firm name, sign: "John Doe, an individual doing business as Blank Company."
2. An individual doing business under his own name, Sign: your name only.
3. A co-partnership, sign: "John Doe and Richard Doe, co-partners doing business as Blank Company, by, John Doe, co-partner.
4. A corporation, sign: "Blank Company, by John Doe, Secretary." (or other title)

I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for worker's 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.

DATE: 9/20/13

Contractor O.C. Jones & Sons, Inc.

By  Greg Souder, Secretary
Signature

GUARANTEE

We hereby guarantee the **5th Street, 5th Street Viaduct & Railyards Blvd at Sacramento Railyards (PN: T15135800)** the City of Sacramento for one (1) year in accordance with the guarantee required in the specifications. We agree to repair or replace any or all such work, together with all or any other work which may be displaced in so doing, that may be proven defective in workmanship or material within the one-year period from the date of acceptance without any expense whatsoever to the City, ordinary wear and tear and unusual abuse or neglect excepted.

In the event of our failure to comply with the above-mentioned conditions within five (5) days time after being notified in writing, we collectively or separately, do hereby authorize the City to proceed to have the defects repaired and made good at our expense and will pay the costs and damages, including but not limited to any related attorney fees and City staff and administrative expenses, therefor immediately upon demand.

Dated: 9/20/13

Signed: 

Greg Souder, Secretary

Printed Name

O.C. Jones & Sons, Inc.

Company

1520 Fourth St., Berkeley, CA 94710

Address

Request for Taxpayer Identification Number and Certification

**Give form to the
 requester. Do not
 send to the IRS.**

Print or type
 See Specific Instructions on page 2.

Name (as shown on your income tax return) O.C. Jones & Sons, Inc.	
Business name, if different from above	
Check appropriate box: <input type="checkbox"/> Individual/ Sole proprietor <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Other ▶	
<input type="checkbox"/> Exempt from backup withholding	
Address (number, street, and apt. or suite no.) 1520 Fourth Street	Requester's name and address (optional)
City, state, and ZIP code Berkeley, CA 94710	
List account number(s) here (optional)	

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on Line 1 to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Social security number								

or

Employer identification number								
9	4	3	3	2	0	1	6	4

Note. If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
3. I am a U.S. person (including a U.S. resident alien).

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the Certification, but you must provide your correct TIN. (See the instructions on page 4.)

Sign Here	Signature of U.S. person ▶	Date ▶ 9-24-13
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Purpose of Form

A person who is required to file an information return with the IRS, must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

U.S. person. Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding,
- or
3. Claim exemption from backup withholding if you are a U.S. exempt payee.

Note. If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

For federal tax purposes you are considered a person if you are:

- An individual who is a citizen or resident of the United States,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States, or

- Any estate (other than a foreign estate) or trust. See Regulations sections 301.7701-6(a) and 7(a) for additional information.

Foreign person. If you are a foreign person, do not use Form W-9. Instead, use the appropriate Form W-8 (see Publication 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

Nonresident alien who becomes a resident alien. Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the recipient has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items:

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.
2. The treaty article addressing the income.
3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.

Attention is directed to "Precast Concrete Quality Control" of these special provisions.

At the Contractor's option, one of the following acceptable alternative earth retaining systems may be constructed:

Proprietary Earth Retaining System	Address and Phone Number	Web Site
Reinforced Earth – 5 ft square	The Reinforced Earth Company 1660 Hotel Circle North, Suite 304 San Diego, CA 92108 (619) 688-2400	www.reinforcedearth.com
Retained Earth	The Reinforced Earth Company 1660 Hotel Circle North, Suite 304 San Diego, CA 92108 (619) 688-2400	www.reinforcedearth.com
MSE Plus - 5 ft square	SSL 4740 Scotts Valley Drive, Suite E 209 Scotts Valley, CA 95066 (831) 430-9300	www.mseplus.com
MSE Plus – 5 by 6 ft	SSL 4740 Scotts Valley Drive, Suite E 209 Scotts Valley, CA 95066 (831) 430-9300	www.mseplus.com

Only one type of earth retaining system shall be used on the project.

The above list of acceptable alternative earth retaining systems has been selected from the States current list of prequalified earth retaining systems and is limited only to those systems determined to have characteristics suitable for this project. Among the alternatives shown, some systems may be proprietary.

The list of prequalified earth retaining systems has been developed from data previously furnished by suppliers or manufacturers of each system. Approval of additional earth retaining systems is contingent on the system meeting the full range of parameters for which prequalification is required. The prequalification requirements are available at:

<http://www.dot.ca.gov/hq/esc/Translab/NewProducts/index.htm>

WORKING DRAWINGS

If the Contractor elects to use a proprietary earth retaining system from the list of acceptable alternative systems, the Contractor shall submit complete working drawings for each installation of the system in conformance with the provisions in Section 5-1.02, "Plans and Working Drawings," of the Standard Specifications. For initial review, 5 sets of drawings shall be submitted. After review between 6 and 12 sets, as requested by the Engineer, shall be submitted for final approval and use during construction. Working drawings shall be submitted to the Engineer.

Working drawings shall be 11" x 17" in size, and each drawing and calculation sheet shall include the State assigned designations for the contract number, bridge number, full name of the structure as shown on the contract Drawings, and District-County-Route-Post Mile. The design firm's name, address, and phone number shall be shown on the working drawings. Each sheet shall be numbered in the lower right hand corner and shall contain a blank space in the upper right hand corner for future contract sheet numbers.

The Contractor shall verify the existing ground elevations at the site before preparing the working drawings. The working drawings shall contain all information required for the proper construction of the system at each location including existing ground line at face of wall as verified at the site and any required revisions or additions to drainage systems or other facilities. The working drawings shall include "General Notes" that contain design parameters, material notes, and wall construction procedures and shall be accompanied with calculations. The working drawings and calculations shall be stamped and signed by an engineer who is registered as a Civil Engineer in the State of California. The Contractor shall allow the Engineer 30 days to review the drawings after a complete set has been received.

Unless otherwise specified, at the completion of each structure for which working drawings were submitted and if the work detailed in these working drawings is permanent, the Contractor shall submit to the Engineer one set of corrected as-built prints 11" x 17" in size and on 20-pound (minimum) bond paper, showing as built conditions. As-built drawings that are common to more than one structure shall be submitted for each structure.

MATERIALS

Earthwork

Excavation and backfill shall conform to the details shown on the Drawings, the provisions in Section 19, "Earthwork," of the Standard Specifications, and these special provisions.

Attention is directed to Section 2.09, "Lightweight Embankment Material (Cellular Concrete Backfill)," of these technical specifications for earth retaining structure backfill material requirements.

Concrete

Concrete used in precast and cast-in-place reinforced concrete members of earth retaining structures shall conform to the details shown on the Drawings, the provisions in Section 51, "Concrete Structures," of the Standard Specifications, and these special provisions.

The concrete leveling pads for the Mechanically Stabilized Embankment (MSE) system shall conform to the provisions in Section 90-10, "Minor Concrete," of the Standard Specifications.

Concrete shall conform to the provisions in "Freezing Condition Requirements" of these special provisions and shall contain not less than 675 pounds of cementitious material per cubic yard.

Reinforcement

Reinforcement shall conform to the provisions in Section 52, "Reinforcement," of the Standard Specifications and these special provisions.

Waterproofing

Membrane waterproofing shall conform to the details shown on the Drawings, and "Waterproofing" of these special provisions.

Geomembrane (Gasoline Resistant)

Geomembrane (gasoline resistant) shall consist of reinforced or unreinforced tri-polymer membrane consisting of polyvinyl chloride (PVC), ethylene interpolymer alloy, and polyurethane or a comparable polymer combination. The geomembrane shall be suitable for the containment of spilled liquid hydrocarbons, including gasoline, diesel fuel, kerosene, hydraulic fluid, methanol, ethanol, mineral spirits, and naphtha. The geomembrane shall be sufficiently

flexible to cover and closely conform to 90 degree edges and corners of lightweight fill (cellular concrete) subgrade material at ambient temperatures as low as 45 °F without application of heat.

Geomembrane (gasoline resistant) shall have the following properties, specified as minimum or maximum, not average roll properties:

Physical Property	ASTM Designation	Acceptance Value
Unleaded Gasoline Permeability	D 814	122 g/m ² Maximum per 24 hours
Thickness	D 751 *	0.71 mm Minimum
Grab Tensile Strength (25mm grip, 100mm x 200mm sample)	D 751 *	2.67 kN Minimum in each direction
Tensile Strength	D 1623	130 kPa Minimum
Elongation at Break	D 4632 *	20 Percent Minimum
Toughness (Percent elongation times Grab Tensile Strength **)	N/A	62 kN Minimum
Puncture Resistance (ball tip)	D 751 ***	3.56 kN Minimum

* or ASTM test method appropriate for specific polymer

** for example, 3kN x 30% = 90kN

***or FTMS 101C, Method 2065

All factory-produced seams shall have a minimum bonded width of 1.5 inches, and shall have a minimum shear strength of 320 lbf when tested in accordance with ASTM D 751 (Modified per NSF Standard No. 54). Failure shall occur in the base geomembrane material.

A Certificate of Compliance from the manufacturer of the geomembrane shall be furnished in accordance with the provisions of Section 6-1.07, "Certificates of Compliance," of the Standard Specifications.

Galvanizing

Soil reinforcement, connecting elements, and other steel components that are in contact with the earth shall be galvanized in conformance with the provisions in Section 75-1.05, "Galvanizing," of the Standard Specifications.

Inspection Elements

If a proprietary alternative system is selected, inspection elements representative of the particular soil reinforcement shall be furnished in the same number and approximate location as shown on the Drawings for the MSE system.

When metallic soil reinforcement is used, the threaded end of the inspection wire may be formed before or after galvanizing. The end 4 inches of the wire shall be coated with two applications of an approved unthinned commercial quality zinc-rich primer (organic vehicle type). The threaded end of the wire shall be encapsulated with corrosion inhibiting, mastic filled, round vinyl enclosure secured with a nylon tie as shown on the Drawings. If the threaded end is galvanized after threading, the threads shall be cleaned before painting. There shall be no damage to the unthreaded portion of the galvanized inspection wire.

Drainage System

The drainage system shall conform to the details shown on the Drawings and these special provisions.

Corrugated steel pipe shall conform to the provisions in Section 66, "Corrugated Metal Pipe," of the Standard Specifications.

Perforated steel pipe underdrains and underdrain outlets and risers shall conform to the provisions in Section 68-1, "Underdrains," of the Standard Specifications.

The class of rock used for rock slope protection at drain pipe outlets shall be No. 3 Backing and shall conform to the provisions in Section 72-2, "Rock Slope Protection," of the Standard Specifications.

Filter fabric shall conform to the provisions in Section 88-1.02, "Filtration," of the Standard Specifications and these special provisions. Filter fabric shall be Class A.

Adhesive for bonding filter fabric to concrete panels shall be commercial grade.

The drainage system shall conform to the details shown on the Drawings and these special provisions.

Plastic pipe shall conform to the provisions for pipe for edge drains and edge drain outlets in Section 68-3, "Edge Drains," of the Standard Specifications.

Ductile iron pipe shall conform to the provisions in Section 74-2.04, "Pipe, Joints, and Fittings," of the Standard Specifications.

Filter fabric strip bonded to precast concrete panel and concrete return wall vertical joint as shown on the Drawings shall conform to the provisions in Section 88-1.02, "Filtration," of the Standard Specifications and these special provisions. Filter fabric shall be Class A.

Adhesive for bonding filter fabric strip to concrete panels and concrete return wall vertical joint shall be commercial grade.

Treated Permeable Base Under Roadway Sections and Barrier Slabs At Precast Concrete Wall with Lightweight Fill (Cellular Concrete Backfill)

Treated permeable base under roadway sections and barrier slabs at precast concrete walls with lightweight fill (cellular concrete backfill) must be on asphalt treated permeable base or a cement treated permeable base in accordance with Section 29, "Treated Permeable Bases," of the Standard Specifications and these special provisions.

Cement treated permeable base material may be spread in one layer. The base material shall be compacted with either a vibrating shoe type compactor or with a steel-drum roller weighing at least 1.5 tons but not more than 5 tons. Compaction shall begin within one-half hour after the spreading operation and shall consist of 2 complete coverages of the treated material.

Soil Reinforcement

Soil reinforcement shall conform to the details shown on the contract Drawings, the approved working drawings, the preapproved proprietary system details, and these special provisions.

Steel wire shall conform to the requirements in ASTM Designation: A 82/A 82M. The welded wire mat shall conform to the requirements in ASTM Designation: A 185/A 185M.

The button on button-head wires shall conform to the provisions in Section 50-1.05, "Prestressing Steel," of the Standard Specifications.

The coupler at the wire mat connection shall be a seamless steel sleeve. The coupler shall be applied over the button-head wires and swaged by means of a hydraulic press. The coupler shall develop the minimum tensile strength of the wire without exceeding a total slip of the wires of 3/16 inch.

Sample button-head wire and coupler connectors shall develop the minimum tensile requirements for steel wire in ASTM Designation: A 82/A 82M without exceeding a total slip of the wires of 3/16 inch when tested in conformance with the provisions for tension testing of round wire samples in ASTM Designation: A 370. An independent testing laboratory shall perform button-head wire and coupler connection testing. Samples shall consist of 2 button-head wires each 24 inches long connected by a swaged coupler.

Prior to the start of wall construction, the Contractor shall furnish test results to the Construction Manager from tension and slip tests conducted on 6 proposed button-head wire and coupler connections. Failure of any of the proposed button-head wire and coupler connector samples to meet the slip and tensile strength requirements herein shall require the connection be redesigned by the Contractor.

The Contractor shall pay transportation and per diem costs at current federal government rates for a site visit to the wall panel fabrication location for one inspector if the location is greater than 100 miles from the project site.

No installation of face panels shall be allowed until the Contractor has successfully completed tension and slip testing for proposed button-head wire and coupler connectors.

During wall construction, the Contractor shall furnish test results to the Construction Manager from tension and slip testing of 4 samples of production button-head wire and coupler connections for each lot of 500 individual mat wire connections incorporated into the work. Production testing shall consist of testing each of the 4 sample connections for both slip and tensile requirements herein. If 2 or more of the production samples fail to meet slip or tensile test requirements, the entire lot represented by these samples shall be rejected. If one of the production samples fails to meet slip or tensile test requirements, an additional 4 samples shall be tested. Should any of the additional samples fail to meet the slip or tensile requirements, the entire lot represented by these samples shall be rejected.

Splicing of the welded wire mat along its length shall be by mechanical coupler that shall develop the minimum tensile strength of the wire. The mechanical coupler shall be approved by the Engineer.

Geogrid soil reinforcement roll identification, storage, and handling shall be in accordance with ASTM Designation: D 4873, and as specified in the preapproved proprietary details. The geogrid shall be shipped and stored such that the material is not placed directly on the ground. The geogrid shall be covered and protected at all times during shipment and storage such that it is fully protected from UV radiation including sunlight, site construction damage, precipitation, chemicals, flames including welding sparks, temperatures less than 20 °F or greater than 140 °F, or other conditions that may damage the physical property values of the geogrid. The Contractor shall prevent foreign materials from coming into contact with or affixing to the geogrid.

Miscellaneous

Resin bonded cork for horizontal joints shall conform to the requirements in ASTM Designation: D 1752, Type II, with a compressive load of not less than 100 psi.

Pipe for the pipe pin shall conform to the requirements in ASTM Designation: A 53/A 53M, Standard weight, except the amount of the zinc coating per square foot of actual surface shall average not less than 2.0 ounces and no individual specimen shall be less than 1.8 ounces.

CONSTRUCTION

Earth retaining structures shall be constructed to the lines, grades, and details shown on the Drawings, and shall conform to these special provisions.

Earthwork

The foundation for the structure shall be graded level for a width equal to the length of soil reinforcement elements plus 12 inches or as shown on the contract Drawings. The foundation material shall be compacted to a relative compaction of not less than 95 percent. The Construction Manager shall approve the compacted foundation area prior to commencement of wall construction.

The Contractor shall remove unsuitable material as determined and directed by the Construction Manager. This work shall be paid for as extra work as provided in Section 4-1.03D, "Extra Work," of the Standard Specifications.

Lightweight fill (cellular concrete backfill) shall be placed simultaneously with the erection of the precast concrete panels. Placement shall be accomplished without distortion of the reinforcing studs or displacement of precast concrete panels. Structure backfill at the front of the wall shall be completed prior to backfilling more than 15 feet above the bottom of the lowermost panel.

The precast concrete panels shall be supported in their plumb and final position at all times during placement of the lightweight fill (cellular concrete backfill) and until the panel directly above has been fully backfilled with the lightweight fill (cellular concrete backfill).

Vertical and horizontal alignment tolerances of panels shall not exceed 3/4 inch when measured along a 10-foot straightedge. The maximum allowable offset in any panel joint shall not exceed 3/4 inch.

A relative compaction of not less than 95 percent shall be obtained for embankment under earth retaining structures with soil reinforcement within the limits established by inclined planes sloping 1.5:1 (horizontal:vertical) out and down from lines one foot outside the bottom limits of the structure, including permeable material when required.

Soil reinforcement shall be tensioned in the direction perpendicular to the wall face with enough force to remove any slack in the connection or in the soil reinforcement itself. Soil reinforcement shall be secured in place to prevent movement during placement of the lightweight fill (cellular concrete backfill).

Soil reinforcement shall be placed in full-length sections.

Soil reinforcement shall be covered with at least 6 inches of lightweight fill (cellular concrete backfill) during the same work shift that it is placed.

Geocomposite drain strips, treated permeable base, and filter fabric shall be placed along with lightweight fill (cellular concrete) as shown on the Drawings.

Berms or ditches shall be provided to direct runoff away from the wall site. The Contractor shall not allow surface runoff from adjacent areas to enter the wall construction site.

Geomembrane (Gasoline Resistant)

Geomembrane (gasoline resistant) shall be placed directly on the surface of the lightweight fill (cellular concrete), which shall be clean, free of voids, and free of sharp objects. Field seams shall be bonded with an electrically-heated hot-wedge device as recommended by the manufacturer. Hot air extrusion welding devices or solvent bonding chemicals shall not be used. The temperature of the bonded geomembrane shall not exceed 165 °F immediately before contacting the lightweight fill (cellular concrete). Before installation of geomembrane, the Contractor shall demonstrate to the Engineer that the equipment, techniques, and personnel proposed for the bonding of field seams can produce vapor-tight seams under similar weather and work conditions near the job site. Field seams shall be inspected and, when ordered by the Engineer, shall be tested and pass the Vacuum Box Test. Construction equipment shall not be operated directly on the geomembrane. Any material damaged by the Contractor's equipment or operations shall be replaced or repaired at the Contractor's expense.

Filter Fabric

Filter fabric shall be placed at the locations and in conformance with the details shown on the Drawings and these special provisions.

Immediately prior to placing filter fabric, the subgrade to receive the filter fabric shall conform to the compaction and elevation tolerance specified for the material involved and shall be free of loose or extraneous material and sharp objects that may damage the filter fabric during installation.

Concrete panel surfaces to receive filter fabric shall be dry and thoroughly cleaned of dust and deleterious materials.

Filter fabric shall be handled and placed in conformance with the manufacturer's recommendations.

Filter fabric shall be stretched, aligned, and placed in a wrinkle-free manner.

Adjacent borders of filter fabric shall be stitched or overlapped from 12 inches to 18 inches. The preceding roll shall overlap the following roll in the direction the material is being spread or shall be stitched. When filter fabric is joined by stitching it shall be stitched with yarn of a contrasting color. The size and composition of the yarn shall be as recommended by the filter fabric manufacturer. The stitches shall number 5 to 7 per inch of seam.

If the filter fabric is damaged during installation, it shall be repaired by placing a piece of filter fabric that is large enough to cover the damaged area and that meets the overlap requirement.

Equipment or vehicles shall not be operated or driven directly on filter fabric.

Treated Permeable Base

Construct treated permeable base under Section 29, "Treated Permeable Bases," of the Standard Specifications and these special provisions.

Place asphalt treated permeable base at a temperature of not less than 200 °F nor more than 250 °F. Do not use material stored in excess of 2 hours in the work.

Asphalt treated permeable base may be spread in 1 layer. Compact the base with a vibrating shoe type compactor or a roller weighing at least 1.5 tons but not more than 5 tons. Begin compacting the base as soon as the mixture has cooled sufficiently to support the weight of the equipment without undue displacement.

Cement treated permeable base may be spread in 1 layer. Compact the base with a vibrating shoe type compactor or with a steel-drum roller weighing at least 1.5 tons but not more than 5 tons. Compaction must begin within one-half hour of spreading and must consist of 2 complete coverages of the cement treated permeable base.

Concrete

Concrete for the leveling pads shall be placed at least 24 hours prior to erecting face panels.

Exposed surfaces of precast concrete members shall receive architectural treatment conforming the details shown on the Drawings and Section 2.21 "Architectural Treatment," of these special provisions.

After placement of an inspection element and placement of backfill to a level at least 2 feet above the inspection element, the void in the face panel shall be dry packed with mortar as shown on the Drawings. Dry pack shall conform to the provisions in Section 51-1.135, "Mortar," of the Standard Specifications, except that the proportion of cementitious material to sand shall be that required to achieve a 28-day mortar compressive strength of 1000 psi to 1500 psi.

Proprietary Earth Retaining Systems

If the Contractor elects to construct one of the acceptable proprietary alternative earth retaining systems, the structure shall be constructed to the lines and grades shown on the Drawings. Vertical and horizontal alignment shall be checked at every course throughout the erection process. The construction shall include a drainage system where shown on the Drawings, and shall conform to the details shown on the approved working drawings, approved proprietary system details, and these special provisions.

The Contractor shall supply a Certificate of Compliance conforming to the provisions in Section 6-1.07, "Certificates of Compliance," of the Standard Specifications stating the supplied material meets the respective index criteria set forth when the proprietary alternative earth retaining system was prequalified by the Department, as measured in accordance with all test methods and standards specified in the Standard Specifications, these special provisions, and the approved working drawings.

A qualified representative of the proprietary earth retaining system manufacturer shall be present during erection and backfill of the first 10 feet of height of the entire length of the wall and shall be available during any remaining installations. The manufacturer's representative shall not be an employee of the Contractor.

Alternative earth retaining structures shall be constructed to accommodate the wall-mounted lighting, the wall mounted drainpipe, and the panels for future drainage inlets, as shown on the Drawings.

The top of wall profile of alternative earth retaining systems shall conform to the profile shown on the Drawings. The bottom of wall elevations or face panels shall be at or below the elevations shown on the Drawings. The height and length to be used for any system shall be the minimums for that system that will effectively retain the earth behind the structure for the loading conditions and the contours, profile, or slope lines shown on the Drawings. The length of soil reinforcement for any system shall be not less than that shown on the Drawings. In addition, if the Drawings or special provisions indicate limiting parameters for alternative systems, the system shall conform to those parameters.

The top of face panels, assuming no leveling pad settlement, shall be covered by the coping lip or concrete barrier slab lip at a minimum of 7 inches.

The top level of soil reinforcement shall be placed parallel to the top of the concrete panel at a distance below the top of the wall as shown on the Drawings. The top level of soil reinforcement shall also be (1) placed a minimum of 3 inches below the bottom of the barrier slab lip or the bottom of the concrete gutter behind coping and (2) placed a minimum of 5 inches below the top edge of the concrete panel.

2.16 STORMWATER QUALITY INLET

General description

The following general specifications describe the components and installation Requirements for a stormwater quality inlet for bioretention filtration of stormwater that utilizes physical, chemical and biological mechanisms of a soil, plant and microbe complex to remove pollutants typically found in urban stormwater runoff. The treatment system shall be a fully equipped, pre-constructed, drop-in-place unit designed for applications in the urban landscape to treat contaminated runoff from impervious surfaces.

Work Includes

The dealer or manufacturer, selected by the contractor shall furnish all required engineering assistance required to properly size and install all components of the treatment device in accordance with the approved drawings and these specifications. The contractor will be responsible for unloading and installation of the delivered product. Manufacturer shall provide, at no additional cost, maintenance of the treatment system for a period of one year.

Quality Control

- A. The quality of precast concrete components, underdrain materials, filter media, landscape materials and all other appurtenances and their assembling process shall be subject to inspection upon delivery of the unit at the work site.
- B. The unit and all components shall be inspected by the manufacturer for completeness, consistency with approved drawings, appearance, dimensions, engineered filter media and type of plant materials.
- C. All plant materials shall comply with the type and size required by the approved drawings and shall be alive and free of obvious signs of disease.
- D. Filter media shall be visually inspected to ensure appropriate volume, texture and consistency with the approved drawings and must be either tested or have been certified using approved procedures to meet or exceed the filter media minimum flow rates, annual volume treatment capacity, pollutant removal efficiency and soil content (sand, silt, clay and organic material) of the stormwater quality inlet.
- D. Stormwater quality inlet must have undergone testing per tarp and tape testing protocols as certified by a third party accredited consulting firm. The tree well stormwater water quality treatment system must be approved by the Sacramento stormwater quality partnership.
- E. The system shall be inspected and approved by the supplier or its certified contractor. The system supplier shall submit a comprehensive checklist of quality and safety items critical to the system and verify the installation has been in accordance with those standards.

Submittals

- A. Installation, Operation and Maintenance Manual - the contractor shall submit the manufacturers approved stormwater quality inlet installation, operation, and maintenance manual for the system. It will be the responsibility of the unit owner/operator or their contractor to ensure the unit is operated and maintained in accordance with the manual.
- B. Drawings - The contractor shall be provided dimensional drawings and, when specified, utilize these drawings to show details for construction, materials, specifications, reinforcing, pipe joints and any maintenances.
- C. Manufacturers Guarantee - the manufacturer shall guarantee all components of the units for a minimum period of one year provided the unit is operated and maintained in

accordance with the manual. Improper operation, maintenance or accidental or illegal activities (ie. Dumping of pollutants, vandalism, etc.) will void the guarantee.

- D. Any proposed equal alternative to this specification must be submitted for review and approved prior to bid opening. All expenses incurred for such a review are to be paid for by the bidder prior to submittal of bid.

Materials and design

Each unit shall consist of a precast concrete container together with an underdrain system, filter media, plant material, and appropriate grate landscape cover where applicable.

- A. Concrete for precast unit shall conform to the following:

- 2. The wall thickness shall not be less than 150mm [5"] or as shown on the dimensional drawings. In all cases, the wall thickness shall be no less than the minimum thickness required to meet loading requirements of the application.
- 3. The precast concrete unit shall be of concrete exterior.
- 4. The precast concrete unit shall be cured by an approved method. The unit shall not be shipped until the concrete has attained 85% of its design compressive strength.
- 5. The connections shall be provided to accept pipes of the specified size(s) and material(s).

Performance criteria

- A. The media shall achieve a flow rate equivalent to 50+ inches per hour.
- B. The unit shall remove 85% total suspended solids and a minimum of 60% Phosphorous, and 43% nitrogen, 90% oil and grease.
- C. The unit shall be located to ensure that high flow events shall bypass the filter media preventing erosion and re-suspension of pollutants.
- D. The filtered effluent shall be discharged to all appropriate storm drainage system in accordance with the approved drawings.

Construction

- A. Manufacture shall have a minimum of 5 years of experience in producing stormwater quality inlet for commercial use and a minimum of 1,000 installed units.
- B. Each unit shall be constructed at the locations and elevations according to the sizes shown on the approved drawings. Any modifications to the elevation or location shall be at the direction of and with approval by the engineer.

- C. Inlet and outlet connections shall be aligned to meet the approved Drawings with modifications necessary to meet site conditions.
- D. Once the unit is set, backfilling should be performed in a careful manner, bringing the appropriate fill material up in 150mm [5"] lifts on all sides. In all instances installation of filter unit shall conform to ASTM Specification C891 "standard practice for installation of underground precast utility structures".

Maintenance

- A. Each correctly installed system is to be maintained by the manufacturer for a minimum period of one year. The cost of this service is to be included in the price of the system.
- B. Annual maintenance consists of a maximum of one [1] scheduled visits.
- C. Each maintenance visit consists of the following:
 - 1. System inspection
 - 2. Foreign debris, silt, plant material and trash removal
 - 3. Filter media evaluation
 - 4. Plant health evaluation and pruning
 - 5. Replacement of plant material
 - 6. Disposal of all maintenance refuse items
 - 7. Maintenance records updated and stored

2.17 STORMWATER QUALITY VAULT

PART 1 GENERAL

1.1 Description

The Contractor shall furnish and install the Stormwater Quality Vault, complete and operable as shown and as specified herein, in accordance with the Drawings and these special provisions.

Stormwater Quality Vault shall consist of an underground precast structure that houses passive siphon-actuated, radial-flow media-filled filter cartridges. The siphon actuated radial flow filter cartridges shall be rechargeable and shall incorporate a self-actuated surface cleaning mechanism to increase the effective life of the filter media and to reduce the accumulation of material on the cartridge surface. Each radial flow filter cartridge shall operate at a predetermined flow rate through the use of an integrated flow control orifice located within each filter cartridge outlet manifold.

1.2. Manufacturer

The Stormwater Quality Vault shall be of a type that has been installed and in use successfully for a minimum of five (5) or more years. The Stormwater Quality Vault shall be supplied by CONTECH Construction Products Inc. 11835 NE Glenn Widing Dr, Portland OR, 97220 (800 548-4667), without exception.

1.3 Submittals

A. CONTECH Stormwater Solutions, or authorized supplier, to submit shop drawings for Stormwater Quality Vault with vault, filters cartridges and accessory equipment. Drawings shall include principal dimensions, filter placement, location of piping and unit foundation.

B. CONTECH Stormwater Solutions, or authorized supplier, shall submit an Operation and Maintenance Manual.

PART 2 PRODUCTS

2.1 Internal Components

All internal components including ABS and PVC manifold piping, filter cartridge(s), filter media (as specified on the Drawings), sump covers, flow spreaders, and energy dissipators shall be provided by CONTECH Construction Products Inc.

A. ABS manifold pipe shall meet ASTM specification F628. PVC manifold pipe shall meet ASTM specification D1785 and PVC fittings shall meet ASTM specification D2466.

B. Filter cartridge bottom pan, inner ring, and hood shall be constructed from linear lowdensity polyethylene (LLDPE) or ABS. Filter cartridge screen shall consist of 1" x ½" welded wire fabric (16 gauge minimum) with a bonded PVC coating. Internal parts shall consist of ABS or PVC material. Siphon-priming float shall be constructed from high-density polyethylene (HDPE). All miscellaneous nuts, bolts, screws, and other fasteners shall be stainless steel or aluminum.

An orifice plate shall be supplied with each cartridge to restrict flow rate to a maximum of 15 gpm at system design head or as specified on drawings.

C. If a sump cover/overflow baffle/inlet sump/outlet sump/inlet tower/outlet overflow is provided, they shall be constructed of ABS and sealed to the interior vault walls and floor with a polyurethane construction sealant rated for use below the waterline, SikaFlex 1a or equal. Contractor to provide sealant material and installation unless completed prior to shipment.

D. Underdrain Design: the size of the underdrain will provide a minimum of 0.067 in² of underdrain cross sectional area per 1 gpm of design flow rate. (example: 105 gpm maximum design flow rate will require an underdrain with 7.035 in² of cross sectional area, which is equal to one 3" diameter pipe)

E. Filter media shall be provided by CONTECH Construction Products Inc. or approved alternate source. Filter media shall consist of one or more of the following, as specified on the Drawings:

1. Perlite Media: Perlite media shall be made of natural siliceous volcanic rock free of any debris or foreign matter. The perlite media shall have a bulk density

ranging from 6.5 to 8.5 lb/ft³ and particle sizes ranging from that passing through a 0.50 inch screen and retained on a U.S. Standard #8 sieve.

2. CSF Media: CSF media shall be made exclusively of composted fallen deciduous leaves. Filter media shall be granular. Media shall be dry at the time of installation. The CSF leaf media shall have a bulk density ranging from 40 to 50 lb/ft³ and particle sizes ranging from that passing through a 0.50 inch screen to that retained on a U.S. Standard #8 sieve.

3. Metal Rx Media: Metal Rx media shall be made exclusively of composted fallen deciduous leaves. Filter media shall be granular. Media shall be dry at the time of installation. The Metal Rx media shall have a bulk density ranging from 40 to 50 lb/ft³ and particle sizes ranging from that passing through a U.S. Standard #8 sieve to that retained on a U.S. Standard #14 sieve.

4. Zeolite Media: Zeolite media shall be made of naturally occurring clinoptilolite, which has a geological structure of potassium-calcium-sodium aluminosilicate. The zeolite media shall have a bulk density ranging from 44 to 48 lb/ft³, particle sizes ranging from that passing through a U.S. Standard #4 sieve to that retained on a U.S. Standard #6 sieve, and a cation exchange capacity ranging from 1.0 to 2.2 meq/g.

5. Granular Activated Carbon: Granular activated carbon (GAC) shall be made of lignite coal that has been steam activated. The GAC media shall have a bulk density ranging from 28 to 31 lb/ft³ and particle sizes ranging from that

6. Zeolite-Perlite-Granular Activated Carbon (ZPG): ZPG is a mixed media that shall be composed of a 1.3 ft³ outer layer of 100% Perlite (see above) and a 1.3 ft³ inner layer consisting of a mixture of 90% Zeolite (see above) and 10% Granular Activated Carbon (see above).

7. Zeolite-Perlite (Zeo/Perl): Zeo/Perl is a mixed media that shall be composed of a 1.3 ft³ outer layer of 100% Perlite (see above) and a 1.3 ft³ inner layer consisting of 100% Zeolite.

8. CSF – Granular Activated Carbon (CSF/GAC): CSF/GAC is a mixed media that shall be composed of a 1.3 ft³ outer layer of 100% CSF media (see above) and a 1.3 ft³ inner layer consisting of 100% Granular Activated Carbon (see above).

9. Perlite – Metal Rx : Perlite/Metal Rx is a mixed media that shall be composed of a 1.3 ft³ outer layer of 100% Perlite (see above) and a 1.3 ft³ inner layer consisting of 100% Metal Rx (see above).

10. PhosphoSorb: PhosphoSorb media shall be made from Perlite pellets with activated alumina bound to the surface. The PhosphoSorb media pellets shall be granular and have a bulk density from 18 to 25 lb/ft³. The pellet size should range from that passing through a U.S. Standard ¼ inch sieve and retained on a #8 sieve.

F. If a sump cover/overflow baffle/inlet sump/outlet sump/inlet tower/outlet overflow is provided, they shall be constructed of ABS and sealed to the interior vault walls and floor with a polyurethane construction sealant rated for use below the waterline, SikaFlex 1a or equal. Contractor to provide sealant material and installation unless completed prior to shipment.

G. Flow spreader shall be constructed of LLDPE.

H. Energy dissipater shall be constructed of polyolefins.

2.2 Precast Concrete Vault Components

A. Precast concrete vault shall be provided according to ASTM C857 and C858.

B. Vault joint sealant shall be Con Seal CS-101 or approved equal.

C. If interior concrete baffle walls are provided, baffle walls shall be sealed to the interior vault walls and floor with a polyurethane construction sealant rated for use below the waterline, SikaFlex 1a or equal. Contractor to provide sealant material and installation unless completed prior to shipment.

D. Frames and covers shall be gray cast iron and shall meet AASHTO H-20 loading requirements, and shall be provided according to ASTM A48.

E. Doors shall have hot-dipped galvanized frame and covers. Covers shall have diamond plate finish. Each door to be equipped with a recessed lift handle. Doors shall meet H-20 loading requirements for incidental traffic, at a minimum.

F. Steps shall be constructed of copolymer polypropylene conforming to ASTM D-4101. Steps shall be driven into preformed or drilled holes once concrete is cured. Steps shall meet the requirements of ASTM C-478 and AASHTO M-199. The ½" Grade 60 deformed reinforcing bar shall meet ASTM A-615.

2G. Ladders shall be constructed of aluminum and steel reinforced copolymer polypropylene conforming to ASTM D-4101. Ladder shall bolt in place. Ladder shall meet all ASTM C-497 load requirements. Ladders provided upon request or where required.

2.3 Contractor Provided Components

All contractor-provided components shall meet the requirements of this section, the plans specifications and contract documents. In the case of conflict, the more stringent specification shall apply.

A. Crushed rock base material shall be six-inch minimum layer of ¾-inch minus rock. Compact undisturbed sub-grade materials to 95% of maximum density at +/-2% of optimum moisture content. Unsuitable material below sub-grade shall be replaced to engineer's approval.

B. Concrete shall have an unconfined compressive strength at 28 days of at least 3000 psi, with $\frac{3}{4}$ -inch round rock, a 4-inch slump maximum, and shall be placed within 90 minutes of initial mixing.

C. Silicone Sealant shall be pure RTV silicone conforming to Federal Specification Number TT S001543A or TT S00230C or Engineer approved.

D. Grout shall be non-shrink grout meeting the requirements of Corps of Engineers CRD-C588. Specimens molded, cured and tested in accordance with ASTM C-109 shall have minimum compressive strength of 6,200 psi. Grout shall not exhibit visible bleeding.

E. Backfill material shall be $\frac{3}{4}$ -inch minus crushed rock, or approved equal.

PART 3 EXECUTION

3.1 Precast Concrete Vault

A. Set precast vault on crushed rock base material that has been placed in maximum 12-inch lifts, loose thickness, and compacted to at least 95-percent of the maximum dry density as determined by the standard Proctor compaction test, ASTM D698, at moisture content of +/-2% of optimum water content.

B. Vault floor shall slope $\frac{1}{4}$ inch maximum across the width and slope downstream 1 inch per 12 foot of length. Vault top finish grade shall be even with surrounding finish grade surface unless otherwise noted on plans.

C. Inlet and outlet pipes shall be stubbed in and connected to precast concrete vault according to Engineer's requirements and specifications.

D. If grout is used, Contractor to grout all inlet and outlet pipes flush with or protruding up to 2 inches into interior of vault.

3.2 Ballast

A. When required, ballast shall be placed to the dimensions specified by the engineer and noted on the Drawings. Ballast shall not encase the inlet and/or outlet piping. Provide 12" clearance from outside diameter of pipes.

3.3 Clean Up

A. Remove all excess materials, rocks, roots, or foreign material, leaving the site in a clean, complete condition approved by the construction manager. All filter components shall be free of any foreign materials including concrete and excess sealant.

3.4 Filter Cartridges

A. Filter cartridges shall be delivered with the vault. Contractor shall take appropriate action to protect the cartridges from sediment and other debris during construction. Methods for protecting the cartridges include but are not limited to:

1. Remove cartridges from the vault and store appropriately. Cartridges shall be reinstalled to operate according to 3.4 B (see below).
2. If vault is equipped with underdrain bypass piping, Contractor may leave cartridges in the vault and allow stormwater entering collection system to bypass filter bay through underdrain bypass piping.
3. Leave cartridges in the vault and plug inlet and outlet pipe to prevent stormwater from entering the vault.

The method ultimately selected shall be at Contractor's discretion and Contractor's risk.

B. Filter cartridges shall not be placed in operation until the vault is clean and the project site is clean and stabilized (construction erosion control measures no longer required). The project site includes any surface that contributes storm drainage to the Stormwater Quality Vault. All impermeable surfaces shall be clean and free of dirt and debris. All catch basins, manholes and pipes shall be free of dirt and sediments. Contact CONTECH Stormwater Solutions to assist with system activation and/or inspect the system for proper installation once site is clean and stabilized.

C. Contractor to install filter cartridges.

1. *Filter Cartridges With CSF Media and Slip Connector Fittings:* Tape shall be cleanly and completely removed from manifold fitting openings. Spool pieces (slip fittings) shall be inserted without glue into all manifold fittings to be equipped with a filter cartridge. Filter cartridges shall be placed over the spool pieces to contact the vault floor. Plugs shall be inserted without glue in all manifold fittings not equipped with a filter cartridge.

2. *Filter Cartridges with Threaded Connector Fittings:* Tape shall be cleanly and completely removed from manifold fitting openings. Threaded connectors shall be glued and inserted into all manifold fittings to be equipped with a filter cartridge. Filter cartridges shall be threaded onto the connectors until they contact the vault floor. Plugs shall be inserted without glue in all manifold fittings not equipped with a filter cartridge.

3. *Filter Cartridges with 1/4-Turn Connector Fittings:* Tape shall be cleanly and completely removed from manifold fitting openings. 1/4-turn connects shall be glued and inserted into all manifold fittings to be equipped with a filter cartridge. Filter cartridges shall be turned onto the connector until they reach the hard stop on the connector – approximately 1/4 revolution. Plugs shall be inserted without glue in all manifold fittings not equipped with a filter cartridge.

PART 4 PERFORMANCE

4.1 Energy Dissipation

A. Each Stormwater Quality Vault shall include an internal energy dissipater, upstream from the filtration area, to spread the trajectory and reduced the velocity of the inlet flow.

4.2 Cartridge Operation

A. Each Stormwater Quality Vault shall contain one or more siphon actuated media filter cartridges that maintain a uniform pressure profile across the face of the filter during operation. At the design flow rate the maximum filter hydraulic loading rate is not to exceed 2.1 gallons per minute per square foot of filter surface area.

Stormwater shall enter the filter cartridges through sides and shall flow through the filter media radially from the outer perimeter to the inner cartridge lumen and shall have an average contact time no less than 38 seconds.

4.3 Cartridge Sediment Loading

A. Filter cartridges shall be of a design that has demonstrated a minimum sediment retention capacity of 22 pounds of silty loam per cartridge in laboratory tests without a reduction in hydraulic capacity. Laboratory data shall be corroborated with field observations showing similar longevity without impact to normal hydraulic performance of the stormwater filtration system. All laboratory and field tests submitted in support of this specification must have undergone peer review.

4.4 Overflow

A. The filter system will have a baffled, non-siphoning internal overflow with a minimum capacity of 1.8 cfs.

2.18 BIORETENTION SOIL

Bioretention soils should meet the following criteria.

1. General Requirements

Bioretention soil shall achieve a long-term, in-place infiltration rate of at least 5 inches per hour. Bioretention soil shall also support vigorous plant growth.

Bioretention Soil shall be a mixture of fine sand, and compost, measured on a volume basis:

60%-70% Sand
30%-40% Compost

1.1. Submittals

The Contractor must submit to the Construction Manager for approval:

A. A sample of mixed bioretention soil.

B. Certification from the soil supplier or an accredited laboratory that the Bioretention Soil meets the requirements of these Special Provisions.

C. Grain size analysis results of the fine sand component performed in accordance with ASTM D 422, Standard Test Method for Particle Size Analysis of Soils.

D. Quality analysis results for compost performed in accordance with Seal of Testing Assurance (STA) standards, as specified in Section 1.4 of this section.

E. Organic content test results of mixed Bioretention Soil. Organic content test shall be performed in accordance with by Testing Methods for the Examination of Compost and Composting (TMECC) 05.07A, "Loss-On- Ignition Organic Matter Method".

F. Grain size analysis results of compost component performed in accordance with ASTM D 422, Standard Test Method for Particle Size Analysis of Soils.

G. A description of the equipment and methods used to mix the sand and compost to produce Bioretention Soil.

H. Provide the following information about the testing laboratory(ies) name of laboratory(ies) including:

- 1) contact person(s)
- 2) address(es)
- 3) phone contact(s)
- 4) e-mail address(es)
- 5) qualifications of laboratory(ies), and personnel including date of current certification by STA, ASTM, or approved equal

1.2. Sand for Bioretention Soil

A. General

Sand shall be free of wood, waste, coating such as clay, stone dust, carbonate, etc., or any other deleterious material. All aggregate passing the No. 200 sieve size shall be non-plastic.

B. Sand for Bioretention Soil Texture

Sand for Bioretention Soils shall be analyzed by an accredited lab using #200, #100, #40, #30, #16, #8, #4, and 3/8 inch sieves (ASTM D 422 or as approved by municipality), and meet the following gradation:

Sieve Size	Percent Passing (by weight)	
	Minimum	Maximum
3/8 inch	100	100
No. 4	90	100
No. 8	70	100
No. 16	40	95
No. 30	15	70
No. 40	5	55
No. 100	0	15
No. 200	0	5

Note: all sands complying with ASTM C33 for fine aggregate comply with the above gradation requirements.

1.3. Composted Material

Compost shall be a well decomposed, stable, weed free organic matter source derived from waste materials including yard debris, wood wastes or other organic materials not including manure or biosolids meeting the standards developed by the US Composting Council (USCC). The product shall be certified through the USCC Seal of Testing Assurance (STA) Program (a compost testing and information disclosure program).

A. Compost Quality Analysis

Before delivery of the soil, the supplier shall submit a copy of lab analysis performed by a laboratory that is enrolled in the US Composting Council's Compost Analysis Proficiency (CAP) program and using approved Test Methods for the Evaluation of Composting and Compost (TMECC). The lab report shall verify:

- 1) Feedstock Materials shall be specified and include one or more of the following: landscape/yard trimmings, grass clippings, food scraps, and agricultural crop residues.
- 2) Organic Matter Content: 35% - 75% by dry wt.
- 3) Carbon and Nitrogen Ratio: C:N < 25:1 and C:N > 15:1
- 4) Maturity/Stability: shall have a dark brown color and a soil-like odor. Compost exhibiting a sour or putrid smell, containing recognizable grass or leaves, or is hot (120F) upon delivery or rewetting is not acceptable. In addition any one of the following is required to indicate stability:
 - a. Oxygen Test < 1.3 O₂ /unit TS /hr
 - b. Specific oxy. Test < 1.5 O₂ / unit BVS
 - c. Respiration test < 8 C / unit VS / day d. Dewar test < 20 Temp. rise (°C)
 - e. Solvita® > 5 Index value
- 5) Toxicity: any one of the following measures is sufficient to indicate non-toxicity.
 - a. NH₄- : NO₃-N < 3
 - b. Ammonium < 500 ppm, dry basis
 - c. Seed Germination > 80 % of control d. Plant Trials > 80% of control
 - e. Solvita® > 5 Index value

6) Nutrient Content: provide analysis detailing nutrient content including N-P-K, Ca, Na, Mg, S, and B.

a. Total Nitrogen content 0.9% or above preferred.

b. Boron: Total shall be <80 ppm; Soluble shall be <2.5 ppm

7) Salinity: Must be reported; < 6.0 mmhos/cm

8) pH shall be between 6.5 and 8. May vary with plant species.

B. Compost for Bioretention Soil Texture

Compost for Bioretention Soils shall be analyzed by an accredited lab using #200, 1/4 inch, 1/2 inch, and 1 inch sieves (ASTM D 422 or as approved by municipality), and meet the following gradation:

Sieve Size	Percent Passing (by weight)	
	Minimum	Maximum
1 inch	99	100
1/2 inch	90	100
1/4 inch	40	90
No. 200	2	10

C. Bulk density: shall be between 500 and 1100 dry lbs/cubic yard

D. Moisture Content shall be between 30% - 55% of dry solids.

E. Inerts: compost shall be relatively free of inert ingredients, including glass, plastic and paper, < 1 % by weight or volume.

F. Weed seed/pathogen destruction: provide proof of process to further reduce pathogens (PFRP). For example, turned windrows must reach min. 55C for 15 days with at least 5 turnings during that period.

G. Select Pathogens: Salmonella <3 MPN/4grams of TS, or Coliform Bacteria <10000 MPN/gram.

H. Trace Contaminants Metals (Lead, Mercury, Etc.) Product must meet US EPA, 40 CFR 503 regulations.

I. Compost Testing

The compost supplier will test all compost products within 120 calendar days prior to application. Samples will be taken using the STA sample collection protocol. (The sample collection protocol can be obtained from the U.S. Composting Council, 4250 Veterans Memorial Highway, Suite 275, Holbrook, NY 11741 Phone: 631-737-4931, www.compostingcouncil.org). The sample shall be sent to an independent STA Program approved lab. The compost supplier will pay for the test.

2.19 MICROTUNNELING

A. General

This section provides the minimum requirements for the trenchless installation of pipe by microtunneling. In addition, auger type boring or bore and jack will be considered as acceptable methods of installation for this project. The locations and lengths of the microtunneled pipelines are shown on the Drawings. Microtunneling may be used for the direct-jacked installation of:

1. 18-inch steel casing pipe, then install 8-inch PVC SDR-35 carrier pipe.
2. 24-inch steel casing pipe, then install 12-inch ductile iron pipe, pressure class 350, carrier pipe.

Requirement

The work specified in this section includes the construction of the pipeline using microtunneling methods, at the location indicated on the Drawings. Remotely controlled, guided, pipe jacking equipment with a slurry spoil removal system capable of maintaining positive face pressure will be required. The microtunneling machine (MTBM) shall be fully retrievable from the jacking shaft at any time during the bore. Pipe jacking methods, using microtunneling equipment, shall be employed to directly install the sanitary sewer pipe, and water main pipe at the locations indicated on the Drawings.

B. Definitions

- I. Microtunneling: For purposes of this specification, microtunneling consists of a remotely controlled, guided, pipe jacking process that provides continuous support to the excavation face. The guidance system usually consists of a reference laser or theodolite and electronic distance measurement (EDM) device, mounted in the jacking pit, and a target, mounted inside the microtunneling machine's articulated steering head. The microtunneling process does not require routine personnel entry into the tunnel. A key element of microtunneling is the ability to control the stability of the face by applying mechanical or fluid pressure to the face to balance the earth and groundwater pressures. The MTBM shall conform to the retrievability requirements defined below.
- II. Microtunnel Boring Machine (MTBM): Remote-controlled, guided slurry shield that can provide continuous support to the excavation face. Operation of the MTBM is controlled from a control container located on the ground surface near a jacking shaft. Soil excavation is achieved by a rotating cutter-wheel. Excavated soil is pushed by the cutter wheel into a slurry chamber where it is mixed with water to form a thickened slurry. Pumps cycle the slurry to the surface where a separation plant removes the solids. The recycled slurry is then returned to the face. The slurry system operates in a closed-system of pumps and hoses. Because of the remote-control operation and the closed spoil-removal system, routine personnel entry into the MTBM is not required. Slurry used to convey spoil may be water; however, it often contains additives such as bentonite that thicken the

slurry, allowing it to carry more solids and providing gel strength to prevent the slurry from permeating the soils at the heading. The slurry system is pressurized and can be controlled to provide stability to the excavation face by counterbalancing earth and hydrostatic pressures. The guidance system consists of a laser or theodolite and EDM device mounted in the jacking shaft communicating a laser reference line to a target mounted in the MTBM's articulated steering head. The target in an MTBM is an active laser receiver that provides the operator with information about machine attitude and pitch, and can allow for accurate steering control. Additionally, the MTBM shall conform to the retrievability requirements contained herein

- III. Jacking Pipe: The pipe jacked behind the microtunneling machine. The jacking pipe may be an oversized steel casing or the carrier pipe.
- IV. Intermediate Jacking Station (IJS): A fabricated steel cylinder fitted with hydraulic jacks that are incorporated into the pipeline between two specially fabricated pipe sections. The function of an intermediate jacking station is to distribute the jacking load along the pipe string during pipe installation. The hydraulic jacks are removed at the completion of a drive and the gap between adjacent pipe sections is fully closed by pushing the pipes together with the main shaft jacks or another IJS. The steel cylinder remains as an extended length sleeve or coupling.
- V. Launch/Retrieval Seal or Entry/Exit Seal: A mechanical seal, usually comprised of one or more rubber flanges, attached to a steel housing, that is mounted to the wall of the jacking shaft. The microtunneling machine distends the flange seal as it passes through, creating a seal to reduce water, slurry, or lubrication inflows into the shaft during tunneling operations.
- VI. Lubrication Port: A port located within the microtunneling boring machine (MTBM) or in a jacking pipe segment, fitted with a one-way valve, for injection of lubrication material or grout into the annular space between the pipe and the ground. Pipe ports are typically threaded to accept pipe plugs, inserted after installation of the pipe and after grouting is completed.
- VII. Jacking Record: A computer-generated or manually recorded report that contains information on pertinent microtunneling operations, and may include: date, time, name of Operator, tunnel drive identification, installed tunnel length, rate of advance, jacking forces, cutter-head speed and torque, slurry flow rates and pressures, bypass valve position, use of any cutting or high-pressure nozzles, face pressure, steering jack positions, line and grade offsets, any movement of the guidance system, machine inclination and roll, intermediate jacking station use and jacking forces, pressure, volume, and location of any lubricant pumped, problems encountered with the tunneling machine or other components or equipment, and durations and reasons for delays.
- VIII. Settlement Point: A point with elevation and spatial location established by survey prior to construction. The point is re-surveyed periodically to monitor

ground movements. The point may be a nail, pin, subsurface settlement rod, borehole extensometer, or other device that can be readily located and surveyed.

- IX. Obstruction: Objects or portions of objects located wholly or partially within the cross-sectional area excavated by the microtunneling machine that are larger than one-third (1/3) the outer diameter of the shield or cutter-head, and that prevent the forward motion of the microtunneling machine.
- X. Retrievability: The capability to withdraw the microtunneling machine through the launch shaft and maintain stability of the partially completed bore without the need for an intermediate access shaft. Retrievability is a required capability of this project.
- XI. Carrier Pipe: Permanent pipe for operational use that is used to convey flows.

C. Equipment

- I. ONLY slurry microtunneling equipment or approved alternate will be used for the pipe installation work described in this section. The microtunneling equipment will be manufactured by Akkerman, Herrenknecht, Iseki, Lovat, Soltau, or approved alternate.
- II. The machine shall be equipped with a computerized data acquisition system for collecting information for the jacking record. An on-site printer and disk drive will also be required for production of the printed daily jacking record and CD or diskette files. As a supplement to the computerized data acquisition system, the Contractor shall use manual data acquisition for collecting information for the jacking record. All data required and specified in this section shall be collected and submitted to the Construction Manager by the Contractor, regardless of the methods for data collection, by noon on the working day following the shift for which the data were collected.
- III. The machine shall be capable of fully supporting the face during both excavation and shutdown periods and shall have the capability of exerting a controllable, measurable, continuous, stabilizing pressure at the face required to prevent loss of ground and groundwater inflows. The machine shall be capable of controlling the volume of excavated material removed at the tunnel face, independent of machine advance. The slurry system shall be capable of reversing the direction of flow at the face to minimize clogging.
- IV. The machine shall have a slurry chamber capable of being pressurized to provide support to the face. A pressure gage shall be provided to monitor the pressure exerted by the slurry at the heading.
- V. The machine shall be remotely operated, guided, and monitored continuously by the Operator. A display shall be provided at the operation console to allow the Operator and site inspector to monitor the machine in relation to the required operational data.

- VI. The machine shall have an articulated shield with a watertight joint. The shield shall be steerable in both the vertical and horizontal directions to allow the operator to maintain line and grade within the specified tolerances. The cutter head shall have a reversible drive system so that it can rotate in either direction to minimize rotation or roll of the machine during operation.
- VII. The machine shall be capable of advancing through the geologic conditions to be encountered at the site, as described in attached Geotechnical Reports and as determined by the Contractor's own investigation. The machine shall be able to excavate or advance past rocks or other hard objects with maximum dimension up to one-third (1/3) the outer diameter of the shield and with unconfined compressive strengths up to 30,000 psi.
- VIII. The machine shall be capable of being retrieved, i.e. withdrawn through the jacking shaft without the need for an intermediate rescue shaft if forward progress cannot be achieved. Reversible jacks and a double-seal entry ring, with a closure device and grouting nipple shall be provided for this project. The Contractor may propose an alternative, subject to Construction Manager's approval. The method proposed for retrievability must be capable of ensuring stability of the aborted bore and avoiding settlement / subsidence.
- IX. The machine shall be equipped for continuous gas monitoring. The Contractor shall have a shutdown plan that includes activation of the slurry bypass in the event that a gassy environment is detected in the heading.
- X. A lubrication injection system shall be provided to inject pipe lubricant around the MTBM and jacking pipe to decrease frictional resistance. Lubrication materials may include a mixture of bentonite and/or polymers and water. Lubrication ports shall be provided in the MTBM and jacking pipe to allow for lubrication along the pipe string at intervals not more than ten (10) feet. Lubrication ports shall be installed by the pipe manufacturer. The lubrication ports shall be used for contact grouting after the microtunneling drive is completed. Lubrication materials may include a mixture of bentonite and/or polymers and water.
- XI. The radial over cut shall be one-quarter (0.25) inch. The radial overcut shall be determined as the difference between the maximum diameter created by the cutting teeth or overcut band on the machine (whichever is greater) and the outer diameter of the jacking pipe, divided by two.
- XII. The connection between the tail of the machine and the first pipe section should be fully gasketed and sealed to prevent soil or water from flowing into the machine during tunneling operations.
- XIII. The jacking system, including any intermediate jacking stations, shall be capable of continuously monitoring the jacking pressure, rate of advance, and jacking distance. The jacking system shall develop a uniform distribution of jacking forces on the ends of the pipe.

- XIV. The intermediate jacking station shell shall be fully gasketed between the inter jack shell and each inter jack pipe, with 2 gaskets installed on each pipe. The inter jack shell shall be fabricated of stainless steel, or mild steel with a fusion bonded epoxy coating and cement mortar protective finish, or galvanized coating with cement mortar protective finish.
- XV. The microtunneling system shall include a slurry separation plant that can achieve the rates of spoil separation and slurry cleaning required by the Contractor to achieve planned production rates. The Contractor is advised that ground conditions include medium dense silty sand to very loose sand that could present delays if a gravity separation method is used alone. Shaker screens, hydrocyclones, and centrifuges may be required for efficient separation of spoils. The Contractor is advised that the separation plant must fit within the allowable work areas shown on the Drawings and that excavated slurry pits or ponds will not be allowed.
- XVI. All spoils and slurry must be contained in trucks, tanks, or other containers at all times. Dumping of spoil or slurry on the ground, discharge into sewers, or discharge into the shafts or the American River will not be permitted. All spoils will be transported and disposed of off-site at an approved disposal facility that meets all State of California and local requirements.

D. Design Criteria

- I. Design of the jacking pipe and determination of acceptable pipe fabrication tolerances is the responsibility of the Contractor. The pipe shall be designed to withstand all anticipated loads with appropriate safety factors.
- II. The thrust block shall be perpendicular to the proposed pipe alignment and shall be designed to withstand the maximum jacking force provided by the jacking frame with an appropriate safety factor. The thrust block shall be designed to transmit the applied jacking forces to the earth surrounding the shaft wall and to minimize deflection and displacement. The thrust block(s) shall be removed prior to backfilling, unless approved in writing by the Construction Manager.
- III. Ground surface settlement or heave above the microtunnel pipeline centerline and within the zone influenced by the microtunnel construction shall be limited to one quarter (1/4") inch or less. The Contractor shall repair any damage resulting from surface settlement or heave caused by shaft excavation, dewatering, or microtunneling at no additional cost to the Owner. The Contractor shall pressure grout any voids caused by or encountered during the shaft construction or microtunneling and shall grout subsurface monitoring point casings after all microtunneling operations are completed.
- IV. Tolerances: The following tolerances apply to the installation of the microtunneled pipelines:
 - a. Line Tolerance: 2 inches.
 - b. Grade Tolerance: 2 inches.

- V. Safety: All materials and methods of construction shall meet the applicable requirements of the City Standard Specifications, these Special Provisions, and the applicable requirements of the Construction Safety Orders of the State of California Department of Industrial Relations and Division of Occupational Safety and Health. Particular attention is called to Subpart S of the Standards (29 CFR 1926/1920, published as U. S. Department of Labor Publication 207, revised October 1, 1979, and revised again August 1, 1989. See the Federal Register dated June 2, 1989, for the revised standard and commentary), and the Division 1, California Department of Industrial Relations, Chapter 4, Division of Industrial Safety, Subchapter 20, Tunnel Safety Orders. These Special Provisions shall supercede any conflicting requirements of Section 37 of the City Standard Specifications.
- a. The City of Sacramento has obtained from the State of California, Industrial Relations Department, Division of Occupational Safety and Health Administration, an underground classification of a potentially gassy@ for this project. All work shall be in conformance with procedures appropriate for this classification and all applicable Federal, State and local safety requirements.
 - b. All work must be performed in accordance with the current applicable regulations of Federal, State, and local agencies. All applicable provisions of the Tunnel Safety Orders of the State of California and 29 CFR Part 1926, Subpart S, Underground Construction by OSHA must be met. In the event of conflict, the more restrictive applicable requirements must be met.
 - c. No gasoline-powered equipment shall be permitted in jacking and receiving shafts.

E. Quality Assurance

- I. The Microtunneling Specialist shall have full responsibility for the selection of the tunnel construction means and methods, subject to review by the Construction Manager. The Contractor shall be responsible for the final installed product, materials and tools and equipment employed, spoil transportation and separation, hoisting, lifting, safety and control equipment, and for furnishing all labor and supervision required for the selected construction method.
- II. Contractor/Microtunneling Specialist Qualification and Experience: The Contractor/Microtunneling Specialist shall have 3 years demonstrated successful experience installing pipelines using microtunneling on at least three (3) projects with similar diameters, drive lengths, and ground and groundwater conditions. Experience tunneling under railroad is required. The Contractor/Microtunneling Specialist shall submit evidence of successful experience with microtunneling including at least three (3) projects listed with project name, owner or owner's representative, location, diameter, total length, number of drives, maximum drive length, depth, ground and groundwater conditions, microtunnel machine, pipe,

any problems encountered and how resolved, and any claims and how resolved. Owner and Owner's representative shall be listed with address and telephone number.

- III. Qualifications and Experience of Contractor/Microtunneling Specialist Personnel: The Contractor/Microtunneling Specialist superintendent(s) and microtunnel machine operator(s) shall each have at least three (3) years experience using microtunneling on projects with similar diameters, drive lengths, and ground and groundwater conditions, and under railroad tracks. The Contractor/Microtunneling Specialist shall submit resumes for the superintendent(s) and microtunnel machine operator(s) that will be onsite for the duration of the microtunneling. Personnel experience records shall include project names, locations, type and diameter of pipe installed, total length, number of drives, maximum drive length, depth, ground and groundwater conditions. Owner and owner's representative shall be listed with address and telephone number. The superintendent and microtunnel machine operator shall be onsite at all times during microtunneling operations.
- IV. The Contractor/Microtunneling Specialist shall provide at least 72 hours advance written notice to the Construction Manager of the planned inception of the microtunneling. The Contractor/Microtunneling Specialist shall immediately notify the Construction Manager, in writing, when any problems are encountered with equipment or materials, or if the Contractor/Microtunneling Specialist believes the conditions encountered are materially and significantly different than those represented within the Contract Documents. All microtunneling work by the Contractor/Microtunneling Specialist shall be performed in the presence of the Construction Manager unless the Construction Manager grants prior written approval to perform such work in Construction Manager's absence.
- V. The Contractor shall allow access to the Construction Manager and shall furnish necessary assistance and cooperation to aid the Construction Manager in observations and data and sample collection, including, but not limited to the following:
- a. The Owner and/or Construction Manager shall have full access to the operator control container prior to, during, and following all microtunneling operations. This shall include, but not be limited to, providing visual access to real-time operator control screens, gauges, and indicators.
 - b. The Owner and/or Construction Manager shall have full access to the shaft prior to, during, and following all jacking operations. This shall include, but not be limited to, visual inspection of installed pipes, launch and retrieval seals, and verification of line and grade.
 - c. The Owner and/or Construction Manager shall have full access to the slurry separation plant prior to, during, and following all microtunneling operations. This shall include, but not be limited to, full access to shaker screens, hydrocyclones, conveyor belts, centrifuge equipment, and slurry

and spoil holding tanks. The Construction Manager shall be allowed to collect soil samples from the shaker screens and/or spoil holding tanks on the slurry separation plant a minimum of once per installed pipe section, or every 10 feet, whichever is more often.

- d. The Owner and/or Construction Manager shall have full access to the bentonite lubrication plant prior to, during, and following all jacking operations. This shall include, but not be limited to, full access to visually inspect storage and mixing tanks, lubricant pressures and pumping rates, and amount and type of lubricants on site.

F. Submittals

Prior to commencing any work associated with construction of the microtunnel and/or associated shafts, the Contractor shall submit for review a site specific Tunneling Work Plan consisting of construction drawings and written detailed descriptions that identify the proposed microtunneling operations; quality control methods; and Safety Procedures. The Construction Manager shall review the submittal for compliance with contract requirements. The submittal shall include, but may not be limited to the following:

- I. Provide sufficient detail to allow the Construction Manager to judge whether or not the proposed equipment, materials, and procedures will meet the Contract requirements. All drawings shall be legible with dimensions accurately shown and clearly marked in English. Drawings and photographs transmitted by facsimile will not be accepted. The Construction Manager's review of submitted details and data will be based on consideration of requirements for the completed work, utilities, and the possibility of unnecessary delays in the execution of the work to be constructed under this Contract. Review and acceptance of the Contractor submittals by the Construction Manager shall not be construed in any way as relieving the Contractor of its responsibilities under this Contract.
- II. Qualifications: Submit written documentation of microtunneling Contractor and key personnel experience in accordance with the Section titled "Microtunneling". Submit evidence of Cal/OSHA certification for the site safety representative and personnel responsible for gas testing.
- III. Equipment Details:
 - a. Submit a detailed description of the microtunneling equipment and procedures to be employed. Provide manufacturer's literature and operator's manual, including mechanical and electrical specifications, noise ratings, date of manufacture, and physical dimensions and weights, describing the microtunneling equipment in detail, including any modifications made since manufacturing. Submit details of any major component overhauled or replaced in the last 2 years.
 - b. Describe method and capabilities for providing stabilizing pressure at the tunnel heading. Indicate the range of face pressures required to stabilize the heading and the methods and equipment to be used to monitor and

control the face pressure. Indicate the torque and torque pressure gage or ammeter reading required to rotate the cutter head under no face pressure. Indicate the torque pressure gage reading or ammeter reading corresponding to maximum available torque.

- c. Submit a description of the alignment control and steering system. Confirm that these systems can achieve the required tolerances for pipeline line and grade. Include a description of the equipment and procedure for checking the position of the laser or other guidance system. Provide documentation that the laser has been tested and that required function, accuracy, and precision have been verified by the Contractor for the longest drive of this Project.
- d. Submit details on the lubrication injection system used for lubrication of the pipeline during microtunneling operations. Provide details on the planned lubrication injection scheme that will be used. Provide details of the calculated volume of the annular space (the minimum volume that will be continuously pumped throughout installation procedures). Provide MSDS' and a description of the lubrication materials that will be used.
- e. Submit details on the muck/slurry handling, transport, recovery, and disposal equipment and procedures. Include dimensions, manufacturer's specifications, capacity, noise rating, and soundproofing details on the slurry separation and recirculation components and system. Details shall be provided on the planned slurry composition and any slurry additives that are planned for use during the microtunneling operations. Include diagrams showing the location of all slurry delivery and return pumps.
- f. Provide written statement that all cuttings and spoil/slurry will be completely contained and transported and disposed off site to an approved disposal facility. Provide written documentation signed by the site owner or manager of the disposal site(s) indicating that the site will accept the muck or slurry and are in compliance with all applicable local, State, and Federal regulations. Submit muck transport Drawings, including route to be used and measures to avoid spillage onsite, or onto streets and highways.
- g. Provide details on the jacking frame, including a diagram of the main jacks, thrust ring, jacking controls, and pressure gages. Provide details on the maximum jacking capacity of the jacking frame and the hydraulic pressure required to develop the maximum pressure. Provide the conversion factor and calculates to convert from gage pressure for the hydraulic jacks to thrust, in tons, for each stage of the jacking system.
- h. Provide details and dimensioned drawings on the entry and exit shaft seals and the mounting procedures.
- i. Provide details on the intermediate jacking stations, including detailed drawings of the alignment of the jacks, the number and capacity of each

hydraulic jack, and the instrumentation for recording jacking pressures at each IJS location.

- j. Provide details on the generator, including dimensions, noise ratings at 25 feet, and soundproofing. Confirm that the generator and other on-site equipment meets the maximum allowable noise level of 83 decibels at 25 feet, or at the property line, whichever is less. Confirm that vibrations produced by the equipment shall be below objectionable levels.
 - k. Provide description, including drawings, of the method and special equipment and materials required for retrievability of the MTBM through the jacking shaft without the need for an intermediate rescue shaft. The description shall address grouting to fill the aborted bore and ensure stability of the excavation, so that settlements are avoided.
- IV. Schedule: Provide a schedule for all microtunneling work, identifying all major construction activities as independent items. The schedule shall include, as a minimum, the following activities: mobilization, groundwater control at jacking and receiving shafts, shaft excavation and support, tremie slab, working slab, thrust wall construction, jacking equipment setup, ground stabilization and entry ring installation for launch of machine, microtunneling, retrieving MTBM, shaft abandonment, site restoration, cleanup, and demobilization. The schedule shall also include the work hours and workdays for each activity, and a written description of the construction activities. The schedule shall be reviewed by the Construction Manager and will be updated and resubmitted by the Contractor every two weeks or more frequently if requested by the Construction Manager.
- V. Ground Stabilization: Submit details on the method of controlling groundwater inflows and loss of ground into the shafts at all times, including periods during launch and retrieval of the microtunneling machine, i.e. when exiting the launch shaft and entering the reception shaft.
- VI. Contact Grouting: Submit details on the materials and methods to be used for grouting of the annular space and in any areas where overexcavation, voids, or cavities are created or encountered.
- VII. Daily Records: The following daily records will be submitted by the Contractor by noon on the working day following the shift for which the data or records were taken, to the onsite Construction Manager for review:
- a. Jacking Records: The Contractor shall provide complete written jacking records to the Construction Manager. These records will include, at a minimum: date, time, name of Operator, tunnel drive identification, installed pipe number and corresponding tunnel length, rate of advance, jacking forces, cutter head speed and torque, slurry flow rates and pressures, bypass valve position, use of any cutting or high-pressure nozzles, face pressure, steering jack positions, line and grade offsets, any movement of the guidance system, machine inclination and roll, intermediate jacking station use and jacking forces, pressure, volume, and

location of any lubricant pumped, problems encountered with the tunneling machine or other components or equipment, and durations and reasons for delays. The operating system should continuously provide performance data to the operator. Computer-recorded data should be referenced to time and distance and should be recorded at time intervals of one minute or less. Manually recorded observations should be made at intervals of not less than three times per pipe, as conditions change, and as directed by the Construction Manager. At least twenty (20) days prior to the launch of the machine, the Contractor shall submit samples of the automated and manual jacking records. Samples shall include electronic data and any necessary programs to interpret data, and the manual logs or records to be used.

- b. Lubrication Records: The Contractor shall provide lubrication records to the Construction Manager. These records will include the amount, in gallons, of lubrication pumped throughout a drive, reported as pumped volume per shift, and total for each drive. The record will also include the type of additive used and amount, in pounds or gallons used, and date, time, and drive distance when used.
- c. Slurry Additives: The Contractor shall provide records of slurry additives to the Construction Manager. These records will include all slurry additives, including any bentonite and polymers and will be submitted with the daily jacking record. The time and volume, or weight, of the addition to the slurry shall be noted. Measurements of mud weights, specific gravity and viscosity will be made at the beginning, middle, and end of each shift, and submitted with the daily logs. Measurements will be made on slurry mixtures in the slurry tanks and noted accordingly.
- d. Survey Measurements: Survey measurements of settlement points will be submitted to the Construction Manager by noon of the working day following the shift for which the measurements were taken. Measurements will be made at least twice per day or once per 10 feet of tunneling, whichever is less, or more frequently as directed by the Construction Manager.

VIII. Protection of Adjacent Structures: Provide details on measures to be taken to monitor and protect adjacent utilities, structures, and roadways, and provide details on monitoring equipment and provisions, including the layout of all settlement points and other monitoring points. Prior to construction, provide two copies of pre-construction survey measurements and photographs with captions to document conditions prior to beginning shaft or microtunneling construction.

IX. Safety Plan: The Contractor shall submit a safety plan for conducting the microtunneling operations, including provisions for lighting, ventilation, gas monitoring, communications, and electrical system safeguards. The safety plan shall include a code of safe practices and an emergency plan in accordance with OSHA and Cal/OSHA requirements. The Contractor shall provide the name and resume, with references, for the onsite safety representative.

- X. Calculations: Submit all calculations in a legible, comprehensible format.
- a. Submit calculations for anticipated jacking forces and safe pipe jacking capacity. The anticipated jacking forces should be based on anticipated face pressures and frictional forces along the pipeline, based on Contractor's experience in similar ground conditions.
 - b. Submit calculations demonstrating that the soils behind the thrust block are capable of sustaining the maximum capacity of the jacking frame with an appropriate safety factor not less than 1.5.
 - c. Submit calculations indicating the maximum allowable jacking force that can be safely carried by the intended jacking pipe. Indicate the factor of safety used in this calculation. The factor of safety shall not be less than 1.5.
- XI. Contingency Drawings: The following list includes problem scenarios that may be encountered during the microtunneling operations. The Contractor shall submit contingency Drawings for dealing with each problem scenario while satisfying the specifications. These Drawings shall include the observations and measurements required to clearly identify the cause of the problems.
- a. Machine unable to advance:
 1. Possible obstructions (including boulders, old foundations, metallic debris, or reinforced concrete).
 2. Insufficient jacking capacity.
 3. Machine malfunction.
 - b. Slurry separation problems:
 1. Cuttings are not separated out using the Contractor's onsite slurry separation plant.
 2. Cuttings settle out in the slurry lines before reaching the separation plan.
 - c. Strong hydrocarbon smell is detected in the slurry returns or in the shaft.
 - d. Laser distorted by heat, humidity, or physical disturbance.
 - e. Jacking forces:
 1. Jacking forces increase dramatically or suddenly.
 2. Jacking forces reach design capacity of pipe, jacking frame, or thrust wall (treat these scenarios as separate incidents).
 - f. Settlement and Subsidence:
 1. Survey measurements indicate deformations exceed allowable limits.
 2. Excavated volumes exceed pipe volume installed.

3. Slurry face pressures and/or torque on head decrease suddenly and significantly.
 4. Voids are created by overexcavation that may not be detectable by survey measurements.
- g. Slurry losses from tank or slurry returns to ground surface.
 - h. Groundwater inflows to shaft increase significantly and/or transport fines into shaft in measurable quantities.
 - i. Steering difficulties result in line and grade tolerances being exceeded.
 - j. Pipe that has been damaged or that has been found to be out of compliance with specifications during or after installation.
 - k. Thrust block deforms excessively under jacking loads, or provides insufficient capacity to advance pipe.
 - l. Severe storms or flooding predicted; shaft flooding possible.
- XII. The Contractor shall submit shaft layout drawings detailing dimensions and locations of all equipment, including overall work area boundaries, crane, frontend loader, forklift, slurry separation equipment, muck hauling equipment, jacking frame, pumps, control container, generator, lubrication plant, pipe storage area, tool trailer or containers, sound baffles, fences, and staging area. Shaft layout drawings will be required jacking and receiving shaft locations and shall be to correct scale or show correct dimensions. The Contractor's layout drawings shall show that all equipment and operations shall be completely contained within the allowable work areas shown on the Drawings.
- XIII. Description of the entry and exit shaft seals and the mounting procedures, including the special seal assembly required for retrievability of the microtunneling machine.
- XIV. Description of the plan for retrieving the machine and pipe if the Contractor is unable to complete the drive beneath the railroad tracks, including description of procedures, drawings for retrieval seal and jacks, and grouting operations.
- XV. Details of the proposed Jacking Pipe as specified in the Section titled "STEEL CASINGS FOR PROPOSED UTILITIES".
- XVI. Survey of Jacking Frame Rails: Contractor shall submit results of survey of installed jacking frame rails to the Construction Manager to confirm design line and grade prior to launch of the MTBM.

G. Jacking Pipe

Inspect all pipe prior to lowering into the jacking pit to ensure that no cracked, broken, or otherwise defective materials are being used. Pipe delivered with visible cracks, scars, chips,

spalls, or any damage in excess of the limitations specified, shall not be used. Damaged or defective pipe shall be marked with a permanent marking as rejected and shall be promptly removed from the job site. Use proper tools and equipment to handle pipe. Slings shall be made of rope, nonmetallic webbing, or other materials that will not damage the pipe. Chain or cable slings or chokers shall not be used to handle the pipe.

H. Execution

- I. Microtunneled installation of the pipeline shall be between the limits indicated on the Drawings to the specified line and grade and shall be accomplished using methods which include due regard for safety of workers, adjacent structures and improvements, utilities, and the public. Jacking and receiving shafts shall be located as identified on the Drawings, unless otherwise approved in writing by the Engineer.
- II. The Contractor shall furnish all necessary equipment, power, water, and utilities for microtunneling, shoring and shafts, excavation, bentonite mixing and pumping, removal and disposal of spoils, and other associated work consistent with the Contractor's methods of construction.
- III. The Contractor shall not begin microtunneling until the following conditions have been met:
 - a. All required submittals have been made and the Construction Manager has reviewed and accepted all submittals.
 - b. Required pre-construction surveys have been completed and submitted to the Construction Manager for review.
 - c. Shaft excavation and support have been completed in accordance with the Drawings.
 - d. Groundwater control and soil stabilization has been established.
 - e. A pre-construction safety conference has been conducted in accordance with Cal/OSHA requirements. This conference must be arranged and the Construction Manager notified of the date at least seven (7) days in advance of the conference.
- IV. The Contractor shall survey the location and orientation of the jacking frame guide rails prior to starting jacking operations to ensure they are on the proper line and grade. Results of this survey shall be submitted to the Construction Manager.
- V. The Contractor shall ensure that the axial forces from the main jacks shall be distributed to the pipe uniformly through cushion materials to prevent damage to the pipe. If direct-jacked RCCP is used, cushion materials shall be incorporated at the joints to evenly distribute load.

- VI. The Contractor shall ensure that steering corrections are gradual, with corrections made at a rate of no more than one (1) inch over twenty-five (25) feet of drive length.
- VII. Pipe sections shall be jacked as excavation progresses so that no length of excavated tunnel is exposed at any time. The lead end of the pipe behind the shield or tunnel boring machine shall at all times be enclosed and sealed in the tail of the machine.
- VIII. The Contractor shall jack the pipes into place without damaging the pipe. In the event a section of pipe is damaged during the jacking operation, the Contractor, with written approval from the Construction Manager, may make temporary repairs to the pipe and jack the pipe through to the next shaft for removal. Other methods of repairing or replacing the damaged pipe may be used, subject to the written approval of the Construction Manager.
- IX. Thrust Blocks: Use thrust blocks for pipe jacking that are properly designed and constructed to withstand all jacking loads imposed during construction. Position thrust blocks perpendicular to the proposed pipe alignment. Thrust blocks shall be designed to safely transfer the maximum obtainable jacking pressure developed by the main jacking system or the maximum anticipated jacking force, whichever is smaller, with a factor of safety of at least one-and-one-half (1.5). Special care shall be taken when setting the jacking frame guide rails in the jacking shaft to ensure correct alignment and grade, and to ensure stability of the frame. If a concrete thrust block or treated soil zone is used, concrete or other materials shall have attained the required strength before jacking begins. Calculations for thrust block designs shall be stamped by a Professional Engineer licensed in the State of California.
- X. The Contractor shall control the advance rate of the machine and shall balance the rate of removal of excavated material with the rate of excavation and pipe installation to avoid overexcavation that can lead to subsidence and underexcavation that can lead to heave.
- XI. The Contractor shall mount the laser or other guidance tracking system independently from the shaft support system, thrust block, and jacking frame to maintain the alignment of the laser. The Contractor shall perform a separate control survey at least once every day or every 100 feet, whichever is more frequent, along the alignment to verify that the guidance system is set to the project design line and grade. The City reserves the right to use their own forces to verify at least once each day that the guidance system is set to the project line and grade. The Contractor shall cooperate with City's crews in verifying the guidance system alignment. The Contractor will stop tunneling operations and reset the guidance system if the alignment shifts or is moved off design alignment and grade for any reason. The Contractor shall immediately notify the Construction Manager if the guidance system has been disturbed and must be reset. Any guidance system disturbances or adjustments shall be noted on the daily log. The Contractor may propose alternative guidance/tracking systems, subject to the Construction Manager's approval.

- XII. If the pipe installation does not meet the specified tolerance, the Contractor will correct the installation including, if necessary, redesign of the pipeline or structures and acquisition of necessary easements. All corrective work shall be performed by the Contractor at no additional cost to the Owner and is subject to the approval of the Construction Manager.
- XIII. The Contractor shall maintain and control face pressure exerted at the heading of the tunneling machine to balance soil and groundwater pressures and prevent loss of ground, groundwater inflows, and settlement or heave of the ground surface. Face pressures (slurry and earth) shall be measured at the face of the machine and slurry flow rates shall be measured at the shaft.
- XIV. The Contractor's operations shall prevent excessive settlement or heave of the ground. The Contractor shall repair any damage resulting from surface settlement or heave caused by shaft excavation, shaft dewatering, or microtunneling at no additional cost to the Owner, and will immediately modify any practices that caused or contributed to the ground disturbance to avoid continued or recurring problems.
- XV. The Contractor shall monitor for settlement or heave before and during tunneling operations.
- XVI. The Contractor shall take active measures to prevent loss of ground during launch and retrieval of the machine. Excessive groundwater or slurry inflows into the shaft during launch and retrieval will not be permitted. Launch and retrieval seals will be required for the microtunneling drive.
- XVII. The Contractor shall use an alignment control and steering system capable of maintaining the position of the machine to within the specified tolerances for line and grade. The system will be field-calibrated to the drive length for this Project, to ensure that the position of the laser on the target can be distinguished and that the signal is sufficiently strong to provide accurate steering data to the operator.
- XVIII. The Contractor shall use a lubrication/bentonite injection system to provide continuous lubrication of the pipeline. Lubrication material shall be pumped in sufficient volume to completely fill the annular space of the pipeline, or that area between the outer diameter of the pipe and the overcut diameter. Lubrication ports shall be spaced at not greater than 10 feet along the pipe string. The pipe shall be installed with lubrication ports alternating between 10 o'clock and 2 o'clock.
- XIX. Slurry Composition: Composition of the slurry shall be monitored by the Contractor during the tunneling operations. Mud weight, specific gravity and viscosity measurements shall be taken at the beginning, middle, and end of each shift and will be included in the daily record. The Contractor shall keep accurate records of all slurry additives, including type of additive and volumes or weights added to the slurry tanks.

- XX. Intermediate Jacking Stations (IJS): One complete IJS and specially fabricated IJS pipe sections will be on-site prior to beginning microtunneling. The Contractor shall evaluate the need for IJS(s), based on a rational assessment of anticipated jacking force and Contractor's operations and work plan. However, the Contractor shall insert an IJS in the pipeline and actuate the IJS to distribute jacking forces along the pipe string, if the jacking force, recorded at the main jacks, reaches or exceeds 60% of the jacking capacity of the jacking pipe, thrust block, or main jacking frame, whichever is less. The equipment will be capable of continuously monitoring the jacking forces at the intermediate jacking station. This information will be recorded on the daily logs. Upon completion of the microtunnel drive, the intermediate jacking station hydraulic jacks and internal thrust reaction rings shall be fully removed and the inter jack pipes shall be pushed together without any gaps.
- XXI. The Contractor shall conduct all operations such that slurry separation operations, trucks and other vehicles do not create a dust or mud nuisance or traffic hazard in the American River Parkway, bicycle trail, streets, and adjacent properties. Any muck spillage or slurry breakthroughs will be promptly cleaned up, removed and properly disposed. The Contractor's slurry separation plant shall discharge into a truck, tank or container that prevents slurry spillage into the American River, onto the ground surface, any parking lot, street, or right-of-way. Discharge from the slurry separation plant into the River, onto the ground surface, any parking lot, street, or right-of-way will not be permitted. Slurry discharges into the storm or sanitary sewers and the American River will not be permitted.
- XXII. The Contractor shall perform all work so as not to disturb operations of the Union Pacific rail system and users, roadways, parking lot operations, adjacent structures, landscaped areas, or utilities. Any damage shall be immediately repaired by the Contractor to the satisfaction of the Construction Manager, at no additional cost to the Owner.
- XXIII. Whenever there is a condition that is likely to endanger the stability of the excavation or adjacent structures, the Contractor shall operate with a full crew 24 hours a day, including weekends and holidays, without interruption, until those conditions no longer jeopardize the stability of the work.
- XXIV. If the microtunneling operations should encounter an obstruction that impedes the forward progress of the machine, the Contractor shall notify the Construction Manager immediately. The Contractor shall correct the condition and remove, clear, or otherwise make it possible for the microtunneling machine and jacked pipe to advance past any and all objects or obstructions that impede forward progress of the machine. Upon written notification of the Construction Manager, the Contractor shall immediately proceed with removal of the object or obstruction by means of an obstruction removal shaft or by other approved means, as submitted by the Contractor in reviewed submittals. An obstruction removal shaft shall consist of a small excavation for the purpose of removing the obstruction. The Contractor will receive compensation for removal of obstructions, as defined as metallic debris, reinforced concrete, rocks, whole trees, and other hard objects within the cross-sectional area of the bore, with a

maximum dimension larger than one-third the outer diameter of the shield or cutting head, whichever is larger. Payment will be negotiated with the Contractor by the Owner on a case-by-case basis. However, any removal process that does not allow direct inspection of the nature and position of the obstruction will not be considered for payment. The Contractor will receive no additional compensation for removing, clearing, or otherwise making it possible for the microtunneling machine to advance past objects consisting of cobbles, boulders, wood, non-reinforced concrete, and other nonmetallic objects or debris with maximum lateral dimensions less than onethird the outer diameter of the shield or cutterhead, whichever is larger.

- XXV. Machine retrievability is required for this project. The microtunneling machine shall be capable of being retrieved without the use of an intermediate rescue shaft, if forward progress is not possible. Retrievability may be achieved using pipe with joints capable of withstanding tensile forces exerted during pullback. Alternatively, steel rods or cables may be attached to the MTBM trailing section for exerting pullback forces. The partially completed bore shall be stabilized and properly abandoned if the drive cannot be completed. Grouting or other means of ensuring stability of the partially completed bore without ground subsidence or heave shall be provided, as the bore cannot be considered self-supporting. Grouting shall be conducted via the use of a double gasketed entry ring seal and a closure device that can be inserted between the seals to ensure that positive grouting pressures can be maintained as the machine is fully retracted at the shaft. The Contractor may propose alternative means for retrieving the MTBM, subject to the approval of the Construction Manager. After retrieval is complete, the point of origin of the drive shall be adjusted, as determined by the Construction Manager, to allow completion of the drive along the revised alignment.
- XXVI. Prior to launch of the machine, the Contractor will conduct a start-up inspection of all mechanical and hydraulic systems associated with the microtunneling operations. The system will be tested on the surface to ensure that the microtunneling machine and supporting equipment is functioning properly. The Construction Manager will be notified at least 72 hours prior to the start-up inspection and a site inspector representing the Owner will be present during the start-up inspection. Key machine performance data will be measured and recorded by the Contractor during this inspection, including cutter head rotational torque, correct functioning of main and steering jacks, laser and target, and other components. Records of the start-up inspection will be submitted to the Engineer within 24 hours of the completed inspection.
- XXVII. The Contractor shall grout the annulus between the excavation and the pipe using the materials and procedures described in the "Grouting" Section herein. Grouting shall be performed at ports located at a maximum of every 10 feet along the pipe string. Grout ports shall alternate between 10 o'clock and 2 o'clock along the pipe string. Grout shall be pumped to completely fill the annular space without causing damage to the jacking pipe, levees or other adjacent utilities or structures.
- XXVIII. In the event that voids are created or encountered around the shaft or pipeline, the Contractor shall immediately notify the Construction Manager. The Contractor

shall grout the voids using materials and procedures described in the "Grouting" Section herein, and take any additional measures necessary to repair the damage to the Construction Manager's satisfaction. The Contractor shall immediately modify construction practices or equipment as appropriate to avoid or protect against further voids and damage.

1. Automated and supplemental manually recorded jacking records shall be submitted for each shift by noon of the working day following the shift for which the data were collected.

XXX. The Contractor shall perform all work within the noise requirements as set forth in the Contract Documents and all federal, state and/or local laws and ordinances.

I. Cleanup

After completion of microtunneling and gravity sewer installation, all construction debris, slurry, oil, grease, and other materials shall be removed from the casing and carrier pipes, jacking and receiving shafts, and all Contractor work areas. Cleaning shall be incidental to the construction. No separate payment shall be made for cleanup.

J. Payment

No separate payment will be made to the Contractor for complying with the requirements of this section. The cost of such work shall be included in the appropriate bid items for boring and jacking for the various size casing pipes with carrier pipes.

2.20 IRRIGATION SYSTEM

This item shall consist of furnishing and installing an Automatic Irrigation System as shown on the drawings in conformance with the applicable paragraphs of Section 10 and Section 36 of the City Standards Specifications and these Special Provisions. Item shall include connection to City water system as shown on the Drawings.

- A. Remote Control Valves shall be Irritrol Model 700 Series, or approved equal, and shall be constructed as specified in Section 10-51. Electric Control Valve sizes as shown on the drawings. Install as per details. Valves shall be installed at grade in the planter area in a locking valve box.
- B. Gate Valves shall be Nibco Model T-113-K, or approved equal and shall be constructed of all brass as specified in Section 10-52. Gate Valve sizes as shown on the drawings. Install as per details. Plastic control valves are not acceptable. Valves shall be installed at finished grade in a concrete valve box with locking cover.
- C. Master Valve shall be normally closed with 24V solenoid and a bypass master valve normally open. Master valve's size and type as shown on the drawings, install as per details and manufacturer's specifications. Pull four (4) additional wires in different color from controller to master valve.

- D. Flow Sensor: Install the flow sensor as per the details and manufacturer's specifications. Pulse output transmitter shall be installed per the manufacturer's specifications. Wire type as per manufacturer's specifications.
- E. Valve Boxes shall be installed in conformance with Section 10-53 and as per details.
- F. Electrical shall conform to Section 34 of the Standard Specifications.
- G. Irrigation Control Wires shall conform to Sections 10-49 and 36-12 of the Standard Specifications. Trenching for irrigation control wires through existing paved areas shall conform to Section 34-10 of the Standard Specifications. Irrigation Control Wires shall be color coded to the use listed below and follow the colors associated with them.
 - i. Drip emitter rings (tree and Storm water Quality Inlet irrigation) - Orange
 - ii. Common Wire - White Wire
- H. Quick Coupling Valves shall be by Rain Bird, model 44LRC as specified in the Drawings, or approved equal. Quick coupling valve shall be constructed of brass with a locking yellow thermoplastic rubber cover with "DO NOT DRINK" markings. Quick Coupling valve shall have a one inch (1") threaded pipe and key connection and shall be installed as shown on the Drawings in conformance with Section 10-54 and per drawings. Installed with the top at finished grade. Four (4) quick coupler keys shall be provided to the City of Sacramento at the completion of the project.
- I. Plastic Irrigation Pipe Fittings shall conform to Section 10-47 of the Standard Specifications with the following addition: All threaded fittings for PVC pipe shall be Schedule 80.
- J. Main Line Pipe shall conform to Section 10-45 of the Standard Specifications and be amended as follows: Main line shall be Schedule 40 solvent weld PVC pipe for pipes smaller than 3".
- K. Lateral Line Pipe or pipe on the discharge side of the irrigation control valve shall be Class 200 solvent weld PVC pipe and shall conform to Section 10-45 of the Standard Specifications, except as previously amended.
- L. Electronic Marker System shall conform to Section 10-55 of the Standard Specifications, except as amended by the following: no marker locators will be required by the Contractor. Contractor shall supply only enough markers for use in new irrigation system. The markers shall be fastened to the underside of the valve box cover.
- M. Drip emitters shall be installed at the locations shown on the Drawings, in conformance with details. Emitters shall be the type and model as shown on the drawings.
- N. Schedule 40 (local) sleeves shall be installed to provide connectivity between adjacent planters and planting areas in the sizes and at locations as shown on the Drawings.

CONTROLLER

This item shall consist of furnishing and installing an Automatic Controller as shown on the Drawings in conformance with Section 34 of the City Standard Specifications and these Special Provisions.

CONDUIT SYSTEM FOR IRRIGATION CONTROLLER

Contractor shall install a conduit system as shown on the Drawings and conforming to Section 34 "Electrical" of the City Standard Specifications, for providing power to the irrigation controller.

MAINLINE AND CONTROL/TRACE WIRE SLEEVING

Contractor shall place irrigation 4" PVC, Schedule 80 sleeves for mainline and control/trace wire in locations as shown on the Drawings. Material and placement shall conform to Section 36-8 "Conduit" of the City Standard Specifications and includes trenching, backfill and paving.

LATERAL SLEEVING

Contractor shall place 2" PVC, Schedule 80 irrigation sleeves for lateral lines in locations as shown on the Drawings. Material and placement shall conform to Section 36-8 "Conduit" of the City Standard Specifications and includes trenching, backfill and paving.

2.21 PRESTRESSING CONCRETE (MOD)

Prestressing concrete shall conform to the provisions in Section 50, "Prestressing Concrete," of the State Standard Specifications and these special provisions.

The number of working drawings to be submitted for initial review shall be 6 sets.

The details shown on the plans for cast-in-place prestressed box girder bridges are based on a bonded full length draped tendon prestressing system. For these bridges the Contractor may, in conformance with the provisions in Section 5-1.14, "Cost Reduction Incentive," of the State Standard Specifications, propose an alternative prestressing system utilizing bonded partial length tendons provided the proposed system and associated details meet the following requirements:

- A. The proposed system and details shall provide moment and shear resistances at least equal to those used for the design of the structure shown on the plans.
- B. The concrete strength shall not be less than that shown on the plans.
- C. Not less than 35 percent of the total prestressing force at any section shall be provided by full length draped tendons.
- D. Anchorage blocks for partial length tendons shall be located so that the blocks will not interfere with the placement of the utility facilities shown on the plans or of any future utilities to be placed through openings shown on the plans.

- E. Temporary prestressing tendons, if used, shall be detensioned, and the temporary ducts shall be filled with grout before completion of the work. Temporary tendons shall be either removed or fully encased in grout before completion of the work.
- F. All details of the proposed system, including supporting checked calculations, shall be included in the drawings submitted in conformance with the provisions in Section 50-1.02, "Drawings," of the State Standard Specifications.

Moments and shears for loads used in the design shown on the plans will be made available to the Contractor upon written request to the Engineer.

Contractor should note that there is limited access for Bent 4 Anchorage because of the existing bridge. No additional compensation due to hand threading strands into anchor plates or any inefficiencies for reduced access will be allowed.

2.22 CONCRETE STRUCTURES

Portland cement concrete structures shall conform to the provisions in Section 20, "Concrete in Structures", of the City of Sacramento Standard Specifications and Section 51, "Concrete Structures," of the State Standard Specifications and these special provisions.

Contractor shall install and cap a 4" plastic pipe through the abutment stem as shown on the plans.

Contractor shall furnish and install street lighting anchor bolts as shown on the plans.

Polystyrene and hardboard shall be removed as instructed and as shown on the plans.

Shotcrete shall not be used as an alternative construction method for reinforced concrete members unless otherwise specified.

Neoprene strip shall be furnished and installed at abutment shear keys and abutment backwall joint protection in conformance with the details shown on the plans, the provisions in the State Standard Specifications, and these special provisions.

Furnishing and installing neoprene strip shall conform to the requirements for strip waterstops as provided in Section 51-1.145, "Strip Waterstops," of the State Standard Specifications, except that the protective board will not be required.

Forms used to support the deck of cast in place box girders shall be removed completely in any bay that has a soffit or deck access opening.

Materials for access opening covers in soffits of new cast-in-place concrete box girder bridges shall conform to the provisions for materials in Section 75-1.03, "Miscellaneous Bridge Metal," of the State Standard Specifications. Material for deck access as well as manhole covers shall conform to the City of Sacramento standard drawings and specifications.

FALSEWORK

Falsework shall conform to the provisions in Section 51, "Concrete Structures," of the State Standard Specifications and these special provisions.

Attention is directed to "Order of Work" regarding falsework removal requirements.

The Contractor's engineer who signs the falsework drawings shall also certify in writing that the falsework is constructed in conformance with the approved drawings and the contract specifications prior to placing concrete. This certification shall include performing any testing necessary to verify the ability of the falsework members to sustain the stresses required by the falsework design. Where falsework contains openings for railroads, vehicular traffic, or pedestrians, the designated representative shall be qualified to perform this work, shall have at least 3 years of combined experience in falsework design or supervising falsework construction, and shall be registered as a Civil Engineer in the State of California. For other falsework, the designated representative shall be qualified to perform this work and shall have at least 3 years of combined experience in falsework design or supervising falsework construction. The Contractor shall certify the experience of the designated representative in writing and provide supporting documentation demonstrating the required experience if requested by the Construction Manager.

Welding and Nondestructive Testing

Welding of steel members, except for previously welded splices and except for when fillet welds are used where load demands are less than or equal to 1,000 pounds per inch for each 1/8 inch of fillet weld, shall conform to AWS D1.1 or other recognized welding standard. The welding standard to be utilized shall be specified by the Contractor on the working drawings. Previously welded splices for falsework members are defined as splices made prior to the member being shipped to the project site.

Splices made by field welding of steel beams at the project site shall undergo nondestructive testing (NDT). At the option of the Contractor, either ultrasonic testing (UT) or radiographic testing (RT) shall be used as the method of NDT for each field weld and any repair made to a previously welded splice in a steel beam. Testing shall be performed at locations selected by the Contractor. The length of a splice weld where NDT is to be performed, shall be a cumulative weld length equal to 25 percent of the original splice weld length. The cover pass shall be ground smooth at the locations to be tested. The acceptance criteria shall conform to the requirements of AWS D1.1, Section 6, for cyclically loaded nontubular connections subject to tensile stress. If repairs are required in a portion of the weld, additional NDT shall be performed on the repaired sections. The NDT method chosen shall be used for an entire splice evaluation including any required repairs.

For all field welded splices, the Contractor shall furnish to the Engineer a letter of certification which certifies that all welding and NDT, including visual inspection, are in conformance with the specifications and the welding standard shown on the approved working drawings. This letter of certification shall be signed by an engineer who is registered as a Civil Engineer in the State of California and shall be provided prior to placing any concrete for which the falsework is being erected to support.

For previously welded splices, the Contractor shall determine and perform all necessary testing and inspection required to certify the ability of the falsework members to sustain the stresses required by the falsework design. This welding certification shall (1) itemize the testing and inspection methods used, (2) include the tracking and identifying documents for previously welded members, (3) be signed by an engineer who is registered as a Civil Engineer in the State of California, (4) and shall be provided prior to erecting the members.

COST REDUCTION INCENTIVE PROPOSALS FOR CAST-IN-PLACE PRESTRESSED BOX GIRDER BRIDGES

Except as provided herein, cast-in-place prestressed box girder bridges shall be constructed in conformance with the details shown on the plans and the provisions in Section 50, "Prestressing Concrete," and Section 51, "Concrete Structures," of the State Standard Specifications.

If the Contractor submits cost reduction incentive proposals for cast-in-place prestressed box girder bridges, the proposals shall be in conformance with the provisions in Section 5-1.14, "Cost Reduction Incentive," of the State Standard Specifications and these special provisions.

The Engineer may reject any proposal which, in the Engineer's judgment, may not produce a structure which is at least equivalent to the planned structure.

At the time the cost reduction incentive proposal (CRIP) is submitted to the Engineer, the Contractor shall also submit 4 sets of the proposed revisions to the contract plans, design calculations, and calculations from an independent checker for all changes involved in the proposal, including revisions in camber, predicted deck profile at each construction stage, and falsework requirements. When notified in writing by the Engineer, the Contractor shall submit 12 sets of the CRIP plan revisions and calculations for final approval and use during construction. The calculations shall verify that all requirements are satisfied. The CRIP plans and calculations shall be signed by an engineer who is registered as a Civil Engineer in the State of California.

The CRIP plans shall be either 11" x 17", or 22" x 34" in size. Each CRIP plan sheet and calculation sheet shall include the assigned designations for the contract number, bridge number, full name of the structure as shown on the contract plans. Each CRIP plan sheet shall be numbered in the lower right hand corner and shall contain a blank space in the upper right hand corner for future contract sheet numbers.

Within 3 weeks after final approval of the CRIP plan sheets, one set of the corrected good quality prints on 20-pound (minimum) bond paper, 22" x 34" in size, of all CRIP plan sheets prepared by the Contractor for each CRIP shall be furnished to the Engineer.

Each CRIP shall be submitted prior to completion of 25 percent of the contract working days and sufficiently in advance of the start of the work that is proposed to be revised by the CRIP to allow time for review by the Engineer and correction by the Contractor of the CRIP plans and calculations without delaying the work. The Contractor shall allow a minimum of 8 weeks for the review of a CRIP. In the event that several CRIPs are submitted simultaneously, or an additional CRIP is submitted for review before the review of a previously submitted CRIP has been completed, the Contractor shall designate the sequence in which the CRIPs are to be reviewed. In this event, the time to be provided for the review of any proposal in the sequence shall be not less than the review time specified herein for that proposal, plus 2 weeks for each CRIP of higher priority which is still under review.

Should the review not be complete by the date specified in the Contractor's CRIP, or such other date as the Engineer and Contractor may subsequently have agreed to in writing and if, in the opinion of the Engineer, the Contractor's controlling operation is delayed or interfered with by reason of the delay in review of CRIP plans and calculations, an extension of time

commensurate with the delay in completion of the work thus caused will be granted as provided in Section 8-1.07, "Liquidated Damages," of the State Standard Specifications except that the provisions in Section 8-1.09, "Right of Way Delays," of the State Standard Specifications shall not apply.

Permits and approvals required of the State have been obtained for the structures shown on the plans. Proposals which result in a deviation in configuration may require new permits or approvals. The Contractor shall be responsible for obtaining the new permits and approvals before the Engineer will reach a decision on the proposal. Delays in obtaining permits and approvals will not be reason for granting an extension of contract time.

All proposed modifications shall be designed in conformance with the bridge design specifications and procedures currently employed by the Department. The proposal shall include all related, dependent or incidental changes to the structure and other work affected by the proposal. The proposal will be considered only when all aspects of the design changes are included for the entire structure. Changes, such as but not limited to, additional reinforcement and changes in location of reinforcement, necessary to implement the CRIP after approval by the Engineer, shall be made at the Contractor's expense.

Modifications may be proposed in (1) the thickness of girder stems and deck slabs, (2) the number of girders, (3) the deck overhang dimensions as specified herein, (4) the amount and location of reinforcing steel, (5) the amount and location of prestressing force in the superstructure, and (6) the number of hinges, except that the number of hinges shall not be increased. The strength of the concrete used may be increased but the strength employed for design or analysis shall not exceed 6,000 psi.

Modifications proposed to the minimum amount of prestressing force which must be provided by full length draped tendons are subject to the provisions in "Prestressing Concrete" of these special provisions.

No modifications will be permitted in (1) the foundation type, (2) the span lengths or (3) the exterior dimensions of columns or bridge superstructure, except that the overhang dimension from face of exterior girder to the outside edge of roadway deck may be uniformly increased or decreased by 25 percent on each side of the box girder section. Fixed connections at the tops and bottoms of columns shown on the plans shall not be eliminated.

The Contractor shall be responsible for determining construction camber and obtaining the final profile grade as shown on the plans.

The Contractor shall reimburse the State for the actual cost of investigating CRIPs for cast-in-place prestressed box girder bridges submitted by the Contractor. The Department will deduct this cost from any moneys due, or that may become due the Contractor under the contract, regardless of whether or not the proposal is approved or rejected.

Materials for access opening covers in soffits of new cast-in-place concrete box girder bridges shall conform to the provisions for materials in Section 75-1.03, "Miscellaneous Bridge Metal," of the Standard Specifications.

SLIDING BEARINGS

Sliding bearings consisting of elastomeric bearing pads lubricated with grease and covered with sheet metal shall conform to the following requirements:

- A. Grease shall conform to the requirements of Society of Automotive Engineers AS 8660. A uniform film of grease shall be applied to the upper surface of the pads prior to placing the sheet metal.
- B. Sheet metal shall be commercial quality galvanized sheet steel. The sheet metal shall be smooth and free of kinks, bends, or burrs.
- C. Construction methods and procedures shall prevent grout or concrete seepage into the sliding bearing assembly.

ELASTOMERIC BEARING PADS

Elastomeric bearing pads shall conform to the provisions in Section 51-1.12H, "Elastomeric Bearing Pads," of the State Standard Specifications.

2.23 STRUCTURE APPROACH SLABS TYPE N (30S) AND TYPE EQ(10)

GENERAL

Summary

This work includes constructing reinforced concrete approach slabs, structure approach drainage systems, and treated permeable base.

Reinforced concrete approach slabs must comply with Section 51, "Concrete Structures," of the State Standard Specifications.

Submittals

Furnish a Certificate of Compliance under Section 6-1.07, "Certificates of Compliance," of the Standard Specifications for the geocomposite drain certifying that the drain complies with these special provisions. The Certificate of Compliance must be accompanied by a flow capability graph for the geocomposite drain showing flow rates and the externally applied pressures and hydraulic gradients. The flow capability graph must be stamped with the verification of an independent testing laboratory.

Notify the Engineer of the type of treated permeable base to be furnished at least 30 days before the start of placement. Once you have notified the Engineer of the selection, the type to be furnished must not be changed without a prior written request to do so and approval thereof by the Engineer.

MATERIALS

Concrete

Concrete for structure approach slabs must contain not less than 675 pounds of cementitious material per cubic yard and must either:

1. Cure for not less than 5 days before opening to public traffic, or
2. Comply with "Rapid Strength Concrete for Structures" of these special provisions.

Drainage Pads

Concrete for use in drainage pads must be minor concrete.

Geocomposite Drain

Geocomposite drain must consist of a manufactured core not less than 0.25 inch thick nor more than 2 inches thick with one or both sides covered with a layer of filter fabric that will provide a drainage void. The drain must produce a flow rate through the drainage void of at least 2 gallons per minute per foot of width at a hydraulic gradient of 1.0 and a minimum externally applied pressure of 3,500 psf.

The manufactured core must be one of the following:

1. Preformed grid of embossed plastic
2. Mat of random shapes of plastic fibers
3. Drainage net consisting of a uniform pattern of polymeric strands forming 2 sets of continuous flow channels
4. System of plastic pillars and interconnections forming a semirigid mat

The core material and filter fabric must be capable of maintaining the drainage void for the entire height of geocomposite drain. Filter fabric must be integrally bonded to the side of the core material with the drainage void.

Filter Fabric

Filter fabric must comply with the specifications for Class A filter fabric in Section 88-1.02, "Filtration," of the Standard Specifications.

Plastic Pipe

Plastic pipe shall conform to the provisions for pipe for edge drains and edge drain outlets in Section 68-3, "Edge Drains," of the Standard Specifications.

Treated Permeable Base

Treated permeable base under structure approach slabs must be an asphalt treated permeable base or a cement treated permeable base as specified in Section 29, "Treated Permeable Bases," of the Standard Specifications.

Steel angles, plates, and bars at the concrete barrier joints must comply with Section 75-1.03, "Miscellaneous Bridge Metal," of the Standard Specifications.

Hardboard and expanded polystyrene must comply with Section 51-1.12D, "Sheet Packing, Preformed Pads, and Board Fillers," of the Standard Specifications.

CONSTRUCTION

Geocomposite Drain

Install the geocomposite drain with the drainage void and the filter fabric facing the embankment. The fabric facing the embankment side must overlap a minimum of 3 inches at all joints and wrap around the exterior edges a minimum of 3 inches beyond the exterior edge. If additional fabric is needed to provide overlap at joints and wraparound at edges, the added fabric must overlap at least 6 inches and be attached to the fabric on the geocomposite drain.

Place core material manufactured from impermeable plastic sheeting having non-connecting corrugations with the corrugations approximately perpendicular to the drainage collection system.

If the fabric on the geocomposite drain is torn or punctured, replace the damaged section completely or repair it by placing a piece of fabric that is large enough to cover the damaged area and provide a 6-inch overlap.

If asphalt treated permeable base is placed around the slotted plastic pipe at the bottom of the geocomposite drain, it must be placed at a temperature of not less than 180 °F nor more than 230 °F.

Filter Fabric

Place filter fabric immediately after grading and compacting the subgrade to receive the filter fabric.

Align, handle, and place filter fabric in a wrinkle-free manner under the manufacturer's recommendations.

Adjacent borders of the filter fabric must be overlapped from 12 inches to 18 inches or stitched. The preceding roll must overlap the following roll in the direction the material is being spread or must be stitched. When the fabric is joined by stitching, it must be stitched with yarn of a contrasting color. The size and composition of the yarn must be as recommended by the fabric manufacturer. The number of stitches per 1 inch of seam must be 5 to 7.

Equipment or vehicles must not be operated or driven directly on the filter fabric.

Treated Permeable Base

Construct treated permeable base under Section 29, "Treated Permeable Bases," of the Standard Specifications and these special provisions.

Place asphalt treated permeable base at a temperature of not less than 200 °F nor more than 250 °F. Do not use material stored in excess of 2 hours in the work.

Asphalt treated permeable base may be spread in 1 layer. Compact the base with a vibrating shoe type compactor or a roller weighing at least 1.5 tons but not more than 5 tons. Begin compacting the base as soon as the mixture has cooled sufficiently to support the weight of the equipment without undue displacement.

Cement treated permeable base may be spread in 1 layer. Compact the base with a vibrating shoe type compactor or with a steel-drum roller weighing at least 1.5 tons but not more than 5 tons. Compaction must begin within one-half hour of spreading and must consist of 2 complete coverages of the cement treated permeable base.

Finishing Approach Slabs

Finish and treat the top surface of approach slabs under Section 51-1.17, "Finishing Bridge Decks," of the Standard Specifications. Edges of slabs must be edger finished.

Cure approach slabs with pigmented curing compound (1) under the specifications for curing structures in Section 90-7.01B, "Curing Compound Method," of the Standard Specifications.

Sealing Joints

Type AL joint seals must comply with Section 51-1.12F, "Sealed Joints," of the Standard Specifications. The sealant may be mixed by hand-held power-driven agitators and placed by hand methods.

The sealant may be mixed by hand-held power-driven agitators and placed by hand methods. Immediately before placing the seal, thoroughly clean the joint, including abrasive blast cleaning

of the concrete surfaces, so that all foreign material and concrete spillage are removed from all joint surfaces. Joint surfaces must be dry at the time the seal is placed.

2.24 ARCHITECTURAL TREATMENT

ARCHITECTURAL SURFACE (TEXTURED CONCRETE)

Architectural treatment for concrete surfaces shall conform to the details shown on the Drawings and the provisions in Section 51, "Concrete Structures," of the State Standard Specifications and these special provisions.

Architectural treatments listed below are required at concrete surfaces shown on the Drawings:

- A. Reckli Sacramento pattern or equivalent
- B. Sine Wave pattern or equivalent

The architectural texture shall simulate a formed relief constructed to the dimensions and shapes shown on the Drawings. Corners at the intersection of plane surfaces shall be sharp and crisp without easing or rounding. A Class 1 surface finish shall be applied to the architectural texture.

REFEREE SAMPLE

The architectural texture shall match the texture, and pattern of the referee sample depicted in a series of photographs available for inspection by the bidders at Kimley-Horn Associates 11919 Foundation Place, Suite 200, Gold River, CA 95670. (916) 858-5800.

TEST PANEL

A test panel at least 4' x 4' in size shall be successfully completed at a location approved by the Construction Manager before beginning work on architectural textures. The test panel shall be constructed and finished with the materials, tools, equipment, and methods to be used in constructing the architectural texture. If ordered by the Construction Manager, additional test panels shall be constructed and finished until the specified finish, texture, and color are obtained, as determined by the Construction Manager.

The test panel approved by the Construction Manager shall be used as the standard of comparison in determining acceptability of architectural texture for concrete surfaces.

FORM LINERS

Form liners shall be used for textured concrete surfaces and shall be installed in conformance with the manufacturer's recommendations, unless other methods of forming textured concrete surfaces are approved by the Construction Manager. Form liners shall be manufactured from an elastomeric material or a semi-elastomeric polyurethane material by a manufacturer of commercially available concrete form liners. No substitution of other types of formliner material will be allowed. Form liners shall leave crisp, sharp definition of the architectural surface. Recurring textural configurations exhibited by repeating, recognizable shadow patterns shall be prevented by proper casting of form liner patterns. Textured concrete surfaces with such recurring textural configurations shall be reworked to remove such patterns as approved by the Construction Manager or the concrete shall be replaced.

Form liners shall have the following properties:

Description	ASTM Designation:	Range
Elastomeric material		
Shore A hardness	D 2240	20 to 65
Tensile strength (psi)	D 412	130 to 900
Semi-elastomeric polyurethane		
Shore D hardness	D 2240	55 to 65
Tensile strength (psi)	D 2370	2600 minimum

Cuts and tears in form liners shall be sealed and repaired in conformance with the manufacturer's recommendations. Form liners that are delaminated from the form shall not be used. Form liners with deformations to the manufactured surface caused by improper storage practices or any other reason shall not be used.

Form liners shall extend the full length of texturing with transverse joints at 8 foot minimum spacing. Small pieces of form liners shall not be used. Grooves shall be aligned straight and true. Grooves shall match at joints between form liners. Joints in the direction of grooves in grooved patterns shall be located only in the depressed portion of the textured concrete. Adjoining liners shall be butted together without distortion, open cracks, or offsets at the joints. Joints between liners shall be cleaned before each use to remove any mortar in the joint.

Adhesives shall be compatible with the form liner material and with concrete. Adhesives shall be approved by the liner manufacturer. Adhesives shall not cause swelling of the liner material.

RELEASING FORM LINERS

Products and application procedures for form release agents shall be approved by the form liner manufacturer. Release agents shall not cause swelling of the liner material or delamination from the forms. Release agents shall not stain the concrete or react with the liner material. For reliefs simulating fractured concrete or wood grain surfaces the application method shall include the scrubbing method using a natural bristle scrub brush in the direction of grooves or grain. The release agent shall coat the liner with a thin film. Following application of form release agent, the liner surfaces shall be cleaned of excess amounts of agent using compressed air. Buildup of form release agent caused by the reuse of a liner shall be removed at least every 5 uses.

Form liners shall release without leaving particles or pieces of liner material on the concrete and without pulling or breaking concrete from the textured surface. The concrete surfaces exposed by removing forms shall be protected from damage.

CURING

Concrete surfaces with architectural texture shall be cured only by the forms-in-place or water methods. Seals and curing compounds shall not be used.

2.25 JOINT SEAL ASSEMBLIES (MOVEMENT RATING EXCEEDING 4 INCHES)

Joint seal assemblies with movement ratings greater than 4 inches shall consist of a metal frame system, supporting rails, and support bars with intervening neoprene glands and shall conform to the details shown on the plans, the provisions in Section 51, "Concrete Structures," of the State Standard Specifications, and these special provisions.

Joint seal assemblies will not be considered for approval without satisfactory evidence that the assemblies have had at least one year of satisfactory service under conditions similar to this application.

A qualified representative of the manufacturer shall be present during installation of the first assembly and shall be available for advice during any remaining installations.

The Contractor shall submit complete working drawings for each joint seal assembly to the Engineer in conformance with the provisions in Section 5-1.02, "Plans and Working Drawings," of the State Standard Specifications. The working drawings shall show complete details of the joint seal assembly and anchorage components and the method of installation to be followed, including concrete blockout details and any additions or rearrangements of the reinforcing steel from that shown on the plans. For initial review, 5 sets of drawings shall be submitted. After review, between 6 and 12 sets, as requested by the Engineer, shall be submitted for final approval and use during construction.

The working drawings shall be supplemented with complete calculations for the particular joint seal assembly, when requested by the Engineer. Working drawings shall be either 11" x 17" in size and each drawing and calculation sheet shall include the assigned designations for the contract number, bridge number, and full name of the structure as shown on the contract plans. The design firm's name, address, and phone number shall be shown on the working drawings. Each sheet shall be numbered in the lower right hand corner and shall contain a blank space in the upper right hand corner for future contract sheet numbers.

Calculations, when requested, and working drawings shall be stamped and signed by an engineer who is registered as a Civil Engineer. The Contractor shall allow the Engineer 30 days to review the drawings after a complete set has been received.

Within 20 days after final approval, one set of corrected 11" x 17" prints on 20-pound (minimum) bond paper of all working drawings prepared by the Contractor for each joint seal assembly shall be furnished to the Engineer.

Each shipment of joint seal assembly materials shall be accompanied by a Certificate of Compliance in conformance with the provisions in Section 6-1.07, "Certificates of Compliance," of the State Standard Specifications. The certificate shall state that the materials and fabrication involved comply in all respects to the specifications and data submitted in obtaining approval.

The neoprene glands shall conform to the requirements in Table 1 of ASTM Designation: D 2628 and the following, except that no recovery tests or compression-deflection tests will be required:

Property	Requirement	ASTM Test Method
Hardness, Type A Durometer, points	55-70	D 2240 (Modified)
Compression set, 70 hours at 212°F maximum, percent	40	D 395 Method B (Modified)

All metal parts of the joint seal assembly shall conform to the provisions in Section 75-1.03, "Miscellaneous Bridge Metal," of the State Standard Specifications. Bolts, nuts, and washers

shall conform to the provisions for high-strength steel fastener assemblies in Section 75-1.02, "Miscellaneous Iron and Steel," of the State Standard Specifications. At the Contractor's option, metal parts may conform to the requirements of ASTM Designation: A 572/A 572M.

At the Contractor's option, cleaning and painting of all new metal surfaces of the joint seal assembly, except stainless steel and anchorages embedded in concrete, may be substituted for galvanizing. Cleaning and painting shall be in conformance with the provisions in "Clean and Paint Joint Seal Assemblies" of these special provisions.

If the assembly consists of more than one component, the design of the assembly shall be such that the external components can be removed and reinstalled at any position, within the larger one-half of the movement rating shown on the plans, to permit the inspection of the internal components of the assembly.

Except for components in contact with the tires, the assembly and its components shall be designed to support the AASHTO LRFD Bridge Design Specifications Design Truck with 100 percent dynamic load allowance. Each component in contact with the tires shall support a minimum of 80 percent of the AASHTO LRFD Bridge Design Specifications Design Truck with 100 percent dynamic load allowance. The tire contact area used to distribute the tire loads shall be 10 inches, measured normal to the longitudinal axis of the assembly, by 20 inches wide. The assembly shall provide a smooth riding joint without slapping of components or wheel tire rumble.

The movement rating of the assembly shall be measured normal to the longitudinal axis of the assembly. The dimensions for positioning the assembly within the movement rating during installation shall be measured normal to the longitudinal axis, disregarding any skew of the deck expansion joint. The assembly shall be capable of adjustment to the "a" dimension shown on the plans.

The maximum width of unsupported or yielding components or grooves in the roadway surface of the assembly, measured in the direction of vehicular traffic, shall be 3 inches.

The assembly shall have cast-in-place anchorage components forming a mechanical connection between the joint components and the concrete deck.

The bridge deck surface shall conform to the provisions in Section 51-1.17 "Finishing Bridge Decks," of the State Standard Specifications prior to placing joint seal assemblies and anchorages.

The assembly shall be completely shop-assembled and placed in a blocked out recess in the concrete deck surface. The depth and width of the recess shall permit the installation of the assembly anchorage components or anchorage bearing surface to the planned line and grade.

The maximum depth and width of the recess shall be such that the primary reinforcement to provide the necessary strength of the structural members is outside the recess. The maximum depth of the recess at abutments and at hinges shall be 14 inches. The maximum width of recess on each side of the expansion joint shall be 18 inches.

All reinforcement other than primary reinforcement shall continue through the recess construction joint into the recess and engage the anchorage components of the assembly.

Contractor's attention is directed to the contract plans which designate the support exclusion zone. Joint Seal Assembly must span these locations with no reduction in vehicle loads.

The vertical expansion joint in barrier shall be available for inspection after placement of the recess concrete around the anchorage components of the assembly.

Full compensation for any additional materials or work required because of application of the optional cleaning and painting shall be considered as included in the contract price paid per linear foot for the joint seal assembly involved, and no additional compensation will be allowed therefor.

2.26 WABO SEISMIC SPAN II

WABO Seismic Span II – APX-600/800 with the WaboCrete Installation or equal shall be furnished and installed as shown on the plans, and in conformance with the manufacturer's recommendations and these specifications.

This item shall include the following components:

- A. WaboCrete
- B. Aluminum Extrusions
- C. Aluminum Shapes
- D. Cover plate
- E. Aluminum Flange Extension (Model "APX")
- F. Seismic-Centering Bar
- G. Anchorage
- H. Bonding Agent
- I. All Coatings
- J. Accessories necessary for complete installation such as sealants and assembly hardware

The WABO Seismic Span II – APX-600/800 shall be installed in accordance with the manufacturer's recommendations and specifications. A manufacturer's representative shall be present at the site during all installation operations.

The successful bidder can obtain the WABO Seismic Span II – APX-600/800 with the Wabocrete Installation from the manufacturer:

Watson Bowman ACME
Justin Lofting
Regional Sales Manager – Southwest Territory
Phone: 619-241-1507

The price quoted for the WABO Seismic Span II – APX-600/800 with the WaboCrete Installation is \$125 per linear foot, including the WaboCrete, not including sales tax.

2.27 REINFORCEMENT

Reinforcement shall conform to the provisions in Section 21, "Placing Steel Reinforcement", of the City of Sacramento Standard Specifications and Section 52, "Reinforcement," of the State Standard Specifications and these special provisions.

The provisions in "Welding Quality Control" of these special provisions do not apply to resistance butt welding.

The following shall apply to ultimate splices for bar reinforcing cages of columns where the longitudinal bars are spliced vertically at the job site in or above their final positions:

1. Instead of being removed from the completed lot, sample splices may be prepared in the same manner as specified in Section 52-1.08C(2)(a), "Production Test Requirements for Service Splices," of the Standard Specifications for service sample splices. These sample splices shall be tested in conformance with the requirements in Section 52-1.08C(3), "Ultimate Butt Splice Test Criteria," of the Standard Specifications.

2. Splices may be encased in concrete prior to having the QCM review, approve, and forward each Production Test Report to the Engineer. Should the Contractor exercise this option, it is expressly understood that the Contractor will not be relieved of the Contractor's responsibility for incorporating material in the work that conforms to the requirements of the plans and specifications. Material not conforming to these requirements will be subject to rejection.

EPOXY-COATED REINFORCEMENT

Bar reinforcement shown on the Drawings to be epoxy coated shall be epoxy coated.

2.28 CLEAN AND PAINT JOINT SEAL ASSEMBLIES

Joint seal assemblies shall be cleaned and painted with a single coat of inorganic zinc in conformance with the provisions in Sections 59-2, "Painting Structural Steel," 59-3, "Painting Galvanized Surfaces," and 91, "Paint," of the Standard Specifications and these special provisions.

Prior to performing any painting, the Contractor shall submit to the Engineer, in conformance with the provisions in Section 5-1.02, "Plans and Working Drawings," of the Standard Specifications, 3 copies of a separate Painting Quality Work Plan (PQWP) for each item of work for which painting is to be performed. As a minimum, each PQWP shall include the following:

- A. The name of each Contractor or subcontractor to be used.
- B. One copy each of all current ASTM and "SSPC: The Society for Protective Coatings" specifications or qualification procedures applicable to the painting or paint removal to be performed. These documents shall become the permanent property of the Department.
- C. A copy of the coating manufacturer's guidelines and recommendations for surface preparation, painting, drying, curing, handling, shipping, and storage of painted structural steel, including testing methods and maximum allowable levels for soluble salts.
- D. Proposed methods and equipment to be used for paint application.
- E. Proposed methods to control environmental conditions in accordance with the manufacturer's recommendations and these special provisions.
- F. Proposed methods to protect the coating during curing, shipping, handling, and storage.
- G. A detailed paint repair plan for the repair of damaged areas.

Certification in conformance with the requirements in SSPC-QP 1, SSPC-QP 2, and SSPC-QP 3 of the "SSPC: The Society for Protective Coatings" will not be required for cleaning and painting of joint seal assemblies .

The Engineer shall have 14 days to review the PQWP submittal after a complete plan has been received. No painting shall be performed until the PQWP for that work is approved by the Engineer. Should the Engineer fail to complete the review within this time allowance and if, in the opinion of the Engineer, the Contractor's controlling operation is delayed or interfered with by reason of the delay in reviewing the PQWP, the delay will be considered a right of way delay in conformance with the provisions in Section 8-1.09, "Right of Way Delays," of the Standard Specifications.

Fresh, potable water with a maximum chloride content of 75 ppm and a maximum sulfate content of 200 ppm shall be used for water rinsing or pressure washing operations. No continuous recycling of rinse water will be permitted. If rinse water is collected into a tank and

subsequent testing determines the collected water conforms to the specified requirements, reuse may be permitted by the Engineer if no collected water is added to the tank after sample collection for determination of conformance to specified requirements.

Metal surfaces to be painted shall be dry blast cleaned in conformance with the requirements in SSPC-SP 10, "Near White Blast Cleaning," of the "SSPC: The Society for Protective Coatings." Blast cleaning shall leave surfaces with a dense, uniform, angular anchor pattern of not less than 1.5 mils nor more than 3.5 mils as measured in conformance with the requirements in ASTM Designation: D 4417.

Mineral and slag abrasives used for blast cleaning metal surfaces shall conform to the requirements for Class A, Grade 2 to 3 abrasives contained in SSPC-AB 1, "Mineral and Slag Abrasives," of the "SSPC: The Society for Protective Coatings," and shall not contain hazardous material.

Steel abrasives used for blast cleaning metal surfaces shall comply with the requirements of SSPC-AB 3, "Ferrous Metallic Abrasive," of the "SSPC: The Society for Protective Coatings." If steel abrasive is recycled through shop or field abrasive blast cleaning units, the recycled abrasive shall conform to the requirements of SSPC-AB 2, "Specification for Cleanliness of Recycled Ferrous Metallic Abrasive," of the "SSPC: The Society for Protective Coatings."

A Certificate of Compliance conforming to the provisions in Section 6-1.07, "Certificates of Compliance," of the Standard Specifications and a Material Safety Data Sheet shall be furnished prior to use for each shipment of blast cleaning material.

Abrasive blast cleaned surfaces shall be tested by the Contractor for soluble salts using a Class A or B retrieval method as described in Technology Guide 15, "Field Methods for Retrieval and Analysis of Soluble Salts on Steel and Other Nonporous Substrates," of the "SSPC: The Society for Protective Coatings," and cleaned so the maximum level of soluble salts does not exceed the lesser of the coating manufacturer's written recommendations or 10 micrograms per square centimeter. Each joint seal assembly shall be tested for soluble salts. If levels of soluble salts exceed the maximum allowed by these special provisions, the Contractor shall perform additional cleaning and testing of blast cleaned surfaces until soluble salt levels conform to these requirements.

Corners shall be chamfered to remove sharp edges.

Thermal cut edges (TCEs) to be painted shall be conditioned before blast cleaning by shallow grinding or other method approved by the Engineer to remove the thin, hardened layer of material resulting from resolidification during cooling.

Visually evident base metal surface irregularities and defects shall be removed in accordance with ASTM Designation: A 6 or AASHTO Designation: M 160 prior to blast cleaning steel. When material defects exposed by blast cleaning are removed, the blast profile shall be restored by either blast cleaning or by using mechanical tools in accordance with SSPC-SP 11, "Power Tool Cleaning to Bare Metal," of the "SSPC: The Society for Protective Coatings."

Blast cleaned surfaces shall receive a single undercoat, and a final coat where specified, consisting of an inorganic zinc coating conforming to the requirements in AASHTO Designation: M 300, Type I or Type II, except that:

1. The first 3 sentences of Section 5.6, "Primer Field Performance Requirements," shall not apply for Type II coatings, and
2. The entire Section 5.6.1 shall not apply for either type of inorganic zinc coating.

If the Contractor proposes to use a Type I coating, the Contractor shall furnish to the Engineer for review documentation as required in Section 5.6 of AASHTO Designation: M 300. The Contractor shall allow the Engineer 14 days to review the proposal.

If the Contractor proposes to use a Type II coating, the coating shall be selected from the qualified products list, which may be obtained from the Transportation Laboratory.

The color of the inorganic zinc coating shall match Federal Standard 595B, No. 36373.

Inorganic zinc coating shall be used within 12 hours of initial mixing.

Application of inorganic zinc coating shall conform to the provisions for applying zinc-rich coating in Section 59-2.13, "Application of Zinc-Rich Primer," of the Standard Specifications.

The single coat of inorganic zinc coating shall be applied to the required dry film thickness in 2 or more applications within 8 hours of the start of blast cleaning. Abrasive blast cleaned steel shall not be exposed to relative humidity exceeding 85 percent prior to application of inorganic zinc.

The total dry film thickness of all applications of inorganic zinc, including the surfaces of outside existing members within the grip under bolt heads, nuts, and washers, shall be not less than 4 mils nor more than 8 mils, except that the total dry film thickness on each faying (contact) surface of high strength bolted connections shall be between one mil and the maximum allowable dry film thickness for Class B coatings as determined by certified testing in conformance with Appendix A of the "Specification for Structural Joints Using ASTM A325 or A490 Bolts" of the Research Council on Structural Connections (RCSC Specification). Unless otherwise stated, all inorganic zinc coatings used on faying surfaces shall meet the slip coefficient requirements for a Class B coating on blast-cleaned steel, as specified in the RCSC Specification. The Contractor shall provide results of certified testing showing the maximum allowable dry film thickness for the Class B coating from the qualifying tests for the coating chosen, and shall maintain the coating thickness on actual faying surfaces of the structure at or below this maximum allowable coating thickness.

Areas where mudcracking occurs in the inorganic zinc coating shall be blast cleaned and repainted with inorganic zinc coating to the specified thickness.

Metal surfaces coated with Type II inorganic zinc coating shall be protected from conditions that may cause the coating film to dissolve. The Contractor, at the Contractor's expense, shall repair areas where the coating has dissolved by blast cleaning and repainting with inorganic zinc coating to the specified thickness.

Dry spray, or overspray, as defined in the Steel Structures Painting Manual, Volume 1, "Good Painting Practice," of the "SSPC: The Society for Protective Coatings," shall be removed prior to application of subsequent coats or final acceptance. Removal of dry spray shall be by screening or other methods that minimize polishing of the inorganic zinc surface. The dry film thickness of the coating after removal of dry spray shall be in conformance with the provisions for applying the single undercoat, as specified herein.

The Contractor shall test the inorganic zinc coating at locations determined by the Engineer. The Contractor shall determine the sequence of the testing operations. The testing for adhesion and hardness shall be performed no sooner than 72 hours after application of the inorganic zinc coating. Satisfactory access shall be provided to allow the Engineer to determine the location of the tests.

The inorganic zinc coating shall pass the following tests:

- A. The inorganic zinc coating shall have a minimum adhesion to steel of 600 psi when measured using a self-aligning adhesion tester in conformance with the requirements in ASTM Designation: D 4541. The Engineer shall select 2 locations per assembly for adhesion testing. If either of the locations tested fails to meet adhesion requirements, the assembly bearing restrainer unit will be rejected. The Contractor, at the Contractor's expense, shall repair the rejected item by blast cleaning and repainting with inorganic zinc to the specified thickness. Test locations for areas of inorganic zinc meeting

adhesion testing requirements shall be repaired by application of organic zinc primer as specified in Section 91-1.04, "Materials," of the Standard Specifications to the specified minimum dry film thickness.

- B. The inorganic zinc coating shall exhibit a solid, hard, and polished metal surface when firmly scraped with the knurled edge of a quarter. Inorganic zinc coating that is powdery, soft, or does not exhibit a polished metal surface shall be repaired by the Contractor, at the Contractor's expense, by blast cleaning and repainting with inorganic zinc coating to the specified thickness.
- C. Dry to solvent insolubility for inorganic zinc primers shall be determined in conformance with the requirements in ASTM Designation: D 4752, except that water shall be the solvent used for testing of water borne inorganic zinc primers. The resistance rating shall be not less than 4. Each assembly shall be tested for dry to solvent insolubility. Inorganic zinc coating that does not meet the solvent insolubility requirements shall be repaired by the Contractor, at the Contractor's expense, by blast cleaning and repainting with inorganic zinc coating to the specified thickness.
- D. Surface hardness of inorganic zinc shall be a minimum 2H when measured in conformance with the requirements in ASTM Designation: D 3363. Each assembly shall be tested for surface hardness. Inorganic zinc coating that fails to meet the surface hardness requirements shall be repaired by the Contractor, at the Contractor's expense, by blast cleaning and repainting with inorganic zinc coating to the specified thickness.

The Contractor, at the Contractor's expense, shall retest all rejected areas of inorganic zinc coating after repairs have been completed.

2.29 PREPARE AND PAINT CONCRETE SURFACES

This work shall consist of preparing and painting anti-graffiti coating on the architectural treatment, where shown on the Drawings, and in conformance with these special provisions.

Materials

ANTI-GRAFFITI COATING

This work includes applying anti-graffiti coating to all architectural treatments and shall comply with Section 59-6, "Painting Concrete," of the State Standard Specifications.

The Contractor shall submit manufacturer's application and removal instructions 7 days before starting work.

Materials

Anti-graffiti coating must:

1. Be a nontoxic, sacrificial, nonflammable, water-based coating designed for protecting concrete from graffiti
2. Be compatible with the concrete surface treatment
3. Have a clear matte finish when dry
4. Be removable with a hot pressure washer

Construction

Cure new concrete surfaces under Section 90-7.03, "Curing Structures," of the State Standard Specifications.

Test concrete surfaces for acceptance of coating under the manufacturer's recommendations before coating. Areas that resist accepting coating must be cleaned and retested.

Apply anti-graffiti coating under the manufacturer's recommendations in at least 2 even coats.

Referee Sample

The applied architectural treatment shall match the texture, color, and pattern of the referee sample depicted in a series of photographs available for inspection by the bidders at Kimley-Horn Associates 11919 Foundation Place, Suite 200, Gold River, CA 95670. (916)-859-3665.

Test Panel

A test panel at least 4' x 4' in size shall be successfully completed at a location approved by the Construction Manager before beginning work on architectural treatment or painting concrete. The test panel shall be constructed, finished, and painted with the materials, tools, equipment, personnel, and methods to be used in constructing, finishing, and painting the concrete surfaces. If ordered by the Construction Manager, additional test panels shall be constructed and finished until the specified finish, texture, and color are obtained, as determined by the Construction Manager.

The test panel approved by the Construction Manager shall be used as the standard for comparison in determining acceptability of painting for concrete surfaces.

The Contractor shall submit to the Construction Manager, not less than 7 days before initial application of the concrete coating to the test panel, a copy of the manufacturer's recommendations and written application instructions.

Surface Preparation

New concrete surfaces to be painted shall be cured in conformance with the provisions in Section 90-7.03, "Curing Structures," of the State Standard Specifications.

Concrete surfaces to be painted shall be prepared in conformance with the requirements of SSPC-SP 13/NACE No. 6, "Surface Preparation of Concrete," of the "SSPC: The Society of Protective Coatings." After concrete surface preparation is complete, the Contractor shall clean all concrete surfaces to be painted by water rinsing as defined in Section 59-1.03, "Application," of the State Standard Specifications.

Painting Concrete

The coating shall be applied per the manufacturer's recommendations and in conformance with the requirements of SSPC-PA 7, "Applying Thin Film Coatings to Concrete," of the "SSPC: The Society of Protective Coatings."

Any damaged areas shall be repaired in the same manner as the original surface preparation and paint application.

2.30 BRIDGE DECK DRAINAGE SYSTEM

Bridge deck drainage systems shall conform to the provisions for miscellaneous bridge metal in Section 75, "Miscellaneous Metal," of the State Standard Specifications and these special provisions.

Self-tapping screws used for sleeve connections shall be hex-head stainless steel, installed in holes drilled to fit the self-tapping screws, conforming to the requirements of ASTM Designation: A 276, Type 304.

At the Contractor's option, fiberglass pipes and fittings with the same diameter and minimum bend radius as those shown on the plans may be substituted for welded steel pipe in deck drain systems.

Fiberglass pipe and fittings shall conform to the requirements in ASTM Designation: D 2996, and shall have a minimum short-term rupture strength of 30,000 psi. The adhesive type recommended by the manufacturer shall be used for joining pipe and fittings. Fiberglass pipe not enclosed in a box girder cell or encased in concrete shall be manufactured from ultraviolet-resistant resin pigmented with concrete-gray color, or be coated with a concrete-gray resin-rich exterior coating. Paint shall not be used. Fiberglass pipe treated with ultraviolet protection shall withstand a minimum of 2,500 hours of accelerated weathering when tested in conformance with the requirements in ASTM Designation: G 154. Lamps shall be UV-B (313 nm wavelength). The resting cycle shall be 4 hours of ultraviolet exposure at 140° F, and then 4 hours of condensate exposure at 120° F. After testing, the surface of the pipe shall exhibit no fiber exposure, crazing, or checking, and only a slight chalking or color change.

Support spacing for fiberglass pipe shall be the same as shown on the plans for welded steel pipe. Pipe supports shall have a width of not less than 1.5 inches.

A Certificate of Compliance for fiberglass pipe and fittings shall be furnished to the Engineer in conformance with the provisions in Section 6-1.07, "Certificates of Compliance," of the State Standard Specifications. The Certificate of Compliance shall include all laboratory test results conforming to the provisions specified herein.

For drainage piping NPS 8 or smaller, the Contractor shall have the option of substituting polyvinyl chloride (PVC) plastic pipe and fittings with the same diameter and minimum bend radius as shown on the plans for welded steel pipe, which is:

- A. Enclosed in a box girder cell and exposed for a length not greater than 20 feet within the cell, or
- B. encased in concrete.

The PVC plastic pipe and fittings shall be Schedule 40 conforming to the requirements of ASTM Designations: D 1785. The maximum support spacing for PVC plastic pipe shall be 6 feet.

Couplings used to connect PVC plastic pipe or fiberglass pipe to steel shall be threaded or flanged. The sleeve connections shown on the plans shall not be used for either PVC plastic pipe or fiberglass pipe.

If PVC plastic pipe or fiberglass pipe is substituted for welded steel pipe, the quantity of drainage piping will be computed on the basis of the dimensions and details shown on the plans, and no change in the quantities to be paid for will be made because of the use of PVC plastic pipe or fiberglass pipe.

Bridge deck drainage systems will be measured and paid for by the pound in the same manner specified for miscellaneous metal (bridge) in Section 75-1.06, "Measurement," and Section 75-1.07, "Payment," of the State Standard Specifications.

2.31 CHAIN LINK RAILING

Chain link railing shall conform to the provisions in Section 83-1, "Railings," of the State Standard Specifications and these special provisions and in conformance with the details shown on the plans.

The Contractor shall submit working drawings in accordance with Section 5-1.02, "Plans and Working Drawings" of the State Standard Specifications to the Engineer for approval before manufacturing.

The Contractor shall submit 7 copies of each set of drawings to the Engineer for review and approval. The Contractor shall allow 25 days after complete drawings are submitted for the review. Upon approval, the Engineer will stamp or mark the drawings approved and return 2 sets of these drawings to the Contractor for use during construction.

In the event the Engineer fails to complete the review within the time allowed, and if, in the opinion of the Engineer, the Contractor's controlling operation is delayed or interfered with by reason of the Engineer's delay in completing the review, the Contractor will be compensated for any resulting loss in the same manner as provided for in Section 8-1.09, "Right of Way Delays," of the State Standard Specifications.

All chain link fence fabric shall be woven into approximately two inch mesh.

Welding shall conform to AWS D1.1 and structural tubing shall conform to ASTM A500 Grade B.

The chain link fabric shall be 11 gauge Type IV polyvinyl chloride (PVC) coated fabric conforming to the requirements in Federal Specification RR-F-191/D. The color of the vinyl coated chain link fabric shall be Federal Std. 595B, #14090.

All steel members shall be galvanized and painted in accordance with Section 59-3, "Painting Galvanized Surfaces," of the State Standard Specifications. Organic zinc will be used to repair the welded areas. Approved organic zincs can be found on the Qualified Products List at:

http://www.dot.ca.gov/hq/esc/approved_products_list/

The Contractor shall apply an epoxy primer with a polyurethane final coat per the manufacturer's recommendations. The primer and final coats products shall be compatible. The finish color will match Federal Std. 595B, #14090.

** The Contractor shall submit a paint sample to the Engineer for approval 7 days prior to ordering the painting.

The strength of the bond between the coating material and steel of the bonded vinyl coated chain link fabric shall be equal to or greater than the cohesive strength of the polyvinyl chloride (PVC) coating material.

2.32 CONCRETE BARRIER

Concrete barriers shall conform to the provisions in Section 83-2, "Barriers," of the State Standard Specifications and these special provisions.

Sidewalk shall be light broom finished with a smooth trowel finish edging as shown on the plans.

2.33 METAL BRIDGE RAILING

Metal railing, steel bridge railing, steel bridge picket railing, metal tube bridge railing, handrailing, pipe handrailing, and tubular handrailing shall conform to the provisions in Section 83-1, "Railings," of the Standard Specifications.

CALIFORNIA ST-40 BRIDGE RAIL (MOD)

California ST-40 bridge rail shall consist of metal railing mounted on a reinforced concrete sidewalk and concrete end blocks as shown on the Drawings and as specified in these special provisions.

Sidewalk shall be light broom finish with a smooth trowel finish edging as directed by the Construction Manager.

Metal railing shall conform to the provisions in Section 83-1.02D, "Steel Bridge Railing," of the State Standard Specifications. Stud bolts shall conform to the provisions for stud connectors in Section 55-2, "Materials," of the State Standard Specifications.

Reinforced concrete shall conform to the provisions in Section 51, "Concrete Structures," and Section 52, "Reinforcement," of the State Standard Specifications.

Ferrous metal parts shall be galvanized. Galvanizing shall conform to the provisions in Section 75-1.05, "Galvanizing," of the State Standard Specifications.

The Contractor shall submit working drawings for the California ST-40 bridge railing in conformance with the provisions in Section 5-1.02, "Plans and Working Drawings," of the State Standard Specifications.

The working drawings shall include the following:

- A. Details for venting and pick-up holes in rails and sleeves
- B. Railing layout
- C. Complete details for the construction of the work including methods of construction, sequence of shop and field assembly, and installation procedures.

Working drawings shall be 11" x 17" minimum in size and shall be printed on 20-lb (minimum) bond paper. Each drawing shall include the name of the structure as shown on the Drawings, the District-County-Route-Post Mile, bridge number, and contract number. The working drawings shall be clearly legible, and text shall be a 12-point minimum font size.

The Contractor shall submit 7 copies of each set of drawings to the Engineer for review and approval. The Contractor shall allow 25 days after complete drawings are submitted for the review. Upon approval, the Engineer will stamp or mark the drawings approved and return 2 sets of these drawings to the Contractor for use during construction.

In the event the Engineer fails to complete the review within the time allowed, and if, in the opinion of the Engineer, the Contractor's controlling operation is delayed or interfered with by reason of the Engineer's delay in completing the review, the Contractor will be compensated for any resulting loss in the same manner as provided for in Section 8-1.09, "Right of Way Delays," of the State Standard Specifications.

California ST-40 bridge railing will be measured by the linear foot from end to end along the face of the railing, including reinforced concreted parapet and intermediate posts.

CABLE RAILING

Cable railing shall be added to the California ST-40 (MOD) Bridge Railing per the requirements shown on the Drawings and shall conform to the provisions in Section 83-1, "Railings," of the State Standard Specifications.

2.34 ELECTRICAL PROVISIONS WHICH APPLY TO ALL ELECTRICAL ITEMS

Cost Break-down

The Contractor will be required to provide a cost breakdown for lump sum electrical items prior to construction per these Special Provisions.

The sum of the amounts for the units of work listed in the cost break-down for electrical work shall be equal to the contract lump sum price bid for the work. The unit price is the material and installed cost with overhead, profit, and labor.

The Contractor shall determine the quantities to complete the work shown on the Drawings. The quantities and values shall be included in the cost break-down submitted with the bid package. The Contractor shall be responsible for the accuracy of the quantities and values. No adjustment in compensation will be made in the contract lump sum prices paid for the various electrical work items due to any differences between the quantities shown in the cost break-down furnished by the Contractor and the quantities required to complete the work as shown on the Drawings and as specified in this special provisions. At the Construction Manager's discretion, the approved cost break-down may be used to determine partial payments during the progress of the work and as the basis of calculating the adjustment in compensation for the items of electrical work due to changes ordered by the Construction Manager. When an ordered change increases or decreases the quantities of an approved cost break-down, the adjustment in compensation may be determined, at the Construction Manager's discretion, in the same manner specified for increases and decreases in the quantity of a contract item of work in accordance with Section 4-1.03B, "Increased or Decreased Quantities", of the State Standard Specifications. The cost break-down submitted by the responsive qualified low bid Contractor shall be approved by the Construction Manager before any partial payment for the items of electrical work shall be made

based on the cost break-down. The cost break-down shall, as a minimum, include the following items:

ITEM	UNIT	MEASURE
Foundations	Type	Each
Standards and poles	Type	Each
Conduit	Size	Linear Foot
Conductor	Size	Linear Foot
Traffic Signal Controller and Cabinet	Type	Each
Electrical Service Pedestal	Type	Each
Pull Box	Size	Each
Luminaires	Type/Wattage	Each
Traffic Signal and Pedestrian Displays	Type	Each
Pedestrian Push Buttons	Type	Each
Detector Loop	Type	Each
Detector Lead-in Cable	Type	Linear Foot
Detector Handhole	Type	Each
Video Detection System	Type	Each
GPS Emergency Vehicle Pre-emption	Type	Each

Foundations

Foundations for posts, standards, pedestals, and other appurtenances shall be in accordance with Section 34-22 of the Standard Specifications and these Specifications.

Standards, Steel Pedestals, and Posts

Standards, steel pedestals, and posts for traffic signal and lighting standards shall conform to the provisions in Section 86-2.04, "Standards, Steel Pedestals and Posts," of the State Standard Specifications and the following requirements.

Steel bolts not designated on the Drawings as high-strength (HS) or stainless steel shall be for general applications and shall conform to the requirements in ASTM Designation: A307.

Where the Drawings refer to the side tenon detail at the end of the signal mast arm, the applicable tip tenon detail may be substituted.

The sign mounting hardware shall be installed at the locations shown on the Drawings.

Handhole reinforcement rings for standards, steel pedestals, and posts shall be continuous around handholes.

Type 1 standards shall be assembled and set with the handhole on the downstream side of the pole in relation to traffic or as shown on the Drawings.

Conduit Material

Conduit to be installed underground shall be Schedule 40 polyvinyl chloride (PVC) or Schedule 40 polyethylene conduit as described herein unless otherwise indicated or specified. PVC conduit shall comply with the specifications in Section 34-10 of the City Standard Specifications. High-density polyethylene conduit shall comply with the following specifications:

Conduit shall be fabricated from polyethylene shall be in conformance with applicable ASTM and NEMA standards and Article 347 of the National Electrical Code. Non-black polyethylene conduit shall contain not less than 2500 parts per million (ppm) of a hindered amain ultraviolet light stabilizer. Ultraviolet stabilization additive for black polyethylene conduit shall consist of a carbon black loading of $2.5\% \pm 0.5\%$ by weight. Conduit shall be manufactured from high-density polyethylene resin designated as Type III, Category 5, Class C, Grade P34 material in accordance with ASTM D1248.

Conduit Installation

Conduit installation shall be in accordance with Section 34-9, 34-10 of the Standard Specifications and as modified by these Special Provisions. "Jet-rodding" is not permitted.

Conduits terminating in pull boxes, standards, pedestals and cabinets shall rise vertically and shall not slope in any direction. Conduits terminating in standards, pedestals, and cabinets shall terminate one and one-half inches ($1\frac{1}{2}$ ") above finished grade. Conduits shown on the Drawings to be adjacent and parallel to each other shall be installed in the same trench or drill hole unless otherwise specified or directed by the Construction Manager. Under the sidewalk, conduit shall be laid to a depth of not less than eighteen inches (18") below the sidewalk grade. Conduit stubs shall be capped eighteen inches (18") below sidewalk grade.

Conduits shall be installed by trenching or directional drilling method.

All applicable requirements in these Special Provisions to locate, and to protect existing utilities, utility laterals, obstructions, and other facilities in the area shall be conformed to and no additional compensation will be allowed therefor. Contractor is responsible for any damage and the repair of any existing facilities damaged by his/her trenching or drilling operations. Contractor is responsible for any potholing necessary and cost for potholing shall also be included in price paid for applicable items of work and no additional compensation will be allowed therefor. All trenching or drilling work shall be contained within the City right-of-way. If utilities or other obstacles are encountered at the specified conduit depth, any additional drilling required to avoid the obstacle shall be made at the Contractor's expense and no additional compensation will be allowed therefor. Location of trenching and drill holes shall take into consideration minimal impact to the street pavement while still meeting the requirements of these Special Provisions.

A. Trenching Method

Installation of conduit by trenching shall be in conformance with the Drawings and these Special Provisions. See plan sheets for trench details. Trenches shall be backfilled or covered at the end of each work day. All conduit installed by trenching shall be anchored every 15 feet to the bottom of the trench, with an approved method, so as to prevent the conduit from floating when the concrete is backfilled into the trench.

1. Trenches in reconstructed roadways shall be backfilled with slurry portland cement per cubic yard and fine type aggregate as defined in the Standard Specifications Section 10-5. A red oxide in the amount of 5 lbs. per cubic yard shall be mixed uniformly throughout the slurry cement. See plan sheets for amount of sack slurry and depth of conduit(s).

2. Trenches in existing roadways shall use the "T-Trench" method. The portion over the trench shall be paved with asphalt concrete, Type A with $\frac{3}{4}$ " aggregate (coarse); except on residential streets where the base course shall be Type A, $\frac{3}{4}$ " aggregate (coarse) and surface coarse shall be Type B, $\frac{1}{2}$ " aggregate, (medium), per Section 22 of the City Standard Specifications, unless otherwise directed by the Construction Manager. See plan sheets for width and thickness of asphalt concrete over trench. Trenches shall be backfilled with slurry portland cement per cubic yard and fine type aggregate as defined in the Standard Specifications Section 10-5. A red oxide in the amount of 5 lbs. per cubic yard shall be mixed uniformly throughout the slurry cement. See plan sheets for amount of sack slurry.

B. Directional Drilling Method

Installation of conduit by directional drilling shall be in conformance with the Drawings and these Special Provisions.

Conduits shall be installed such that the top of the conduit(s) are not less than eighteen inches (18") below the finished grade in sidewalk areas and not less than thirty inches (30") in all other areas except as otherwise specified or directed by the Construction Manager.

Prior to the start of directional drilling, the Contractor shall submit a plan which identifies location and size of proposed drill holes, describes process for identifying/locating existing utility services and other underground utilities or obstructions, identifies a proposed "drilling corridor" to avoid conflicts with existing utilities, services and other facilities. This plan shall be submitted to the Engineer a minimum of ten (10) working days prior to the start of work. The Contractor will not be allowed to directional drill until an approved plan is on file with the Engineer

Directional drilling shall be performed by the technique of creating and directing a bore hole along a predetermined path to a specified targeted location where indicated on the Drawings to install conduits. The technique shall involve the use of mechanical and hydraulic equipment to change the boring course and shall use instrumentation to monitor the location and orientation of the boring head assembly along the predetermined course. Drilling shall be accomplished with fluid-assisted mechanical cutting. Unless otherwise approved, boring fluids shall be a mixture of bentonite and water or polymers and additives. Bentonite sealants and water will be used to lubricate the drilling head. It is mandatory that minimum pressures and flow rates be used during drilling operations so as not to fracture the subgrade material around and/or above the bore. Uncontrolled jetting (where the primary purpose is to use fluid force to erode soil for creation of the final bore hold diameter) is prohibited. The drilling system shall utilize small-diameter fluid jets to fracture, and mechanical cutters to cut and excavate the soil as the head advances forward.

All drilling shall be located a minimum of three feet (3') from the center of all existing maintenance holes. Drilling that run parallel to any sanitary sewer or storm drainage lines shall maintain a minimum clearance of three feet (3') measured from the centerline of the sewer or

drainage line to the adjacent side of the drill hole. Drilling that crosses any sewer or drainage line shall cross at 90 degrees to the line or at a minimum of 45 degrees if a 90 degree crossing is not possible.

Pull Boxes

Shall be in accordance with Section 34-11 of the Standard Specifications, except for the following:

- a. All new pull boxes shall be set in place prior to pouring any new sidewalk.
- b. Existing pull boxes damaged by the installation of new conduits shall be removed and replaced at the Contractor's expense as directed by the Construction Manager.
- c. All pull boxes shall be placed in sidewalk areas unless otherwise specified on the Drawings or directed by the Construction Manager, and shall not be placed in driveways, in vehicular traveled lanes, or in any part of the new sidewalk handicap ramp areas. Unless otherwise specified, pull boxes shall be placed a minimum of 5 feet from existing driveways.
- d. Contractor shall cut, remove and replace the concrete to the nearest joint when installing new pull boxes.
- e. New pull boxes shall have a minimum of 6" of new concrete around all sides in sidewalks.
- f. For pull boxes to be removed, holes or depressions resulting from the removed pull box shall be filled, compacted, brought to grade, and filled to match surrounding materials.
- g. Pull boxes shall be placed as shown according to the details shown on the Drawings and according to these Special Provisions.
- h. A crushed rock foundation shall be installed prior to placing the pull box. The crushed rock foundation shall have a minimum of 12" in depth and continue to extend a minimum of 6" beyond the outside edge of the pull box. Crushed rock foundation shall be compacted. Compact crushed rock while maintaining integrity of the conduit. Then, install pull box on top of crushed rock foundation. Adjust pull box to grade. Conduit and pull boxes shall not be damaged nor cracked.
- i. All No. 5 and No. 6 Pull Boxes shall have steel security lids with locking key bolt. Lid shall be 1/4" thick minimum galvanized steel. Lid shall be manufactured with slip resistant surface. Lid shall be on-traffic rated, unless specified otherwise. Lid shall be equipped with a lock mechanism which can be secured from the top of the lid. Lock shall be recessed in a 1 inch diameter circle. Lock shall be Secured Keyed Bryce Fastener, or approved equal. A steel welding plug shall be provided by the manufacturer to be inserted into the 1 inch diameter recessed lock. Lid shall be flush with top of the pull box when lid is completely secured and locked to the pull box. No. 5 pull boxes shall have a single cam locking system, or approved equal. No. 6 pull boxes shall have a double cam locking system, or approved equal. Lid shall have a grounding lug. Lid shall be new and free of scratches, defects, and debris.

Conductors

Conductors shall be in accordance with Section 34-12 of the Standard Specifications, except for the following:

- If the existing ground wire (green 1#10 THW) is used as a pullwire, a new ground wire shall be pulled with the new conductors or cables, unless otherwise specified.
- Unless called for on the Drawings, insulation Types THHN and THWN are not approved for installation.
- The electrolier leads from base to lamp socket shall be No. 12 THW solid wire with 45 mils insulation suitable for 600-volt service for historic decorative, post top and mast arm electroliers.
- All conductors of AWG #10 or larger shall be identified by printed and embossed labels identifying the UL listing, the insulation type, the voltage rating, the AWG number, and the "City of Sacramento". The printed label and the embossed label shall be placed at approximately 90 degrees separation around the center of the conductors. Labels shall appear every one foot interval. Embossed labels shall be between 0.002" to 0.003" in depth and shall not damage the conductors. Label heights shall be no less than 3/32" for AWG #8 or larger, and shall be no less than 2/32" for AWG #10.

Wiring

Shall be in accordance with Section 34-13 of the Standard Specifications, except for the following:

1. After taping, all splices shall be painted with an approved electrical coating which will resist oil, acids, alkalis, and adverse environmental conditions. Pull ropes used to pull conductors in conduit shall be a minimum of three-eighths inch (3/8") in diameter.

Inspection

Inspection shall be in accordance with Section 34-22 of the Standard Specifications and these Specifications.

Communication Equipment

The following communication equipment shall be provided, installed and configured per the Drawings and Special Provisions.

A. Surge Suppressor Power Strip

Surge Suppressors shall meet the following requirements:

- 120 VAC
- 60 Hz
- All metal housing
- Isolated filter banks
- 2350 joule/97,000 amps rating
- 6 outlets
- 6 foot cord

Surge Suppressors shall be manufactured by Tripp-Lite Power Protection, Model ISOBAR6ULTRA or approved equal.

Surge Suppressors are to be installed in Type R and Type 332 cabinets at locations where a network fiber or DSL switch are being installed as noted on the Drawings. For Type R cabinet, the Surge Suppressor shall be mounted to the cabinet channel rail, and must be wired to the load side of the 15-amp main breaker in the cabinet. For the Type 332 cabinet, the Surge Suppressor shall be mounted on 2" aluminum stock on the back side of the cabinet near the top using the existing 19" rack. The Surge Suppressor must be plugged into the equipment receptacle on the back of the power assembly of the 332 cabinet. See Drawings for further details.

B. Network Switch (Fiber Infrastructure)

Network Switch shall meet the following requirements:

- Industrial grade
- DIN rail mountable
- Ethernet connectivity
- Operate under 14 degrees Fahrenheit to 140 degrees Fahrenheit, and under vibration and shock
- Uses copper and fiber uplink options
- Twelve (12) 10/100 ports
- Two (2) 100 BASE-LX (single mode fiber) uplinks
- Enhanced Image (EI) software
- 5-year warranty

Network Switch shall be manufactured by Cisco, Model 2955S-12 or approved equal.

Network switches shall be installed in Type R and Type 332 cabinets at all locations where fiber optic cabling is terminated in the traffic signal cabinet or as noted on the Drawings.

For Type R cabinet, network switch shall be mounted on a DIN rail attached to aluminum stock for support. The DIN rail and aluminum stock shall be mounted to the cabinet channel rails.

For Type 332 cabinet, network switch shall be mounted on a DIN Rail Adapter for use on an EIA 19" rack in a 332 cabinet. DIN Rail Adapter shall be by Cisco, Model STK-RACKMNT-2955 or approved equal.

The Contractor is responsible for making all connections per manufacturer recommendations. See Drawings for further details.

Functional Test

Network Switch shall be installed and wired per the manufacturer's recommendation, the Drawings and these Special Provisions. The Network Switch power indicator light shall both be green for both A and B power sources.

C. Power Supply for Network Switch

Power Supply for Network Switch shall meet the following requirements:

- Compatible with Cisco Catalyst Series 2955 Series industrial grade switch
- DIN rail mountable
- Input: 100-120 VAC or 200-240 VAC, manually selected AC, 50-60 Hz
- Operate under 14 degrees Fahrenheit to 140 degrees Fahrenheit, and under vibration and shock
- Output: 24 VDC, 2.5 amps
- 5-year warranty

Power Supply for Network Switch shall be manufactured by Cisco, Model PWR-2955-AC or approved equal.

Power Supply for Network Switch shall be installed in Type R and Type 332 cabinets.

For Type R cabinet, power supply for network switch shall be mounted on a DIN rail attached to aluminum stock for support. The DIN rail and aluminum stock shall be mounted to the cabinet channel rails.

For Type 332 cabinet, power supply for network switch shall be mounted on a DIN Rail Adapter for use on a 19" rack in a 332 cabinet. DIN Rail Adapter shall be by Cisco, Model STK-RACKMNT-2955 or approved equal.

The Contractor is responsible for making all connections and shall be made per manufacturer's recommendations to insure that the switch is powered. See Drawings for further details.

Functional Test

Power Supply for Network Switch shall be installed and wired per the manufacturer's recommendation, the Drawings and these Special Provisions. The Power Supply for Network Switch power indicator light shall be green.

D. Termination Block

Termination block shall meet the following requirements:

- EIA/TIA-568 Category 5e
- Terminates 22 - 26 AWG solid insulated cable
- Terminates 18 - 19 AWG solid stripped cable
- 25 pair capacity
- Fanning strips for horizontal cable management
- Made of high impact flame retardant thermoplastic
- Snap on cover

Termination block shall be manufactured by Siemon, Model S66M1-25 or approved equal.

The Contractor shall install and terminate signal interconnect and DSL equipment using specified terminal block at all locations where signal interconnect is terminated to DSL

communication equipment. Connection to the terminal block shall be made per manufacturer's recommendation. Bridging clips shall be provided as required to connect interconnect and DSL equipment. Terminal block shall be installed to traffic signal cabinet channel rail using aluminum stock.

E. DSL Network Switch (Copper Infrastructure)

DSL Network Switch shall meet the following requirements:

- Deliver a high speed Ethernet link over copper and fiber infrastructure
- Speeds up to 100 Mbps of symmetrical Ethernet traffic
- Capable of bonding copper pairs into two directions
- 8 copper high speed pairs. Compatible of bonding 8 high speed links into 2 Ethernet channels.
- G.SHDSL
- Drop and repeat Ethernet traffic
- Minimum of 4 – 10/100M copper Ethernet ports.
- 1-100 Base FX optical SFP port.
- Environmentally hardened casing
- Manufacturer approved power supply
- Capable of Layer 2 network management

Equipment shall be manufactured by Actelis, Model ML688 or approved equal.

DSL high speed copper links shall be terminated to interconnect cable per manufacturer's recommendations. The Contractor is responsible for providing a continuous link between intersections. The DSL Network Switch shall be placed on the top shelf inside the traffic signal controller cabinet. The Contractor shall work with the manufacturer's representative and City staff to configure DSL Network Switch to provide the highest speed link possible. Copper pair signal quality results from the DSL Network Switch shall be provided to the City. The Network IP address will be provided to the Contractor by the City.

Functional Test

The DSL Network Switch shall be programmed to provide a high speed link over the traffic signal interconnect. The DSL shall be configured to obtain a link speed as specified above; deviation from the specification shall be approved by the Engineer. The network shall transmit IP video at 80% of the approved link speed. Data and video latency shall be minimized.

F. DSL Switch (SFP Module)

DSL Network Switch SFP module shall meet the following requirements:

- Provide 125 Mbps data rate
- Transmit and receive over single mode fiber using 1310 nm wavelength
- Transmission distance of 15km
- Dual LC connector

Equipment shall be manufactured by Actelis, Model 506R00032 or approved equal.

GPS Emergency Vehicle Detector System

The GPS Emergency Vehicle Detector System provided by the Contractor shall be fully compatible with the City's existing GPS system. The Contractor shall provide and install the following GPS Emergency Vehicle Detector System equipment manufactured by Global Traffic Technologies (GTT) or approved equal.

A. Intersection GPS Emergency Vehicle Detector System Components

Intersection GPS Emergency Vehicle Detector System components shall include the following:

- Opticom GPS Phase Selector – Model 1000
- Opticom GSP Radio Unit (shaft mount) – Model 1010
- Opticom GPS Auxiliary Interface Panel – Model 1030
- Opticom GPS Card Rack with power supply kit, including harness – Model 1040
- Opticom Intersection Cabling
- Opticom Mounting Hardware

B. Installation

The Contractor shall provide, fully install, and configure the GPS Emergency Vehicle Detector System per the Drawings and Special Provisions. The Contractor shall terminate all wiring and provide all necessary programming software and electronic manuals. The Contractor shall map approaches, program and configure input/output of all GPS phase selector cards per manufacturer's recommendation and City standards. The Contractor shall install the Auxiliary Interface Panel in controller cabinet and terminate all wiring connections.

The GPS unit shall be mounted to the shaft of the traffic signal mast arm pole using a Pelco Astro Mini Bracket with 90 degree sweep or approved equal. See Drawings for further mounting details. All GPS cabling and mounting hardware which includes NPT mounts, nipple/pipe, cable retainers, cover screws, wiring covers, etc. shall be included in the bid price. The GPS unit shall be mounted to allow the maximum GPS signal strength reception from GPS satellites and shall meet manufacturer's recommendations. The mounting location of the GPS unit should be such that the cable run from the GPS unit to the phase selector in the controller cabinet is no more than 250 feet. The GPS unit shall be oriented such that the cable retainer is facing an area from which vehicles will not be approaching and/or per manufacturer's recommendation.

C. Functional Test

GPS Phase Selector, GPS Unit, and GPS Auxiliary Interface Panel shall be installed, powered, and programmed per manufacturer's recommendation and City standards. The GPS system shall be able to detect vehicle up to 1500 feet from the intersection. The Contractor shall conduct functional tests for all approaches to the intersection. The system shall provide phase

green for the preempted approach. The City shall program the traffic signal controller for preemption functionality as needed.

Traffic Signal Controller 2070L

The Contractor shall provide and deliver all Model 2070L controllers, with the modules, spares and external wiring adapters, if necessary, defined herein. The Contractor shall supply operating system software, device drivers and descriptors, initialization software, and the validation suite as required herein. Traffic controller firmware is included. The Contractor shall deliver 2070L controllers in accordance with Section 1.1, Scope and Location of Work.

A. General Compliance Requirements

The Contractor shall furnish products listed on the current State of California Qualified Products List (QPL) for Traffic Signal Control Equipment. The State of California QPL for Traffic Signal Control Equipment may be found at the following link: <http://www.dot.ca.gov/hq/traffops/electsys/QPL/index.htm>

The 2070 controllers shall comply with the Transportation Electrical Equipment Specifications (TEES), dated August 16, 2002 plus Errata 1 dated October 27, 2003 and Errata 2 dated June 08, 2004 published by the California Department of Transportation (Caltrans) along with all current errata. The City reserves the right of final interpretation of the Transportation Electrical Equipment Specification (TEES). The Caltrans TEES and current errata for 2070 controllers may be found at the following link: <http://www.dot.ca.gov/hq/traffops/electsys/TEES.htm>

The Contractor shall furnish 2070 controllers loaded with Fourth Dimension Traffic D4 software.

Features or enhancements, such as OS or hardware improvements, made to the controller during the time of the contract shall be made available to the City at no additional cost. All accompanying engineering data and diagrams shall also be made available to the City at no additional cost.

B. Components

The contractor shall supply fully assembled 2070L controllers that are in full compliance with TEES. The contractor shall provide evidence that controller units, with a make and model identical to those being provided, have been tested and approved in accordance with TEES, by CALTRANS.

The Contractor shall supply 2070L controllers with the following components for 33x cabinet:

- Unit Chassis
- 2070-1B Single Board Processor
- 2070-2A Field I/O Module for 170 style cabinet
- 2070-3B 8x40 Front Panel Display
- 2070-4A 10.0 Amp Power Supply Module

The module must be marked appropriately as a 4A.
Back cover plates
2 Megabit Data key

Model 2070-1B CPU Module shall be a single board resident in Slot A5 consisting of connectors C13S and C14S, Datakey and CPU Module Software.

Model 2070-2B Module for NEMA style cabinet shall provide an I/O interface to the 2070-8 NEMA interface for NEMA TS1 family cabinets and shall have a C12S connector

Model 2070-3B Front Panel Assembly (FPA) shall consist of a Metal Panel with latch assembly and two TSD #1 hinge attaching devices, Assembly PCB, FPA Controller, two Keyboards, AUX Switch, Display B, External Serial Port Connector, CPU Activity LED Indicator, and FP Harness Interface.

Model 2070-4A Power Supply Module shall be independent, self-contained Module, vented, and cooled by convection only. The Module shall slide into the unit's power supply compartment from the back of the chassis and be attached to the Back-plane Mounting Surface by its four TSD #3 Devices.

Model 2070-7B Asynchronous Serial Communications Module, Dual EIA-485 shall conform to EIA-485 specifications for twisted pair with a 15 pin "D" connector. The data rate shall be 0-614400 baud. Port is optical isolation.

Model 2070-8 NEMA Interface Module Chassis shall be made of 0.06 inches (1.524 mm) minimum aluminum sheet and treated with clear chromate. The Module shall consist of the Module Chassis, Module Power Supply, FCU Controller, Parallel Input/Output Ports, Serial Communications Circuits and Module Connectors.

Model 2070L Back Cover shall be made of 0.06 inches (1.524 mm) minimum aluminum sheet and treated with clear chromate. All external screws, except where called out, shall be counter sunk and shall be Phillips flat head stainless steel. The matching nuts shall be permanently captive on the mating surfaces.

Datakey shall be a minimum of 2 megabits in size and be capable of storing Fourth Dimension Traffic D4 database.

The "D" plug on the 2070-8 module shall be equipped with a male, nonmetallic, 63-pin, AMP 205842-1 connector, to be compatible with the City's existing "D" harness. Provisions may be made for an adapter/pigtail cable. The Contractor shall ensure the controller is compatible with the City's existing "D" as shown in the connector assignments below. An adapter harness shall be constructed and provided as necessary. Documentation of the pin outs and a wiring diagram shall be supplied to assist the City in making the needed connections.

TYCO ELECTRONICS / AMP 205843-1 Male			AMPHENOL INDUSTRIAL MS3126F24-61S Female	
Standard City P-cabinet D-connector pin assignment			Mapped 2070L D-connector pin assignments	
PIN	I/O	FUNCTION	PIN	I/O
1	O	EMERG. PR. 4 OUT	AA	O
2	I	LOW PRIORITY 2 (PREEMPT 8)	A	I
3	I	RESERVED	B	I
4	I	RAILROAD 2 (PREEMPT 6)	C	I
5	I	RESERVED	D	I
6	I	CABINET DOOR OPEN	E	I
7	I	DIAL 6	F	I
8	O	SPECIAL FUNCTION 2 OUT	BB	O
9	I	SPLIT 3	G	I
10	I	RESERVED	H	I
11	O	FLASH OUT	CC	O
12	I	RESERVED	J	I
13	I	SYSTEM DET. 8	K	I
14	I	DIAL 5	L	I
15	O	SPECIAL FUNCTION 3 OUT	DD	O
16	I	SPLIT 2	M	I
17	I	SYSTEM DET. 1 (SEQ. #1)	N	I
18	I	SYSTEM DET. 4 (SEQ. #4)	P	I
19	I	SYSTEM ENABLE	R	I
20	I	DIMMING ENABLE	S	I
21	I	CLOCK UPDATE	T	I
22	O	EMERG. PR. 2 OUT	EE	O
23	O	RAILROAD PR. OUT	FF	O
24	I	RESERVED	U	I
25	I	DIAL 2 (SPECIAL FUNCTION 2)	V	I
26	I	FREE/COORD (SPECIAL FUNCTION 1)	W	I
27	I	RESERVED	X	I
28	O	SPECIAL FUNCTION 1 OUT	GG	O
29	I	RESERVED	Y	I
30	I	SYSTEM DET. 5	Z	I
31	I	SYSTEM DET. 3 (SEQ. #3)	a	I
32	O	EMERG. PR. 1 OUT	HH	O
33	I	LOW PRIORITY 1 (PREEMPT 7)	b	I
34	O	EMERG. PR. 3 OUT	JJ	O
35	I	DIAL 3 (SPECIAL FUNCTION 3)	c	I

36	I	RESERVED	d	I
37	I	FLASH STATUS	e	I
38	I	OFFSET 5 (ADD BIT 4)	f	I
39	I	SYSTEM DET. 6	g	I
40	I	SYSTEM DET. 7	h	I
41	I	LOW PRIORITY 4 (PREEMPT 10)	i	I
42	I	LOW PRIORITY 3 (PREEMPT 9)	j	I
43	I	RESERVED	k	I
44	I	RESERVED	m	I
45	I	RESERVED	n	I
46	I	RESERVED	p	I
47	I	SYSTEM DET. 2 (SEQ. #2)	q	I
48	---	LOGIC GND.	PP	---
49	I	EMERG. 1 (PREEMPT 1)	r	I
50	I	EMERG. 2 (PREEMPT 2)	s	I
51	---	RESERVED	KK	---
52	O	RESERVED	LL	O
53	---	LOGIC GND.	PP	---
54	---	LOGIC GND.	PP	---
55	I	EMERG. 3 (PREEMPT 3)	t	I
56	I	EMERG. 4 (PREEMPT 4)	u	I
57	I	RAILROAD 1 (PREEMPT 5)	v	I
58	I	CONFLICT STATUS	w	I
59	---	RESERVED	MM	---
60	I	FLASH COMMAND	x	I
61	I	RESERVED	y	I
62	O	RESERVED	z	O
63		CHASSIS GND.		

C. Traffic Signal Controller Software

The Contractor shall install Fourth Dimension (D4) Traffic Signal Controller software on each controller assembly. The most current version of D4 Traffic Signal controller software, at the time of controller delivery, shall be fully configured in the 2070L controller.

The Contractor shall provide a D4 license to the City for each controller assembly. The license shall include technical support and user manual of this software.

The contact for the traffic signal controller software is as follows:

Fourth Dimension Traffic

Tod Eidson, President
255 King St. #609
San Francisco, CA 94107
Phone: 415-516-4051
Fax: 415-495-9010
Email: tod@4dtraffic.com

General Controller Software Features

1. 16 phases
 - a. Three maximum times per phase with dynamic max operation
 - b. Minimum, maximum, soft recall modes
 - c. Early and delayed "Walk" timing
 - d. Conditional service during free and coordination with conditional service minimum green time
 - e. Manual control operation with selectable call, omit, and protected pedestrian clearance phases
 - f. Per phase preempt timing
2. 4 rings (Single intersection or two independent intersections)
3. 16 timed overlaps
 - a. Vehicle and pedestrian movement for each overlap
 - b. Actuated pedestrian movements
 - c. Early and delayed "Walk" timing
 - d. Pedestrian overlap rest-in-walk across multiple phases
 - e. Per overlap preempt timing
4. 8 transit phases
 - a. Two and three section signal head controls for light rail vehicles
 - b. Advanced warning sign control per transit phase
 - c. Recall or actuated operation
 - d. Normal or priority service

Detector Features

1. 64 vehicle detectors
 - a. Programmable call and extend phases
 - b. Extend and delay timing
 - c. Stop bar disconnect mode with carryover (extend) timer
 - d. Detector cross-switching
 - e. No presence and max fail detector diagnostics (disabled by TOD)
2. 16 queue detectors
 - a. Detects traffic backups
 - b. Capable of selecting alternate coordination patterns, selecting alternate maximum green times, or calling a preempt
 - c. Advanced green to clear vehicle movements prior to transit vehicle arrival

3. 16 pedestrian detectors
 - a. Programmable calls for pedestrian and vehicle phases
 - b. Pedestrian cascade mode (sequential calling of two pedestrian movements)
4. 8 transit detectors
 - a. Programmable calls for transit and vehicle phases
 - b. Extend and delay timing
 - c. Travel time delay
 - d. Alternate travel times by TOD
 - e. Adaptive arrival time adjustment
5. 32 remote transit detectors
 - a. Calls received by transit detectors at other intersections (on peer-to-peer Ethernet network)
 - b. Travel time delay
 - c. Alternate travel times by TOD
 - d. Adaptive arrival time adjustment

Coordination Features

1. 32 coordination patterns
 - a. Cycle time and three offsets per pattern
 - b. Flexible per phase split expansion and shrinking during transition
 - c. Fixed or floating force-offs (per phase)
 - d. Automatic permissive calculations
2. Single-band or multi-band permissive modes with permissive limit timer
3. Three pedestrian permissive modes
 - a. Programmable recalls and omits active during each pattern
 - b. Actuated coordinated phases can gap-out early and distribute unused time to movements with greater demand
 - c. Selectable reservice phases (a.k.a. "fully actuated coordination")
4. Multiple interconnect modes
 - a. Time based scheduler
 - b. Central system command (over twisted pair or Ethernet connection)
 - c. 120 volt interconnect cable
5. Master controller mode
 - a. Controller can operate as a twisted pair, Ethernet, or 120 volt cable master in the absence of a central management system

Preemption Features

1. 10 prioritized preempts
 - a. Two track clearance states, dwell state, and exit state per preempt

- b. Permit or allow any phase and overlap individually for each preempt state
 - c. Presence preempt input with optional fail-safe interlock input
 - d. "Check-in / Check-out" preempt detection option with check-out override timer
2. 4 soft preempts
- a. "Step-by-step" preempt (special preempt sequence)
 - b. 8 states per soft preempt sequence (timed or actuated)
 - c. Each state allows programmable calls, omits, holds, and force-offs for each phase and overlap

Transit Priority Features

- a. Programmable transit priority options for each transit phase
- b. Operates based on estimated arrival times using local intersection detection and remote ("peer-to-peer") detection from upstream intersections
- c. Separate options for free or coordinated operation
- d. Extend only (no phase abbreviation) or Early/Extend operation
- e. Minimum phase green times
- f. Maximum extend limit
- g. Optional vehicle/pedestrian phase omits
- h. Ability to switch to alternate sequence to better serve early arriving transit vehicle
- i. Adaptive arrival times to automatically compensate for fluctuating station dwell times

Status / Diagnostic Features

- 1. Detailed controller status displays through the 2070 LCD display
 - a. Phase, ring, and overlap status
 - b. Transit phase/priority status
 - c. Coordination status
 - d. Preemption status
 - e. Vehicle and pedestrian detector status
 - f. Cabinet / Field I/O status
 - g. System communication status
- 2. 6000 controller event log
 - a. Multiple classes of events can be individually enabled for logging
 - b. Retrieved and reset from central connection (serial or Ethernet)
- 3. 62.5 day detector VOS log
 - a. Log VOS for 16 system detectors each 15 minutes
- 4. 600 MMU event log
 - a. Detailed MMU events, including reason for failure and state of field outputs

Cabinet Support

- 1. NEMA TS1, TS2-Type 1 and Type 2, Caltrans 332/336, and ITS cabinet support

2. All controller input and output functions can be mapped to any physical cabinet input and output
3. "Peer-to-Peer" interconnect over Ethernet (select outputs or inputs from the source intersection to activate a function at the local intersection)
4. Cabinet logic channels to accomplish custom controller I/O operation

Protocol Support

1. Communications over serial port, twisted pair, or Ethernet (fiber-optics)
2. Caltrans AB3418E with extended messages for extended status and D4 specific functionality
3. Future NTCIP compliance

D. Testing

The Contractor shall comply with electrical, environmental and testing requirements defined in the TEES. The Contractor shall comply with all testing, quality control and reporting procedures specified in the TEES.

E. Manuals

All equipment (base controller assemblies and all modules) and software provided under this specification shall be provided with product/operational manuals, which document the operation and maintenance of the equipment in compliance with TEES. **The Contractor shall furnish ten (10) printed and one (1) electronic copy of operating manual, technical data sheets, product cut sheets, and any associated documentation with delivery of the first controller shipment per Section 1.1, Scope and Location of Work.**

Manuals shall be printed on 8.5" x 11" inch paper. Schematics, layouts, parts lists and plan details may be on 11" x 17" inch sheets, but the sheets must be neatly folded to 8.5" x 11" inch size. The manuals shall be bound in durable covers, and shall not suffer degradation when subjected to normal cabinet temperature testing.

F. Warranty

The 2070L controller equipment and components/modules shall have a full warranty for manufacturer defects and workmanship, including parts and labor for a minimum of five (5) years from the date of acceptance. Identification of manufacturer defects shall be as determined by the City. The Contractor shall submit three (3) copies of all warranty certificates with the first controller shipment per Section 1.1, Scope and Location of work.

The Contractor shall bear all expenses for the return and repair of 2070L and 2070L controller equipment and components or field repair of installed equipment deemed necessary for adjustments during the warranty period.

Traffic Signal Cabinet, Type 332

Traffic Signal Controller Cabinets, Type 332, shall be supplied and delivered to the City of Sacramento per Section 1.1, Scope and Location of Work. Cabinets shall be constructed in accordance with the State Standard Plans and Specifications. The Contractor shall furnish and install Type 332 traffic signal cabinets at locations shown on the Drawings.

A. General Requirements

a. Type 332 Traffic Signal Cabinet Assembly, including, as a minimum, the following for each controller cabinet assembly:

- Auxiliary output file for overlap outputs,
- Model 200 Switch Packs;
- Model 222 detector amplifiers;
- Model 242 two-Channel Isolators;
- Model 204 Flashers;
- Model 252 two-channel AC (Railroad Preemption) isolators;
- Model 2010 Conflict Monitor compatible with Model 2070L controller;
- All convenience receptacles shall be Ground Fault Interrupter (GFI) type.
- All labeling shall be either silk screen or phenolic/engraved.
- Provide a test switch panel in the cabinet, for Phases 1 thru 8 Detector inputs, PPB's, EVA, EVB, EVC, EVD. Switches shall be of the on-off-momentary contact type. All cabinets shall be wired for high priority and low priority EVP detection.
- Provide an 18inch fluorescent light in the cabinet.
- The PDA and the Cabinet Power Supply shall be combined into one unit.
- Controller cabinet shall be provided with dual exhaust fans.
- Mounting hardware and bolts.

All additional equipment needed for the operation of the signal control system specified in these Special Provisions and required for the operation of the system for the system operation as shown in signal phasing in the Drawings.

The Controller Cabinet Assembly shall be pre-wired for a full eight (8) vehicle phase, four (4) pedestrian phases and four (4) overlap signal outputs.

The Contractor shall provide Model 222 detector amplifier for the controller cabinet to accommodate the number of detection zones shown on the Drawings.

The Contractor shall furnish and install all other materials, including foundation, anchor bolts, cabling for complete installation of the cabinet assembly. The Contractor shall construct the appropriate cabinet foundation as shown on the Drawings or install cabinet adapters, shall install the controller cabinet on the foundation or adapter, and shall make field wiring connections to the terminal blocks in the cabinet.

b. The cabinet shall be completely wired for the A, B, and C harnesses. The cabinet shall be wired with the D connector and the D connector shall be fully compatible with a 2070L.

- c. All cabinet accessories as specified in the State specifications 86-3.05 A, B, D, and E shall be supplied.
- d. All circuits appearing at all controller plugs shall be wired to a terminal board.
- e. Circuit board construction for cabinet wiring will not be acceptable, except where specified.
- f. Cabinet wiring utilizing ribbon cable will not be acceptable.
- g. Three (3) prints of the cabinet-wiring diagram shall be supplied with each controller cabinet in addition to an electronic copy. One copy of the cabinet print shall be enclosed in the document drawer under the controller shelf.
- h. *Two copies of circuit diagrams and operation manual for each major component of control cabinet equipment shall be provided for each cabinet delivered.*

B. Specific Requirements

- a. All equipment and materials shall conform to the provisions in Section 86, "Signals, Lighting and Electrical Systems" of the Standard Specifications and these Special Provisions. The Contractor shall furnish all materials required to facilitate installation of agency-furnished equipment on new or existing cabinet foundations.

The Contractor shall provide all other materials necessary for complete installation of Type 332 controller cabinet as shown on the Drawings, and as specified in these Special Provisions.

INSTALLATION

Installation shall include:

- Conduct full bench testing of entire cabinet and controller assembly with proposed signal operation and railroad preemption operation.
- Removing and salvaging of the existing traffic signal cabinet and controller assembly;
- Furnishing and installing all needed mounting hardware;
- Bonding and grounding the cabinet to the ground rod using bare, solid AWG #8 soft-drawn copper wire. All equipment, housings, and metal conduits shall be grounded and bonded in accordance with the NEC.

Contractor shall install Type 332 controller cabinet on Type 332 cabinet foundation per Caltrans Standard Plans 2010, ES-2C.

- b. *Type 332 cabinets shall be constructed from sheet aluminum. Cabinets constructed from aluminum sheet shall be .125" minimum thickness. The cabinet corners shall be reinforced by welding aluminum gussets to the inside corners. **There shall be two lifting brackets attached to the top sides of the cabinet.***

- c. *The door latching mechanism shall be a three-point draw roller type with twin nylon rollers. The center catch and pushrods shall be zinc-plated or cadmium plated steel.*
- d. A door lock shall be set above the door handle or in the door handle. Two (2) cabinet door keys and two (2) PD access door keys shall be provided with each cabinet. The latching handle shall have provisions for padlocking in the latched position. The operating handle shall be stainless steel.
- e. The main door shall have a 1" wide and .25" thick weather-tight neoprene gasket. The police access door shall have a .5" wide and .25" thick weather-tight neoprene gasket.
- f. The cabinet shall be provided with three (3) shelves to house the controller, detector rack, and any other equipment required. The detector rack shall be located on the shelf above the controller.
- g. Shelves shall be at least 10.25" deep and be located in the cabinet to provide a 1.75" clearance between the back of the shelf and the back of the cabinet. A 1.5" deep drawer shall be provided in the cabinet, mounted directly beneath the controller support shelf. The drawer shall have a hinged top cover and shall be capable of storing documents and miscellaneous equipment. This drawer shall support to 50 lbs in weight when fully extended. The drawer shall open and close smoothly. Drawer dimensions shall make maximum use of available depth offered by the controller shelf and be a minimum of 18" wide.
- h. *All external hardware shall be stainless steel. The door hinge pins and mounting hardware shall be tamper-proof or inaccessible when the door is closed. All internal hardware shall be stainless steel or cadmium-plated steel.*
- i. All exterior cabinet seams shall be continuously welded.
- j. *Louvers shall be located in the lower half of the front door. A washable metal dust filter shall be provided and securely attached to filter the air drawn through the louvers.*
- k. One set of galvanized anchor bolts shall be included with each cabinet.
- l. All identification shall be by means of black and white labeling, painted or self-adhesive labels.
- m. Each cabinet shall be equipped with two **(2) each electric fans** with ball or roller bearings and a capacity of at least 100 cubic feet per minute per fan. The fan shall be thermostatically controlled and fused according to Section 86-3.06B of the State Standard Specifications.
- n. *An LED luminaire panel (Relume Technologies PN 796-5000 or approved equivalent) with a door-actuated switch shall be installed near top front of cabinet. A second LED luminaire panel shall be installed below the bottom shelf (or bottom of drawer) to provide for illumination of bottom half of cabinet.*

o. *The main door shall include a police door. The police panel shall include the following switches:*

(1) Automatic/Flash

(2) Signal Indications - on/off

The panel shall be located behind the police door on the main door of the cabinet. No wiring transmission to the switches shall be exposed.

p. A technician panel shall be mounted on the inside of the main door. The detection test switches on the technician test panel shall be wired to allow momentary vehicle detector or pedestrian calls, locked vehicle detector or pedestrian calls and an off/normal position. The detector amplifier outputs shall be routed directly to the back panel and shall not be affected by the test switches. (Test switches are wired in parallel.)

A three position "Stop time" switch shall be provided on the technician panel. The switch shall be labeled "Flash Stop Time On", "Off", and "Stop Time On". When placed in the "Flash Stop Time On" position, the switch shall cause the controller to stop time when in flash mode. When placed in the "Off" position, the switch shall be disabled. When placed in the "Stop Time On" position, the switch shall cause the controller to activate the stop time function.

q. The cabinet shall be wired so that it is possible to remove the conflict monitoring device without causing the intersection to go into flashing operation. The cabinet shall be wired so that with the cabinet door closed and the conflict monitoring device removed the intersection shall operate in flashing operation.

r. The flashers shall be wired so that the odd phases (1,3,5,7) are on one circuit and the even phases (2,4,6,8) are on another circuit. Both circuits shall flash all red.

s. All wire terminations shall have a minimum of one inch (1") of slack on each wire before terminating the conductors.

t. Two (2) spare terminal strips with a minimum of twenty-four (24) terminations shall be mounted in each cabinet.

u. The loadbay field connection terminals shall be compression-lug type terminations; **Panduit Part Number CX35-36-CY or approved equal.**

v. *The power distribution rack shall be located on the lower portion of the right side of the cabinet. A six (6) outlet power strip (Tripp-lite Isobar premium surge & noise suppression model# isobar6ultra or approved equal) shall be mounted below the top shelf on the right side of the cabinet and hard wired into the A/C power panel. A door switch shall also control a 3 prong A/C outlet located near top shelf of cabinet. The power strip and 3 prong A/C outlet shall be fused to the requirements of Section 86-3.06B of the State Standard Specifications.*

- w. The Type 332 cabinet shall have no terminations below fifteen inches (15") from the bottom of the cabinet.
- x. Loadbay panel shall have double row terminal blocks between the outputs of the controller and the inputs of the loadswitches.

C. Load Switches for Type 332 Cabinets

Load switches shall be designed for use in traffic signal controllers and each unit shall contain three (3) independent switches capable of switching 120 volts A.C. to one or more traffic signal field devices. Each of the three switches of the unit shall have three circuits as follows:

- a. An optical coupler electrically isolating the D.C. input circuit from the A.C. output circuit activation.
- b. A light emitting diode in the D.C. circuitry indicating the A.C. output circuit activation.
- c. A power triac mounted to an aluminum-extruded heat sink designed for appropriate heat dissipation.
- d. Each switch shall conform to the following electrical specifications:
 - 1) Power Input - 95 - 135 volts, 60 hertz
 - 2) Power Output - 15 amperes RMS up to +70° C and 25 amperes RMS up to +40° C
 - 3) Leakage - Maximum load current output in de-energized condition is less than 5 milliamperes peak.
 - 4) *Isolation - Optical coupler isolation between d.c. input and a.c. output, no internal electrical circuit connection between d.c. input and a.c. output.*

D. Solid State Flashers for Type 332 Cabinets

The solid state flashing devices for each cabinet shall be a dual circuit device with each circuit capable of operating at 15 amperes minimum at +50° C.

Each cabinet shall be supplied with one flasher unit.

F. Inductive Loop Detectors for Type 332 Cabinets

Detector Sensor Units – The detector sensor shall be the automatic tuning unit. The detector sensor shall be a dual circuit unit (two detector channels per unit) and suitable for rack mounting. All detector sensor units shall have relay output circuits.

Type One – A Type One detector sensor shall be the automatic tuning unit. The Unit shall be of the dual circuit type and suitable for rack mounting. Type One detector sensor units shall be Detector Systems model 222CR (Relay output) or approved equal.

Type Two – A Type Two detector sensor shall be the automatic tuning unit. The unit shall be of the dual circuit type and suitable for rack mounting.

The unit shall be capable of selecting three (3) operating modes: normal, delay, and extension. The delay function shall have a digital timer capable of setting from 0 to 63 seconds. The extension function shall have a digital timer capable of setting from 0 to 15.75 seconds. Both timers' operation shall be defeated by a green output (indication or the same phase as the Type Two detector. Type Two detector sensor units shall be Detector Systems Model 262CR (Relay Output) or approved equal.

The following detector sensor units shall be supplied with each cabinet:

TWELVE (12) - Type One (Dual Channel)

TWO (2) - Type Two (Dual Channel)

G. Detector Rack and Power supply for Type 332 Cabinets

- a. Each cabinet shall be supplied with three programmable detector racks capable of housing a minimum of sixteen (16) channels each and compatible with the dual channel detectors specified. Each channel shall be assignable by programming a program card included in the cabinets' detector rack and drawn on the cabinet print. A minimum of four channels shall be wired for operation with the Type Two detector sensor units.
- b. The detector rack shall utilize 5.25 inches of rack mounting height and 6.8 inches of depth. It shall provide rigid one-piece card guides that are a minimum of 5 inches long (both top and bottom) and 22 pin edge connector centered vertically at 1.1 inches o.c. The detector rack shall allow air circulation through the top, bottom, and rear. The detector rack shall be connected to the cabinet with a detachable connector.
- c. The power supply for the detector rack(s) shall be shelf mounted adjacent to the detector rack and shall be readily accessible for easy replacement. A multiple contact MS-type connector MS102A18-1P shall be readily accessible for easy replacement on the power supply.
- d. *The cabinet shall be wired to provide locked calls on all phases in the event of detector power supply failure.*
- e. The 24-volt output shall terminate on a conveniently located terminal block and shall connect to the proper detector rack terminal.
- f. The detector rack power supply shall be a switching, electronically regulated power supply and satisfy the following requirements:
 - 1) Line Regulation: .5% for 95 to 130 VAC and 59 to 61 hertz plus 0.9% for each additional one (1) hertz increase.

- 2) Load Regulation: .5% for one-fifth to full load current with a minimum temperature rise of 30° C above ambient.
- 3) Design Voltage: +24 VDC + or - 1% VDC.
- 4) Minimum Full Load Current: 4.0 amperes.
- 5) Ripple Noise: Max .2 volts P-P.
- 6) Line: 95 to 130 VAC.
- 7) Efficiency: 80%
- 8) Operating Temperature: -17° to 70°C.

H. Cabinet Delivery and Acceptance

The cabinets shall be delivered per Section 1.1, Scope and Location of Work.

The cabinets shall be tested for complete operation and inspected for conformance to these Special Provisions at the City Traffic Signal Shop. The Contractor shall have an authorized service engineer from the cabinet manufacturer available at the City's Corporate Center South within one (1) working day after notification to correct all minor malfunctions or make minor modifications to meet these specifications. If major adjustments, modifications or repairs to the cabinet are required to meet these specifications, the Contractor shall be required to repair or modify the cabinet(s) in question at no additional cost to the City. The contractor shall be responsible for all shipping charges for any cabinet(s) that are returned for major repairs or modifications. The Contractor shall also be required to repair or replace any equipment that fails to function properly during testing and inspection. For the first cabinet shipment, the City shall have fifteen (15) calendar dates from date of cabinet receipt to test and inspect the cabinets. For the balance of the cabinets, the City shall have twenty (20) calendar days from date of cabinet receipt to test and inspect the cabinets.

I. Guarantee

The Contractor guarantees all cabinets, materials and devices of whatsoever nature incorporated in, or attached to the cabinets, to be free of all defects of workmanship and materials for a period of one (1) year after final acceptance of each shipment of Type 332 controller cabinets by the City of Sacramento. The Contractor shall repair or replace any or all equipment or material, together with all or any other equipment or material which may be displaced or damaged in so doing, that may prove defective in workmanship or material within said one (1) year guarantee period without expense or charge or any nature whatsoever to the City.

In the event that the Contractor should fail to comply with the conditions of the foregoing guarantee within (10) days time, after being notified of the defect in writing, the City shall have the right, but shall not be obligated to repair, or obtain the repair of the defect and the Contractor shall pay to the City on demand all reasonable costs and expense of such repair. In the event that

any defect in workmanship or material covered by the foregoing guarantee results in a condition which constitutes an immediate hazard to the health or safety, or any property interest, or any person, the City shall have the right to immediately repair, or cause to be repaired, such defect, and the Contractor shall pay to the City on demand all reasonable costs and expense of such repair. The foregoing statement relating to hazards to health, safety or property shall be deemed to include either temporary or permanent repairs, which may be required as determined in the sole discretion and judgment of the City.

Equipment provided by Contractor but not installed

The Contractor is required to furnish certain equipment and materials as specified in the plans and in these Special Provisions, for future installation by others. The Contractor is to deliver these items to:

Corporate Center South
City of Sacramento
5730 24th Street, Building #11
Sacramento, CA 95822-3699

The Contractor shall contact Norm Colby at (916) 808-6635 at least five (5) working days in advance to schedule each delivery.

Equipment provided by City installed by Contractor

The City shall furnish certain equipment and materials as specified in the plans and in these Special Provisions, for installation by the Contractor. The Contractor is to receive these items at:

Corporate Center South
City of Sacramento
5730 24th Street, Building #11
Sacramento, CA 95822-3699

The Contractor shall contact Norm Colby at (916) 808-6635 at least five (5) working days in advance to schedule receipt.

Testing

Testing shall be divided in two categories

- Functional Test
- Final Test

A. Functional Test

All equipment shall meet functional test requirements of each piece of equipment as specified in Section 2 of these Special Provisions.

B. Final Test

A successful final test shall include successful completion of all functional testing for all equipment including cabinets and the following:

- Emergency Vehicle Detector System must preempted by a vehicle and provide phase greens for the preempted approach.

Contractor shall be responsible for all equipment and work as specified in these Special Provisions until final acceptance by the Engineer.

2.35 FLUID-APPLIED WATERPROOFING

Fluid-applied Waterproofing shall conform to the requirements of ASTM C836 – Standard Specification for High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course. Surfaces receiving fluid-applied waterproofing shall be prepared in accordance with the manufacturer's recommendations. The fluid-applied waterproofing shall be applied and allowed to cure per the manufacturer's recommendations.

Acceptable manufacturers:

1. American Hydrotech, Inc., Model MM6125
2. Carlisle Coatings & Waterproofing, Model CCW525
3. Tremco Sealants & Waterproofing, Model TREMproof 201/60
4. Or approved equal.

2.36 LIGHT-EMITTING DIODE (LED) LUMINAIRE (ORNAMENTAL)

A. GENERAL

Ornamental streetlight shall comply with the latest City of Sacramento Standard Specifications and City of Sacramento Detail Drawings, unless otherwise specified in these Special Provisions or Plans.

B. POLE

The ornamental streetlight pole and luminaire shall be manufactured by the Union Metal Corporation, or approved equal. The capital, shaft and base shall be Union Metal. The ornamental streetlight pole shall be Style I, unless otherwise specified in the Plans. The model numbers are:

Style I – 10', N874-38-B102-Y3; Style I – 12', N874-39-B102-Y1

Style II – 10', N1571-70-B72-Y3; Style II-12', N1571-70-B72-Y1

Each pole shall bear an identification tag which shall list the manufacturer model number of the pole and the year and location of manufacturer. The identification tag shall be placed inside of the base, facing the handpole, and clearly visible from the outside. Pole base and shaft shall be of one-piece construction. Pole base, shaft and glove holder shall consist of aluminum.

Included for each pole assembly (base, shaft, and luminaire) shall be a minimum of four (4) fully hot-dipped galvanized steel anchor bolts measuring 3/4-inch by 30-inch minimum

and have a 55,000 psi minimum yield strength and shall conform to ASTM A307 with threaded end, hex nuts (two per bolt), and flat washers (two per bolt) all fully hot-dipped galvanized to ASTM A153. A bolt hole template consisting of a 12-inch bolt circle shall be furnished with the anchor bolts. Pole base and shaft shall be of one-piece construction.

Streetlight assembly and all materials shall meet the requirements of the most current version of AASHTO, "Standard Specifications for Structural Support for Highway Signs, Luminaires and Traffic Signals". The post and anchorage shall be designed with a minimum safety factor of two (2) and shall not deflect more than five (5%) percent of the above ground height at full wind loading.

C. LUMINAIRE

The luminaire shall be the 424 Lexalite Acrylic Prismatic Top, GE8-9 capital. Luminaire shall be UL listed for wet/damp locations and shall be furnished prewired. Globe holder shall have four (4) 5/16-inch minimum stainless steel set screws (90 degrees) for mounting of the globe. Set screws shall be square head. Allen or Phillips set screws are not acceptable.

Globe shall have IES Distribution Type III or V as specified by the City Engineer. Assembly of top and bottom globe shall be by Lexalite stainless steel band. Globe top shall include a factory installed Lexalite spike aluminum finial. Globes shall be provided with a neck ring. Luminaire shall be designed for LED lighting system.

D. LED

The lighting system shall be LED and manufactured by SimplyLED CAN-70-C, or approved equal. The LED luminaire shall be designed for the 424 Lexalite Acrylic Prismatic Top.

E. PAINT

The entire streetlight pole assembly shall have a powder coat finish. The inside and outside of the cast aluminum base shall be powder coated. Exterior surface of the pole base, shaft, and globe holder shall have a smooth or natural finish that be uniform along the entire length of the pole assembly. Color shall be Semi-gloss black as specified by the City Engineer. Manufacturer shall supply one (1) quart of touch up. Contractor shall use Sherwin Williams Powdura® Super Durable TGIC Powder Coating, or equivalent, in the specified color. Contractor shall provide Manufacturer certification that all finishing was performed per coating manufacturer specification for the selected coating, prior to delivery of streetlight pole. Field touch up coating is NOT permitted. Poles, bases, and luminaires, which have scratched or otherwise damaged coating surfaces, will not be accepted. Replacement is the responsibility of the Developer. All powder coating shall be done in a climate controlled, self-contained shop.

F. PACKAGING

Each pole and luminaire shall be individually packaged to prevent damage with sufficient packaging strength for protection during shipping and storage. Small parts shall be packaged in boxes. Individual components shall be packaged in the same manner as the poles and luminaires. All handling shall be done with rope or nylon slings to prevent surface damage. Use of chains, wire slings or unprotected forks or hooks is prohibited. Packaging list and assembly instruction sheet shall be included. After packaging is removed and prior to

installation, each pole must be inspected for manufacturing or paint defects by the engineer. No pole is to be installed without the written authorization of the engineer.

G. SEALING OF STREETLIGHT POLE FOUNDATION

The concrete for the foundation shall be finished so that the top surface is straight and smooth with a 2% grade conforming to the adjoining sidewalk.

Remove concrete forms on streetlight poles upon project completion. Remove all plywood, forms, excess and leftover concrete, and other debris as a result from construction upon project completion.

Once the pole is installed and leveled on the anchor bolts, the gap between the base of the pole and the top of the foundation shall be sealed using the following procedure:

The bottom surface of the pole base shall be primed using Pecora P-120 or approved equal and the top of the foundation shall be primed using a Pecora P-150 or approved equal. The curing of the concrete used for the foundation or pavement and the application of the primer shall follow the guidelines provided by the manufacturer of the primer and sealant. The gap to be sealed shall be partially filled by pushing in a 1.5" diameter Bi-Cellular Backer Rod (SOF Rod), cut to size, and installed using around the bottom perimeter of the pole base, pushed against the anchor bolts. The backer rod product shall be made by the anchor bolts. The backer rod product shall be made by Construction Foam Products or approved equal. A one half-inch (1/2") inside diameter drain tube shall be placed in the gap between the base of the pole and its foundation to prevent standing water. The drain tube shall be placed under the backer rod, flush with the finished surface of the concrete, and extending about 2.25" toward the center of the pole base. It shall be placed so that it is following the downward slope of the surrounding sidewalk and top of foundation (about 2%). The drain tube shall be made of PVC with a wall thickness of 1/16" or as approved by the engineer. Once the primer is dry as recommended by the manufacturer, and the backer rod is installed, the Contractor shall apply a silicone sealant, with a minimum thickness of 0.5inch. Use a pre-tinted black color silicone, model number Pecora 890NST or approved equal. Completely seal the gap between the base of the pole and the top of the foundation with the silicone making. Use a masking tape and the surrounding pavement with the sealant material. The sealant shall be smoothed out around the base of the pole, and any excess material removed before it has set to cure as required by the sealant manufacturer. The sealant shall be smoothed out around the base of the pole, and any excess material removed before it is set to cure as required by the sealant manufacturer.

H. WARRANTY

All materials supplied shall be warranted by the manufacturer for a minimum warranty period of five (5) years from the date received at the city's facility. Entire pole and luminaire to be rated to withstand ASSHTO requirements for a minimum 70 mile and hour wind load with the 30% gust factor.

2.37 LIGHT EMITTING DIODE (LED) LUMINAIRE (MAST ARM MOUNTED)

A. General

Mastarm streetlights standards, Type 15, and foundation shall be in accordance with the latest California Department of Transportation Standard Plans, unless otherwise specified in the Drawings and these Special Provisions.

B. Luminaire

Luminaires to be installed shall be specifically designed for LED use and rated for up to 100,000 hours of operation. Luminaires shall be designed to produce asymmetric distributions conforming to the Illuminating Engineering Society light pattern Type III unless otherwise specified. Luminaire shall utilize a heat sink to efficiently draw heat away from the LED chipset.

The units shall be suitable for two-inch (2") slip filter and mounting.

All new luminaires to be installed shall be inspected by the Construction Manager prior to installation. Luminaires shall be supplied without photo cell receptacles unless otherwise called for in the Drawings. All luminaires supplied with photo cell receptacles that will not be used shall be required to completely bypass the receptacle and a shorting plug shall be securely installed in the receptacle.

C. LED

Luminaire shall be Philips Road View Series, Model RVS135W80LED or approved equal. The luminaire shall be Type III with a minimum CRI of 70 and a CCT of 4000K, unless otherwise specified.

2.38 ARCHITECTURALLY EXPOSED STEEL (BRIDGE CANOPY)

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and special provisions of the Contract.

1.2 SUMMARY

- A. Section includes:
 - 1. Supplemental requirements for architectural treatment of exposed steel framing.
 - 2. Requirements for Architecturally Exposed Steel components at Bridge Canopies as defined herein.

1.3 DEFINITIONS

- A. Architecturally Exposed Steel (Bridge Canopy): All exposed steel components of the Bridge Canopy fabricated from structural steel plates, shapes, rods, tubes, pipes, angles or channels indicated in the drawings.

1.4 SUBMITTALS

A. Shop Drawings: Show fabrication of structural steel components of bridge canopy as indicated herein.

1. Include structural and non-structural components fabricated with structural steel such as gutters, plates, shapes, tubes, beams, bracing and brackets used for the attachment of components of the Work such as lights, speakers, and junction boxes to canopy structural steel.
2. Indicate welds by standard AWS symbols. Show backing bars that are to be removed and supplemental fillet welds where backing bars are to remain. Indicate grinding, finish, and profile of welds.
3. Indicate type, size, and length of bolts and screws where occurs. Indicate orientation of bolt heads.

B. Samples: Submit samples of Architecturally Exposed Steel to set quality standards for exposed welds.

1. Two steel plates, 3/8 by 8 by 4 inches (9.5 by 200 by 100 mm), with long edges joined by a groove weld and with weld ground smooth.
2. Steel plate, 3/8 by 8 by 8 inches (9.5 by 200 by 200 mm), with one end of a short length of rectangular steel tube, 4 by 6 by 3/8 inches (100 by 150 by 9.5 mm), welded to plate with a continuous fillet weld and with weld ground smooth and blended.
3. Two Steel Tubes, 6 by 2 x 1/4 by 5 inches long, attached perpendicular to each other with a continuous fillet weld and weld ground smooth.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified installer who participates in the AISC Quality Certification Program and is designated an AISC-Certified Erector, Category ACSE.
- B. Fabricator Qualifications: A qualified fabricator that participates in the AISC Quality Certification Program and is designated an AISC-Certified Plant, Category STD.
- C. Shop-Painting Applicators: Qualified according to AISC's Sophisticated Paint Endorsement P3 or SSPC-QP 3, "Standard Procedure for Evaluating Qualifications of Shop Painting Applicators."
- D. Welding: In accordance with Section 1.18 of these Special Provisions.
- E. Pre-installation Conference: Conduct conference at Project site.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Use special care in handling to prevent twisting, warping, nicking, and other damage. Store materials to permit easy access for inspection and identification. Keep steel members off ground and spaced by using pallets, dunnage, or other supports and spacers.
 1. Do not store materials on structure in a manner that might cause distortion, damage, or overload to members or supporting structures.

1.7 PROJECT CONDITIONS

- A. Field Measurements: Where Structural Steel has been erected and components of Architecturally Exposed Steel (Bridge Canopy) are indicated to fit against structural steel or other construction, verify actual dimensions by field measurements before fabrication.

PART 2 - PRODUCTS

2.1 BOLTS, CONNECTORS, AND ANCHORS

- A. Tension-Control, High-Strength Bolt-Nut-Washer Assemblies: ASTM F 1852, Type 1, round-head assemblies.
 - 1. Finish: Mechanically deposited zinc coating.
- B. Corrosion-Resisting (Weathering Steel), Tension-Control, High-Strength Bolt-Nut-Washer Assemblies: ASTM F 1852, Type 3, round-head assemblies.

2.2 PRIMER

- A. Primer: Comply with Section 59 of the State Standard Specifications.
- B. Etching Cleaner for Galvanized Metal: Complying with MPI#25.
- C. Galvanizing Repair Paint: MPI#18, MPI#19, or SSPC-Paint 20.

2.3 FABRICATION

- A. In addition to special care used to handle and fabricate Structural Steel, all exposed surfaces of Structural Steel and Architecturally Exposed Steel shall comply with the following:
 - 1. Fabricate with exposed surfaces smooth, square, and free of surface blemishes.
 - 2. Grind sheared, punched, and flame-cut edges smooth.
 - 3. Fabricate with exposed surfaces free of mill marks.
 - 4. Fabricate with exposed surfaces free of seams to maximum extent possible.
 - 5. Remove blemishes by filling or grinding or by welding and grinding, before cleaning, treating, and shop priming.
 - 6. Fabricate with piece marks fully hidden in the completed structure or made with media that permits full removal after erection.
 - 7. Seal-weld open ends of hollow structural sections with 3/8-inch (9.5-mm) closure plates.
- B. Curved Members: Fabricate indicated members to curved shape by rolling to final shape in fabrication shop.
 - 1. Distortion of webs, stems, outstanding flanges, and legs of angles shall not be visible from a distance of 20 feet (6 m) under any lighting conditions.

2. Tolerances for walls of hollow steel sections after rolling shall be approximately 1/2 inch (13 mm).
- C. Coping, Blocking, and Joint Gaps: Maintain uniform gaps of 1/8 inch (3.2 mm) with a tolerance of 1/32 inch (0.8 mm).
- D. Bolt Holes: Cut, drill, or punch standard bolt holes perpendicular to metal surfaces.
- E. Cleaning Corrosion-Resisting Structural Steel: Clean and prepare steel surfaces that are to remain unpainted according to SSPC-SP 6/NACE No. 3, "Commercial Blast Cleaning."
- F. Holes: Provide holes required for securing other work to structural steel and for other work to pass through steel framing members.
 1. Cut, drill, or punch holes perpendicular to steel surfaces.
 2. Baseplate Holes: Cut, drill, mechanically thermal cut, or punch holes perpendicular to steel surfaces.
 3. Weld threaded nuts to framing and other specialty items indicated to receive other work.

2.4 FABRICATION, GUTTERS AND DOWNSPOUTS AT CANOPY

- A. General: Provide all shapes, plates and accessories as needed to complete the Work. Preassemble gutters in shop to greatest extent possible.
- B. Fabricate steel gutters from continuous 1/4" thick steel plate welded and bent as required to provide shape indicated in the Drawings unless otherwise indicated. Fabricate to sizes, shapes, and profiles as necessary to receive adjacent construction.
- C. Fabricate steel downspouts from galvanized steel schedule 40 pipe. Cut, bend, shape, splice or miter to the profile indicated on the Drawings. Weld splices and miters with continuous welds appropriate for the condition being welded and grind smooth all exposed welds at splices, miters and other visible connections.
- D. Weld all connections with continuous fillet welds all around. Make welds the same size as wall thickness unless otherwise indicated. Welded connections shall not leak when exposed to standing water.

2.5 FABRICATION, COMPONENTS USED FOR ATTACHING FIXTURES AND EQUIPMENT

- A. General: Provide all shapes, plates and accessories as needed to complete the Work. Preassemble components comprised of multiple shapes to the greatest extent practical.

2.6 SHOP CONNECTIONS

- A. High-Strength Bolts: Shop install high-strength bolts according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts" for type of bolt and type of joint specified.

1. Joint Type: Snug tightened.
- B. Weld Connections: Comply with AWS D1.1/D1.1M for tolerances, appearances, welding procedure specifications, weld quality, and methods used in correcting welding work, and comply with the following:
1. Assemble and weld built-up sections by methods that will maintain true alignment of axes without exceeding specified tolerances.
 2. Use weld sizes, fabrication sequence, and equipment that limit distortions to allowable tolerances.
 3. Provide continuous, sealed welds at angle to gusset-plate connections and similar locations where Architecturally Exposed Steel is exposed to weather.
 4. Provide continuous welds of uniform size and profile where Architecturally Exposed Steel is welded.
 5. Make butt and groove welds flush to adjacent surfaces within tolerance of plus 1/16 inch, minus 0 inch (plus 1.5 mm, minus 0 mm). Do not grind unless required for clearances or for fitting other components, or unless directed to correct unacceptable work.
 6. Remove backing bars or runoff tabs; back-gouge and grind steel smooth.
 7. At locations where welding on the far side of an exposed connection of Architecturally Exposed Steel occurs, grind distortions and marking of the steel to a smooth profile aligned with adjacent material.
 8. Make fillet welds of uniform size and profile with exposed face smooth and slightly concave. Do not grind unless directed to correct unacceptable work.

2.7 SHOP PRIMING

- A. Shop prime steel surfaces except the following:
1. Surfaces embedded in concrete or mortar. Extend priming of partially embedded members to a depth of 2 inches (50 mm).
 2. Surfaces to be field welded.
 3. Surfaces to be high-strength bolted with slip-critical connections.
 4. Surfaces to receive sprayed fire-resistive materials.
 5. Galvanized surfaces.
- B. Surface Preparation:
1. SSPC-SP 3, "Power Tool Cleaning."
 2. SSPC-SP 7/NACE No. 4, "Brush-Off Blast Cleaning."
 3. SSPC-SP 14/NACE No. 8, "Industrial Blast Cleaning."
 4. SSPC-SP 11, "Power Tool Cleaning to Bare Metal."
 5. SSPC-SP 6/NACE No. 3, "Commercial Blast Cleaning."
 6. SSPC-SP 10/NACE No. 2, "Near-White Blast Cleaning."
- C. Preparing Galvanized Steel for Shop Priming: After galvanizing, thoroughly clean steel of grease, dirt, oil, flux, and other foreign matter, and treat with etching cleaner.
- D. Priming: Immediately after surface preparation, apply primer according to manufacturer's written instructions and at rate recommended by SSPC to provide a minimum dry film thickness of 1.5 mils (0.038 mm). Use priming methods that result in full coverage of joints, corners, edges, and exposed surfaces.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify, with steel erector present, elevations of concrete- and masonry-bearing surfaces and locations of anchor rods, bearing plates, and other embedments for compliance with requirements. Notes and documentation of field verification shall be submitted with shop plans.
 - 1. Prepare a certified survey of bearing surfaces, anchor rods, bearing plates, and other embedments showing dimensions, locations, angles, and elevations.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 ERECTION

- A. Provide temporary shores, guys, braces, and other supports during erection to keep Architecturally Exposed Steel secure, plumb, and in alignment.
 - 1. If possible, locate welded tabs for attaching temporary bracing and safety cabling where they will be concealed from view in the completed Work.
 - 2. All shores, guys, braces, and other supports must be set on the bridge and cannot extend beyond the face of the bridge.
- B. Set Architecturally Exposed Steel accurately in locations and to elevations indicated and according to AISC 303 and AISC 360.
 - 1. Erect Architecturally Exposed Steel to the tolerances specified in AISC 303 for steel that is designated Architecturally Exposed Steel.
- C. Do not use thermal cutting during erection.

3.3 FIELD CONNECTIONS

- A. High-Strength Bolts: Install high-strength bolts according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts" for type of bolt and type of joint specified.
 - 1. Joint Type: Snug tightened.
 - 2. Orient bolt heads in same direction for each connection and to maximum extent possible in same direction for similar connections.
- B. Weld Connections: Comply with requirements in "Weld Connections" Paragraph in "Shop Connections" Article.
 - 1. Remove backing bars or runoff tabs; back-gouge and grind steel smooth.
 - 2. Remove erection bolts, fill holes, and grind smooth.

3. Fill weld access holes and grind smooth.

3.4 FIELD QUALITY CONTROL

- A. Testing Agency: City will engage a qualified independent testing and inspecting agency to inspect Architecturally Exposed Steel. The testing agency will not be responsible for enforcing requirements relating to aesthetic effect.
- B. Construction Manager will observe Architecturally Exposed Steel in place to determine acceptability relating to aesthetic effect.

3.5 REPAIRS AND PROTECTION

- A. Remove welded tabs that were used for attaching temporary bracing and safety cabling and that are exposed to view in the completed Work. Grind steel smooth.
- B. Galvanized Surfaces: Clean field welds, bolted connections, and abraded areas and repair galvanizing to comply with ASTM A 780.

2.39 EQUIPMENT LIST AND DRAWINGS SUBMITTALS

Equipment list and drawings shall be in accordance with Section 34-3 of the Standard Specifications and these Special Provisions.

Unless otherwise permitted in writing by the Engineer, the Contractor shall, within five (5) days following notification of award of the contract, submit to the Engineer for approval a listing of equipment and material which he/she proposes to furnish and install. The list shall be complete as to name of manufacturer, size and catalog number of unit, and shall be supplemented by other data, including detailed scale drawings and wiring drawings. A minimum of six (6) copies of the above data shall be submitted to the Engineer for review and approval.

The Contractor shall submit to the Engineer a statement from each vendor supplying electrical equipment, including but not limited to, standards, electroliers, luminaires, and all other electrical equipment indicating that the orders for the materials required for this contract have been received and accepted by said vendor. The confirmed date of delivery to the contractor shall be indicated on the statement. All substitutions are subject to the approval of the Engineer.

2.40 EPOXY CRACK INJECTION

Cracks that are designated by the Engineer in the existing concrete structure shall be prepared and filled with pressure injected epoxy in conformance with the details shown on the plans and these special provisions.

The Construction Manager will not designate cracks that are less than 8 mils wide for epoxy injection.

MATERIALS

The epoxy adhesive to be used for injecting into cracks in concrete shall be furnished in conformance with the provisions in Sections 95-1, "General," and 95-2.11, "Epoxy Resin Adhesive for Injection Grouting of Portland Cement Concrete Pavements, " of the Standard Specifications and these special provisions.

Where cracks of varying widths are to be filled, it may be necessary to use more than one epoxy formulation.

PREPARATION

Cracks to be filled shall be cleaned free of dust, silt, and any other material that would impair bond of epoxy to concrete. Cleaning shall be done with oil free compressed air. When compressed air does not remove the material in the cracks, the cracks shall be flushed with water under pressure. When flushing water is used, the water shall be blown out of the cracks with oil-free compressed air before epoxy is injected.

Suitable injection ports shall be inserted in the cracks at intervals not less than the thickness of the concrete being injected. At the end of a crack, the first port shall be about one-half this distance from the end. The spacing of the ports shall be adjusted so that the epoxy substantially fills the cracks.

The surface of crack between ports shall be sealed with tape or other temporary surface sealant that is capable of retaining the epoxy adhesive in the crack during pressure injection and until the epoxy has hardened.

INJECTION

Epoxy adhesive shall be pumped into the cracks through the injection ports. The pump, hose, injection gun and appurtenances shall maintain the proportion and mix of the epoxy and shall also inject the epoxy at a sufficient rate and pressure to completely fill all designated cracks. A suitable gasket shall be used on the head of the injection gun to prevent epoxy from running down the face of the concrete. Pumping pressure shall be kept as low as practical.

The temperature of the concrete shall be not less than 50°F or greater than 90°F at the time that epoxy is injected.

Before starting injection work and at hourly intervals during injection work, when requested by the Engineer, a 3 ounce sample of mixed epoxy shall be taken from the injection gun. If samples show any evidence of improper proportioning or mixing, injection work shall be suspended until the equipment or procedures are corrected.

The epoxy shall be forced into the first port at one end of a crack until epoxy runs in substantial quantity from the next adjacent port. The first port shall then be sealed and injection started at the next port. Injection shall then continue from port to port in this manner until the crack is fully injected. For slanting or vertical cracks, pumping shall start at the lower end of the crack. Where approximately vertical and horizontal cracks intersect, the vertical crack below the intersection shall be injected first. Ports shall be sealed by removing the fitting, filling the void with epoxy, and covering with tape or surface sealant.

Sealing tape and temporary surface sealant shall remain in place until the epoxy has hardened.

On faces of concrete exposed to public view, sealant tape and other temporary surface sealant shall be removed when no longer required and any spillage of epoxy shall also be removed. Surfaces that are not visible to the public are not required to be cleaned.

2.41 ELECTRICAL SERVICE, STREET LIGHTING

The electrical services for the lighting system will be from the service locations shown on the Plans. Service shall be wired for 120/208 or 120/240-volts three wire as shown on the Plans. The Contractor shall connect the luminaires to the circuits designated on the Plans.

For each new service, the Contractor shall install service conduit and wires to the Sacramento Municipal Utility District service point in accordance with SMUD's requirements.

The service pedestal shall be fabricated from Type 304 stainless steel in accordance with the dimensions shown on the Plans. Each service pedestal shall be fabricated from the 14 gauge stainless steel, except that the mounting brackets shall be 10 gauge stainless steel. The overall dimensions of the enclosure shall be 43" high x 12" wide x 9" deep. The enclosure shall be rain tight and dust tight. All welds shall be ground smooth and finished so that grind marks are not visible. A hinged dead front plate with cutouts for the handles of the breakers and the switch shall be provided in addition to the hinged outside door equipped with a draw latch suitable for padlocking. The anchor bolts shall be inside or outside the service pedestal as shown on the street lighting detail plan.

A hinged dead front plate with cutouts for the handles of the breakers and the switch shall be provided. A hinge outside door equipped with a heavy duty draw latch suitable for padlocking shall be provided for the service section. The dead front panel on the service enclosure shall have a continuous stainless steel piano hinge.

The enclosure shall have no screws, nuts, or bolts on the exterior, except utility sealing screws. All screws, nuts, bolts, and washers shall be stainless steel. All hinges and hinge pins shall be stainless steel.

No surface of the pedestal shall be deflected inward or outward more than 1/6" measured from the intended plane of the surface.

Service enclosures shall be factory wired and conform to NEMA Standards. All control wiring shall be stranded copper, No. 14 AWG rated for 600-Volts. Wiring shall be arranged so that any piece of equipment can be removed without disconnecting any wiring other than the leads to the equipment being removed. All wiring shall be marked with permanent clip sleeve wire markers. Felt, pencil, or stick back markers will not be accepted. A copy of the wiring diagram for the service pedestal shall be enclosed in plastic and mounted on the inside of the service section.

Mounted in each service pedestal shall be the following equipment:

- a. One two-pole, 120-volt alternate current main breaker with 100-Ampere trip and asymmetrical interrupting rating of 10,000 amperes at 240-volts. The breaker shall have a handle for each pole and handle ties shall be provided for the disconnect of all service conductors simultaneously. Breaker shall be Cutter-Hammer Quick log C or approved equal. Sufficient space shall be provided for the replacement of the two-pole main breaker with a similar three-pole main breaker in the future. The space for the extra pole shall be blanked off.
- b. One single-pole, 120/240-volt, 15-ampere trip, 10,000-ampere asymmetrical interrupting capacity circuit breaker for control circuit. Breaker shall be Cutter-Hammer Quick log C or approved equal.

- c. Six single-pole, 120-volt alternating current branch circuit breakers for street lighting each with 40-ampere trip and an asymmetric interrupting rating of 10,000 amperes at 240 volts. Breakers shall be Cutter-Hammer Quick log C or approved equal.
- d. Two 3-pole, normally open, 60-ampere mercury displacement relays. Coil voltage shall be 120 VAC, 60 cycle. Mercury displacement relays shall be Dayton Electric Manufacturing Co., Model Number 3X753E, or approved equal.
- e. One 10-ampere, double-pole, double-throw pilot relay with an eight-point industrial socket (Potter and Brumfield KRP11AG, or approved equal.) A similar base (socket) shall be completely wired in place for future tickler wires.
- f. One oil tight "Hand-Off-Auto" selector switch.
- g. One solid copper neutral bus.
- h. Incoming terminals (landing lugs).
- i. Solid neutral terminal strip.
- j. Terminal strips for conductors within the cabinet.

The service pedestal shall have provisions for the installation of up to a total of 12 single-pole circuit breakers. This shall include brass links and mounting hardware. Branch circuit panel shall be bussed panel using the copper bus bar of 125-ampere capacity with bolt on circuit breakers bolting to the bus bars. Loop wiring will be accepted. However, all copper wiring used for main busing shall be rated for 125 amperes.

Nameplates of a reasonable size identifying the control unit therein shall be installed on the dead front panel. Nameplates shall be black laminated with a white plastic center. All nameplates shall be fastened by screws.

The entire service pedestal shall be constructed with the highest quality workmanship and shall meet applicable codes. Complete submittal drawings on all substitutions shall be submitted to the Engineer in accordance with Section 34-3 of the Standard Specifications. If the proposed substitute is rejected or if the submittal is not made within the specified time, the specified equipment shall be furnished.

The Contractor shall protect and lock the service pedestal during construction. After construction, the Contractor shall provide a master lock that will accept Type 3207 key for the service pedestal.

All conduits and wire shall be furnished and installed by the Contractor.

* END OF SECTION *

SECTION 3.0 - MITIGATION MEASURES

3.01 STOP WORK IF CULTURAL RESOURCES ARE DISCOVERED DURING CONSTRUCTION

In the event that unanticipated archaeological resources or human remains are encountered, compliance with federal and state regulations and guidelines regarding the treatment of cultural resources and human remains shall be required. The following details the procedures to be followed in the event that new cultural resource sites or human remains are discovered.

1. If the monitoring archaeologist believes that an archaeological resource has inadvertently been uncovered, all work adjacent to the discovery shall cease, and the appropriate steps shall be taken, as directed by the Preservation Director in consultation with the archaeologist, to protect the discovery site. The area of work stoppage will be adequate to provide for the security, protection, and integrity of the archaeological resources in accordance with Federal and State Law. At a minimum the area will be secured to a distance of 50 feet from the discovery. Vehicles, equipment, and unauthorized personnel will not be permitted to traverse the discovery site. The archaeologist will conduct a field investigation and assess the significance of the find. Impacts to cultural resources shall be mitigated to a less-than-significant level through data recovery or other methods determined adequate by the archaeologist and that are consistent with the Secretary of the Interior's Standards for Archaeological Documentation. All identified cultural resources shall be recorded on the appropriate Department of Parks and Recreation (DPR) 523 (a-1) form and filed with the North Central Information Center.
2. If human remains are discovered at the project construction site during any phase of construction, all ground-disturbing activity within 50 feet of the resources shall be halted and the County Coroner shall be notified immediately, according to Section 5097.98 of the State Public Resources Code and Section 7050.5 of California's Health and Safety Code. If the remains are determined by the County Coroner to be Native American, the Native American Heritage Commission (NAHC) shall be notified within 24 hours, and the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains. If the remains are determined to be Chinese, or any other ethnic group, the appropriate local organization affiliated with that group shall be contacted and all reasonable effort shall be made to identify the remains and determine and contact the most likely descendant. The approved mitigation shall be implemented before the resumption of ground disturbing activities within 50 feet of where the remains were discovered.

If the remains are of Native American origin, the landowner or his representative shall contact the Native American Heritage Commission to identify the Most Likely Descendant. That individual shall be asked to make a recommendation to the landowner for treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.983.

If the Most Likely Descendant fails to make a recommendation or the landowner or his authorized representative rejects the recommendation of the descendant, and if mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner, then the landowner or his authorized representative shall

rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.

If delay of work in the area delays the current controlling operation, the delay will be considered a differing site condition and the Contractor will be compensated for the delay in conformance with the provisions in Section 5-1.116, "DIFFERING SITE CONDITIONS," of the State Standard Specifications.

3.02 AIR QUALITY CONFORMANCE

During grading activities, Contractor shall water all soil with sufficient frequency as to maintain soil moistness and maintain 2 feet of freeboard space on haul trucks. To reduce the PM₁₀ impact during construction activity, all operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. (The use of dry brushes is expressly prohibited except where preceded or accompanied by sufficient water or chemical stabilizer/suppressant.) Wheel washers for all exiting trucks shall be installed, or all trucks and equipment leaving the site shall be washed off. Excavation and grading activity shall be suspended when winds exceed 20 mph. During clearing, grading, earth-moving, or excavation operations, fugitive dust emissions shall be controlled by watering exposed surfaces two times per day, watering haul roads three times per day or paving of construction roads, or dust-preventative measures. All onsite unpaved roads and offsite unpaved access roads shall be effectively stabilized of dust emissions using water or a chemical stabilizer or suppressant. Onsite vehicle speeds on unpaved roads shall be limited to 15 mph.

In order to reduce NO_x emissions from off-road diesel-powered equipment, the Contractor shall provide a plan for approval by the City and the Sacramento Metropolitan Air Quality Management District (SMAQMD) demonstrating that the heavy-duty (> 50 horsepower) off-road vehicles to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project-wide fleet-average 20% NO_x reduction and 45% particulate reduction compared to the most recent CARB fleet average at time of construction. The SMAQMD shall make the final decision on the emission control technologies to be used by the project construction equipment; however, acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.

The Contractor shall submit to Construction Manager and SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project. The inventory shall include the horsepower rating, engine production year, and projected hours of use or fuel throughput for each piece of equipment, and its compliance status with respect to CARB emission reduction regulations for off-road diesel equipment. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. At least 48 hours prior to the use of subject heavy-duty off-road equipment, the Contractor shall provide the Owner and SMAQMD with the anticipated construction timeline including start date and name and phone number of the project manager and on-site foreman.

In order to control visible emissions from off-road diesel-powered equipment, the Contractor shall ensure that emissions from all off-road diesel-powered equipment used on the project site

do not exceed 40% opacity for more than 3 minutes in any 1 hour. Any equipment found to exceed 40% opacity (or Ringelmann 2.0) shall be replaced immediately, and the SMAQMD shall be notified within 48 hours of identification of non-compliant equipment. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The SMAQMD and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this section shall supersede other SMAQMD or state rules or regulations.

Construction activities shall comply with SMAQMD Rules 403 on fugitive dust and 405 on dust and condensed fumes, so that emissions do not exceed hourly levels as regulated per processing weight. The Contractor shall take every reasonable precaution not to cause or allow the emissions of fugitive dust from being airborne beyond the property line from which the emission originates, from any construction, handling or storage activity, or any wrecking, excavation, grading, clearing of land or solid waste disposal operation. All dust control measures and any violations of SMAQMD rules are the responsibility of the Contractor.

Construction equipment shall be kept in optimum running condition at all times. Construction equipment shall be maintained and tuned at the interval recommended by the manufacturers to minimize exhaust emissions and odors and increase fuel efficiency.

When appropriate, use alternative fueled (such as aqueous diesel fuel) or catalyst equipped diesel construction equipment. When appropriate, replace fossil-fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set).

Equipment idling shall be kept to a minimum when equipment is not in use. No piece of equipment shall be left to idle in one place for more than 5 minutes.

Full compensation for complying with the requirements of this section shall be considered as included in the prices paid for the various contract items of work involved and no additional compensation will be allowed therefore.

3.03 PRECONSTRUCTION BIOLOGICAL SURVEY

An Owner provided Biologist will perform all preconstruction biological surveys, including nesting surveys for Swainson's Hawks, other protected or sensitive avian species, and Burrowing Owls.

If active Swainson's Hawk nests are found in the construction area, the following mitigation measures shall be implemented:

1. No intensive new disturbances (e.g., heavy equipment operation associated with construction, use of cranes or draglines, new rock crushing activities) or other project-related activities that may cause nest abandonment or forced fledging, can be initiated within 200 yards (buffer zone) of an active nest between March 1 and September 15. The size of the buffer area may be adjusted if a qualified biologist and California Department of Fish and Game (CDFG) determine it would not be likely to have adverse effects on the

- hawks. No project activity shall commence within the buffer area until a qualified biologist confirms that the nest is no longer active.
2. Nest trees shall not be removed unless there is no feasible way of avoiding removal of the tree. If a nest tree must be removed, a Management Authorization (including conditions to offset the loss of the nest tree) must be obtained from CDFG with the tree removal period specified in the management Authorization, generally between October 1 and February 1.
 3. If construction or other project-related activities that may cause nest abandonment or forced fledging are necessary within the buffer zone, monitoring of the nest site (funded by the project proponent) by a qualified biologist will be required to determine if the nest is abandoned. If the nest is abandoned and if the nestlings are still alive, the project proponent shall fund the recovery and hacking (controlled release of captive reared young) of the nestling(s).
 4. Routine disturbances, such as routine maintenance activities within 0.25 mile of an active nest, shall not be prohibited.

If occupied Burrowing Owl burrows are found in the construction area, the following mitigation measures shall be implemented:

1. Impacts on the burrows shall be avoided by providing a buffer of 165 feet during the non-breeding season (September 1 through January 31) or 250 feet during the breeding season (February 1 through August 31). The size of the buffer area may be adjusted if a qualified biologist and CDFG determine it would not be likely to have adverse effects on the owls. No project activity shall commence within the buffer area until a qualified biologist confirms that the burrow is no longer occupied. If the burrow is occupied by a nesting pair, a minimum of 7.5 acres of foraging habitat contiguous to the burrow shall be maintained until the breeding season is over.
2. If impacts on occupied burrows are unavoidable, onsite passive relocation techniques approved by CDFG shall be used to encourage owls to move to alternative burrows outside of the impact area. However, no occupied burrows shall be disturbed during the nesting season unless a qualified biologist verifies through non-invasive methods that juveniles from the occupied burrows are foraging independently and are capable of independent survival. Mitigation for foraging habitat for relocated pairs shall follow guidelines provided in the California Burrowing Owl Consortium's April 1995 Burrowing Owl Survey Protocol and Mitigation guidelines, which ranges from 7.5 to 19.5 acres per pair.

If delay of work in the area delays the current controlling operation, the delay will be considered a differing site condition and the Contractor will be compensated for the delay in conformance with the provisions in Section 5-1.116, "DIFFERING SITE CONDITIONS," of the State Standard Specifications.

3.04 SOUND CONTROL REQUIREMENTS

Sound control shall conform to the provisions in Section 7-1.01I, "Sound Control Requirements," of the State Standard Specifications, Section 66 of the City Code, and these Special Provisions.

The contractor shall ensure that the following measures are implemented during all phases of project construction:

1. Construction activities shall comply with the City of Sacramento Noise Ordinance, which limits such activity to the hours of 7:00 a.m. to 6:00 p.m. Monday through Saturday, the hours of 9:00 a.m. to 6:00 p.m. on Sunday, prohibits nighttime construction, and requires the use of exhaust and intake silencers for construction equipment engines. Exceptions to these regulations may be granted by the building inspector, consistent with the Noise Ordinance.
2. Construction equipment staging areas shall be located as far as feasible from residential areas while still serving the needs of construction contractors.
3. Activities that generate high noise levels, such as pile driving and the use of jackhammers, drills, and impact wrenches, shall be restricted to the hours of 7:00 a.m. to 6:00 p.m. Monday through Friday, unless it can be proved to the satisfaction of the City that the allowance of Saturday work on certain onsite parcels (i.e., those as far from noise-sensitive uses as possible) would not have an adverse noise impact.
4. During construction, should damage occur despite the above mitigation measures, construction operations shall be halted and the problem activity shall be identified. The Engineer shall establish vibration limits based on soil conditions and the types of buildings in the immediate area. The contractor shall monitor the buildings throughout the remaining construction period and follow all recommendations of the Construction Manager to repair any damage that has occurred to the pre-existing state, and to avoid further structural damage.

The noise level requirement shall apply to the equipment on the job or related to the job, including but not limited to trucks, transit mixers or transient equipment that may or may not be owned by the Contractor. The use of loud sound signals shall be avoided in favor of light warnings except those required by safety laws for the protection of personnel. As directed by the Owner, implement appropriate additional noise mitigation measures that may include changing the location of stationary construction equipment, shutting off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, or installing acoustic barriers around stationary construction noise sources.

Full compensation for conforming to the requirements of this section shall be considered as included in the prices paid for the various contract items of work involved and no additional compensation will be allowed therefore.

3.05 VIBRATION REQUIREMENTS

A copy of the Sacramento Railyards Indicator Pile Tests – Vibration Monitoring Results Report is available as an information document. It was determined during the indicator pile tests that pile driving at the locations during the test did not cause any further progression of building cracks, as documented by the crack gauges. The buildings were exposed to vibration amplitudes of no more than 0.08 inch per second. The following requirements will be imposed during the construction of the bridges:

- Target Threshold: 0.2 inch per second
- Not to Exceed Threshold: 0.25 inch per second

During production pile driving, the nearest piles could be as close as 100 feet from pile driving, and it is expected that the vibration generated during production pile driving will exceed the target threshold of 0.2 inch per second at this distance. However, the vibration at this distance is expected to be below 0.25 inch per second. The Engineer will have equipment such as a tri-axial vibration monitor to record these values of vibration as well as monitor cracks at nearby buildings. If the Contractor's operations cause these thresholds to be exceeded, then the Contractor may be required to:

- Use smaller hammer size or force to reduce vibration. The vibration is expected to be inversely proportional to the square root of the ratio of hammer force.
- Pre-drill or relief drill as needed to reduce ground vibration or reduce duration of high vibration
- Drive the pile until 0.2 inch per second is exceeded; let the pile rest for a minimum 2 hours then continue driving, stopping again if the threshold is reached, or until the required depth is achieved.
- If no other methods are identified to reduce the vibration further, allow the contractor to proceed with limited excursions over 0.2 inch per second, but do not allow the monitored vibration to exceed 0.25 inch per second at these buildings. If it can be demonstrated that frequent vibration of up to 0.25 inch per second still does not cause any measureable effects on the existing cracks, and no new cracks are identified, allow the contractor to drive piles as long as the vibration does not exceed 0.25 inch per second.

3.06 POST CERTIFICATION SOIL MANAGEMENT

Soils in the area where this Project is occurring have been remediated to construction workers standards. DTSC has certified completion of this work. In coordination with the City of Sacramento, IA Sacramento Holdings, L.L.C. will provide environmental management and oversight within the construction area. All management and oversight will be conducted consistent with the Soil and Groundwater Management Plan included in Appendix E and all applicable regulations.

IA Sacramento Holdings, L.L.C. will accept all excavated material not needed or suitable for re-use by the project, including soils, asphalt and concrete. IA Sacramento Holdings, L.L.C. will direct material stockpiles to designated stockpile storage areas, in accordance with the Soil and Groundwater Management Plan. IA Sacramento Holdings, L.L.C. will not accept debris and garbage. These items are to be handled per their respective bid item. All scrap metal, including above ground and buried rail, cables, and other similar metal features, shall be managed in accordance with project specifications, and shall be considered as salvage value, to be handled per their respective bid item.

Full compensation for conforming to the requirements of this section shall be considered as included in the prices paid for the various contract items of work involved and no additional compensation will be allowed therefore.

3.07 HEALTH AND SAFETY

The Contractor shall prepare a site-specific construction worker Health and Safety Plan containing construction worker health and safety requirements based on the levels of remediation

already performed in the project area. The site has been remediated to construction workers standards. Guidelines for Health and Safety Plan preparation are included in the Soil and Groundwater Management Plan

Full compensation for conforming to the requirements of this section shall be considered as included in the prices paid for the various contract items of work involved and no additional compensation will be allowed therefore.

3.08 DEWATERING

The groundwater in the project area is likely contaminated, including but not limited to the possible presence of Bunker C free product. The Contractor should schedule their construction activities so that significant groundwater extraction volumes are avoided. If needed, measures to control groundwater intrusion should be considered. The Contractor shall take all necessary precautions to prevent surface runoff from entering construction trenches within the project limits. In the event dewatering is required, the Contractor shall coordinate with the Owner to prepare a project-specific Dewatering Plan as required by the Soil and Ground Water Management Plan (Appendix E). Dewatering is prohibited unless an Owner approved plan has been prepared and the dewatering procedures are designed not to adversely impact existing conditions and groundwater treatment and monitoring systems in the area. The Dewatering Plan shall require that any extracted subsurface ground water or surface water coming in contact with impacted soils or ground water shall be sampled and tested in accordance with a frequency and sample procedure approved in the Plan. In the event testing indicates compliance with sanitary system discharge, Contractor shall seek approval and permit for such discharge. In the event testing indicates non-compliance with discharge parameters, groundwater shall either be stored onsite, or treated and discharged, or transported off-site, in accordance with all applicable regulations and a Plan approved by the Owner.. The Owner shall reimburse the Contractor the cost for onsite testing, storage, discharge, transport, and disposal of extracted groundwater. All efforts must be made to ensure that the least costly and applicable method is selected. The Owner shall reimburse the Contractor the cost of either treating the stored, extracted groundwater with a portable treatment system or transporting the extracted groundwater offsite to an appropriate facility as determined in the approved Dewatering Plan. The Contractor shall obtain all necessary testing, treatment, discharge or hauling permits and approvals. The Owner shall reimburse the Contractor for the cost of the permits. The Contractor shall ensure that appropriate monitoring and compliance procedures, including discharge sampling, are incorporated in any proposed plans.

The Contractor shall be responsible for the cost of onsite storage, treatment, discharge, transport, and offsite disposal of surface water, such as rain water, coming in contact with groundwater or impacted soils. Such water must be tested to evaluate its disposition status. At no time can groundwater or ponding water that has come in contact with site soils be extracted and reapplied or re-injected at the Project. This activity is prohibited without the expressed written approval by the Owner.

Full compensation for furnishing all labor, materials tools, equipment and incidentals and for all work involved in dewatering or water control, including but not limited to providing protective covering over open excavations when raining, security of systems used, scheduling, etc., and preparing the Dewatering Plan, shall be considered as included in the price paid for various contract items of work and no additional compensation will be allowed therefore.

All costs associated with the process of dewatering, testing, storage, treatment, discharge, disposal, and permitting must be itemized and provided to Owner immediately upon conducting such activities for submittal by Owner for reimbursement from the Responsible Party.

3.09 HANDLING AND REMOVAL OF HAZARDOUS OR CONTAMINATED MATERIALS

The Contractor shall coordinate with the Owner, the City of Sacramento, DTSC, and other involved agencies, as appropriate, to assure that project construction shall not interfere with any adjacent and/or on-site existing and/or planned remediation activities or unduly delay of existing and/or planned site remediation activities.

The project developers and their contractors shall comply with all applicable site controls established for site remediation activities through the approved Remedial Action Drawings (RAPS) and Remedial Design and Implementation Plan (RDIP) and shall ensure that project construction does not prevent such compliance.

In the event hazardous or contaminated materials, including groundwater, are encountered at the site for which separate handling or removal provisions have not been made in these Special Provisions, the Contractor shall stop work, contact the Owner and schedule their operations to work elsewhere on the site if possible. The Owner will be responsible for handling and removal of hazardous material or may request the Contractor be available, through force account utilizing the optional bid items, to provide services as needed for the completion of the work. A current California license for hazardous substance removal and remedial actions may be required to perform this work.

Hazardous or contaminated materials may only be removed and disposed of from the project site in accordance with the following provisions:

- A. All work is to be completed in accordance with the following regulations and requirements:
 - 1. Chapter 6.5, Division 20, California Health and Safety Code.
 - 2. Soil and Ground Water Management Plan
 - 3. California Administration Code, Title 22, relating to Handling, Storage, and Treatment of Hazardous Materials.
 - 4. City of Sacramento Building Code and the California State Codes, 2007 editions.
- B. Coordination shall be made with the County of Sacramento Environmental Management Department, Hazardous Materials Division, and the necessary applications shall be filed.
- C. All hazardous materials shall be disposed of at an approved disposal site and shall only be hauled by a current California registered hazardous waste hauler using correct manifesting procedures and vehicles displaying a current Certificate of Compliance. The Contractor shall identify by name and address the site where hazardous and toxic wastes shall be disposed. No payment for removal and disposal services shall be made without a valid certificate from the approved disposal site that the material was delivered.

None of the aforementioned provisions shall be construed to relieve the Contractor from the Contractor's responsibility for the health and safety of all persons (including employees) and from the protection of property during the performance of the work. This requirement shall be applied continuously and shall not be limited to normal working hours.

Full compensation for conforming to the requirements of this section shall be considered as included in the prices paid for the various contract items of work involved and no additional compensation will be allowed therefore.

3.10 PROTECTION OF TREES

During construction the Contractor shall follow the procedures necessary to protect existing trees that are not to be removed as part of this project. All work near existing trees shall be coordinated with the Engineer who will consult the City Arborist, Dan Pskowski of Park and Recreation Tree Services Section, phone number 808-6345. The Contractor shall comply with direction as given by the City Arborist and the following City requirements regarding tree protection:

- The Contractor shall hire an International Society of Arboriculture (ISA) – certified arborist to conduct any pruning or root inspections.
- No storage of materials or parking of vehicles may occur within the drip-lines of the trees.
- If, during construction grading, tree roots two inches (2") in diameter or greater are encountered, work shall stop immediately and the City Arborist shall be contacted for a root inspection, and the root shall not be cut unless the Arborist approves. Roots approved by the Arborist to be severed during the course of project construction shall be neatly trimmed. If a large number of roots require cutting, the tree will then have to be evaluated by the certified Arborist for possible removal.
- If construction activities will affect any of the limbs of the trees, a certified Arborist (certified by International Society of Arborists, Western Chapter) shall be consulted prior to the cutting or removal of any limb. Limbs approved by the Arborist to be severed during the course of project construction shall be neatly trimmed.
- The Contractor shall be responsible for damages to trees not scheduled for removal. Trees damaged by the Contractor during construction activities shall be assessed by the City Arborist using the International Society of Arborists (ISA) appraisal guide, "Guide to Plant Appraisal." The Contractor's responsibility for damaged trees will be determined by the City Arborist.

Pruning will be allowed by permit, when approved by the City Arborist for equipment clearance. Any and all pruning shall be done under the direction of the City Arborist.

3.11 PAYMENT

Full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all work involved in this section, "Mitigation Measures" shall be considered as included in the prices bid for various items of work.

* END OF SECTION *

SECTION 4.0 - ITEMS OF THE PROPOSAL

ITEM NO. 1 - MOBILIZATION

Mobilization shall conform to the provisions in Section 11, "MOBILIZATION," of the State Standard Specifications. Attention is directed to Section 15 "LIQUIDATED DAMAGES", of the Agreement Between the City of Sacramento and Contractor for 5th Street, 5th Street Viaduct and Railyards at Sacramento Railyards (PN: T15135800).

The bid amount for this item shall not exceed 2% of the bid amount excluding this item. If the amount shown on the bid form is greater than 2% of the bid amount excluding this item, the City will adjust the bid amount of this item to 2% of the total bid amount excluding this item.

Payment shall be at the lump sum bid price and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved in mobilizing the contractor for work as shown on the Drawings, as specified in these Special Provisions or as directed by the Construction Manager.

ITEM NO. 2 - FURNISH FIELD OFFICE

Furnish Field Office shall conform to the provisions in Section 2.06, "FURNISH FIELD OFFICE" of Section 2 – Technical Specifications in these Special Provisions. For bidding purposes, the Contractor shall furnish the field office from January 1, 2014 (completion of the 6th Street Project) to October 31, 2014 (completion of the 5th Street and Railyards Boulevard project) a duration of ten (10) months.

Payment shall be per month for each field office furnished and delivered to the site fully ready for service and shall be full compensation for furnishing, delivering, securing, connecting utilities and removal of the field office at the completion of the project and for furnishing all labor, materials, tools, equipment and incidentals as required to furnish the field office and its accompanying appurtenances as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 3 - IMPLEMENT STORM WATER POLLUTION PREVENTION PLAN

Implement Storm Water Pollution Prevention Plan shall conform to the provisions in Section 2.05, "IMPLEMENT STORM WATER POLLUTION PREVENTION PLAN" of the technical specifications and these special provisions.

Payment shall be at the lump sum bid price for implementing the Storm Water Pollution Prevention Plan and shall be full compensation for furnishing all labor, materials, tools, equipment, and incidentals as specified in the Standard Specifications and these special provisions.

During each estimate period the Contractor fails to conform to the provisions in Section 2.05, "IMPLEMENT STORM WATER POLLUTION PREVENTION PLAN" of Section 2 – Technical Specifications these Special Provisions, Owner will withhold 25 percent of the progress payment.

Withholds for failure to perform water pollution control work will be in addition to all other withholds provided for in the contract. The Owner will return performance-failure withholds in the progress payment following the correction of noncompliance.

Storm water sampling and analysis will be paid for as extra work as provided in Sections 8-8, "EXTRA WORK A PART OF THE CONTRACT," and 8-10, "PAYMENT BY COST AND PERCENTAGE," of the City Standard Specifications. No payment will be made for the preparation, collection, analysis, and reporting of storm water samples where appropriate water pollution control practices are not implemented before precipitation or if a failure of water pollution control practice is not corrected before precipitation.

Implementation of water pollution control practices in areas outside the limits of disturbance not specifically provided for in the SWPPP or in these Special Provisions will not be paid for.

Water pollution control practices for which there are separate contract items of work will be measured and paid for as those contract items of work.

DEMOLITION

ITEM NO. 4 - DEMOLITION (5TH STREET SOUTH)

Demolition of various site features shown on the Drawings for 5th Street South to be removed or which conflict with the proposed improvements under this contract shall conform to Section 13 "EXISTING FACILITES" of the City Standard Specifications and these special provisions.

The work shall include the removal of fire hydrant assemblies, street lights, signs and sign poles, parking meters, telephone/electrical poles, and guy wires and anchors, overhead telephone/electrical wires, asphalt and concrete paving, chain link fencing, and gates, bollards, underground water, sewer and storm drain facilities that are no longer in service as shown on the Drawings or visible from the surface and not shown to be saved and protected in place. The Contractor shall coordinate with franchise utility companies to ensure that all utilities shown to be removed are abandoned, inactive, or de-energized and safe for removal. The Contractor shall coordinate with franchise utility companies to ensure that necessary guy wires and anchors are installed to support remaining telephone/electrical poles following removal of overhead telephone/electrical wires.

Concrete removed with this item shall be crushed and incorporated into the embankment fills for the project. The cost to haul, sort, screen, crush, and reincorporate crushed concrete into the embankments shall be included in Item 15 – Crush Concrete.

Payment shall be at the lump sum bid price and shall be full compensation for furnishing all labor, materials, tools equipment and incidentals, and for doing all work involved as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 5 - DEMOLITION (5TH STREET NORTH)

Demolition of various site features shown on the Drawings for 5th Street North to be removed or which conflict with the proposed improvements under this contract shall conform to Section 13 "EXISTING FACILITES" of the City Standard Specifications and these special provisions.

The work shall include the removal of fire hydrant assemblies, street lights, signs and sign poles, parking meters, telephone/electrical poles, and guy wires and anchors, overhead telephone/electrical wires, asphalt and concrete paving, chain link fencing, and gates, bollards, underground water, sewer and storm drain facilities that are no longer in service as shown on the Drawings or visible from the surface and not shown to be saved and protected in place. The Contractor shall coordinate with franchise utility companies to ensure that all utilities shown to be removed are abandoned, inactive, or de-energized and safe for removal. The Contractor shall coordinate with franchise utility companies to ensure that necessary guy wires and anchors are installed to support remaining telephone/electrical poles following removal of overhead telephone/electrical wires.

Concrete removed with this item shall be crushed and incorporated into the embankment fills for the project. The cost to haul, sort, screen, crush, and reincorporate crushed concrete into the embankments shall be included in Item 15 – Crush Concrete.

This item shall also include relocating two existing steel storage cylinders (approximately 12' in diameter by approximately 15' tall to a location within the central shops area to be determined by the Construction Manager.

Payment shall be at the lump sum bid price and shall be full compensation for furnishing all labor, materials, tools equipment and incidentals, and for doing all work involved as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 6 - DEMOLITION (Railyards Boulevard)

Demolition of various site features shown on the Drawings for Railyards Boulevard to be removed or which conflict with the proposed improvements under this contract shall conform to Section 13 "EXISTING FACILITES" of the City Standard Specifications and these special provisions.

The work shall include the removal of fire hydrant assemblies, street lights, signs and sign poles, parking meters, telephone/electrical poles, and guy wires and anchors, overhead telephone/electrical wires, asphalt and concrete paving, chain link fencing, and gates, bollards, underground water, sewer and storm drain facilities that are no longer in service as shown on the Drawings or visible from the surface and not shown to be saved and protected in place. The Contractor shall coordinate with franchise utility companies to ensure that all utilities shown to be removed are abandoned, inactive, or de-energized and safe for removal. The Contractor shall coordinate with franchise utility companies to ensure that necessary guy wires and anchors are installed to support remaining telephone/electrical poles following removal of overhead telephone/electrical wires. Existing chain link fencing removed during demolition may be reused.

Concrete removed with this item shall be crushed and incorporated into the embankment fills for the project. The cost to haul, sort, screen, crush, and reincorporate crushed concrete into the embankments shall be included in Item 15 – Crush Concrete.

Payment shall be at the lump sum bid price and shall be full compensation for furnishing all labor, materials, tools equipment and incidentals, and for doing all work involved as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

EARTHWORK

ITEM NO. 7 - SURCHARGE FILL REMOVAL (SOUTH)

Surcharge fill removal as shown on the Drawings in conformance with Section 2.09, “EARTHWORK” of Section 2 - Technical Specifications and Section 3 of these Special Provisions. The surcharge volume consists of all material above elevation 30.0 within the surcharge pile areas shown on the 5th Street South Drawings south of the railroad tracks.

This material was placed for presettlement and is the property of IA Sacramento Holdings L.L.C. Under this item the Contractor shall remove the surcharge fill from its current location and either use it as imported road embankment for 5th Street South at a cost of \$2 per cubic yard payable to IA Sacramento Holdings L.L.C. or haul and stockpile the soil to the north side of the tracks per the Soil Stockpile plan in Appendix G. If used as imported road embankment, the \$2 per cubic yard material cost shall be included in the price per cubic yard to acquire, place, and compact import material under bid Item No. 10 – Roadway Embankment (Import Material).

This item includes all labor and materials necessary to remove the existing surcharge soil from its current location to temporary or permanent locations for use as embankment fill for 5th Street South or to stockpiles located on the north side of the tracks.

Payment shall be made per cubic yard of surcharge fill material removed and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved as shown on the Drawings and as required to and, as specified in these Special Provisions, or as directed by the Construction Manager. Pay quantity will be based on the differential volume calculated between the ground surface prior to the start of surcharge removal work and the ground surface after surcharge removal. Ground surveys will be performed by City survey crews.

ITEM NO. 8 - SURCHARGE FILL REMOVAL (NORTH)

Surcharge fill removal as shown on the Drawings in conformance with Section 2.09, “EARTHWORK” of Section 2 - Technical Specifications and Section 3 of these Special Provisions. The surcharge volume consists of all material above elevation 30.0 within the surcharge pile areas shown on the 5th Street North Drawings north of the proposed viaduct.

This material was placed for presettlement and is the property of IA Sacramento Holdings L.L.C. Under this item the Contractor shall remove the surcharge fill from its current location and stockpile the soil per the Soil Stockpile plan in Appendix G for future use at the discretion of IA Sacramento Holdings L.L.C..

Payment shall be made per cubic yard of surcharge fill material removed, hauled and stockpiled and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved as shown on the Drawings and as required to and, as specified in these Special Provisions, or as directed by the Construction Manager. Pay quantity will be based on the differential volume calculated between the ground surface prior to the start of surcharge removal work and the ground surface after surcharge removal. Ground surveys will be performed by City survey crews.

ITEM NO. 9 - OVEREXCAVATE AND RECOMPACT

This item includes all excavation necessary to obtain the required subgrade elevation or over excavation elevation of the soils as shown on the Drawings as well surface preparation, placement and recompaction of suitable excavated material to the finished grades shown on the Drawings. All soil excavation, surface preparation, backfill, and compaction shall conform to Section 2.09, "EARTHWORK", of Section 2 - Technical Specifications in these Special Provisions.

Vegetation and man-made buried objects encountered during over-excavation are to be removed and are included in the contract bid price per cubic yard for this item. Vegetation and man-made buried objects removed with overexcavation, except concrete, shall be disposed of onsite to a location on the Railyards property to be determined by the Construction Manager and is included in the contract bid price per cubic yard for this item. Concrete will be hauled and crushed under Item No. 15 – Crush Concrete. For bidding purposes, 5% of the material excavated is assumed to be vegetation and man-made buried objects, with the majority of this being concrete.

The Contractor may temporarily place over-excavated material within the limit of work or in a location approved by the Construction Manager if material is suitable for use and recompaction as described in "FILL QUALITY AND COMPACTION" of Section 2.09, "EARTHWORK" of Section 2 - Technical Specifications in these Special Provisions. All over-excavated material not suitable for use as fill and is not otherwise considered Suspect or Impacted Soil as defined in the Soil and Groundwater Management Plan shall be disposed of onsite at a location specified by the Construction Manager.

If it is determined by the Construction Manager in coordination with the Contractor that Suspect or Impacted Soils are encountered, the Contractor shall implement the procedures described in the SGMP per Section 1.36 of these Special Provisions. For bidding purposes, 5% of the material excavated is assumed to be either Suspect or Impacted soil which must be handled in conformance with the SGMP. The additional cost for excavation, hauling and stockpiling of Suspect or Impacted soil in conformance with the SGMP encountered in performing the work covered under this item shall be included in Bid Item No. 14 – Excavate, Haul, and Stockpile Suspect or Impacted Soil.

Payment shall be made per cubic yard of material excavated and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager. Pay quantity will be based on the differential volume calculated between the ground surface prior to the start of overexcavation work and the overexcavated

ground surface prior to placing the material for recompaction. Ground surveys will be performed by City survey crews.

ITEM NO. 10 - ROADWAY EMBANKMENT (IMPORT MATERIAL)

Acquisition, transport, surface preparation, placement, and compaction of roadway embankment required to obtain the finished grades after placement and compaction of soil excavated under Item No. 9 – Overexcavate and Recompact and concrete crushed under Item No. 15 as shown on the Drawings. Unless authorized in writing by the Construction Manager, the Contractor shall not commence soil import operations until material generated from bid Item No. 9 and bid Item No. 15 have been exhausted. The Contractor shall take into account anticipated material to be generated from subsequent activities such as utility trenching and structure excavation when estimating the quantity of material to import. The quantity of excess material generated and removed from the street right of way from subsequent activities exceeding 5% of the imported volume of fill will be deducted from the pay quantity for this item.

This item shall include the implementation of a settlement monitoring program, recording and delivery of information to the Construction Manager, shall conform to Section 2.09, “EARTHWORK” of Section 2 - Technical Specifications in these Special Provisions.

The Contractor shall provide written documentation that imported material from outside the Railyards meets the requirements for Imported Borrow Fill in Section 2.09, “EARTHWORK” of Section 2 - Technical Specifications in these Special Provisions.

Payment shall be made per cubic yard of fill material acquired, transported, placed and compacted in place and shall be full compensation for furnishing all labor, materials, tools, equipment, testing, and incidentals, and for doing all work involved as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager. Pay quantity will be based on the differential volume calculated between the ground surface prior to the start of soil import and the ground surface after placement and compaction of imported soil. Ground surveys will be performed by City survey crews.

ITEM NO. 11 - STRUCTURE EXCAVATION (RETAINING WALLS 3 AND 4)

Structure Excavation (Retaining Walls 3 and 4) shall conform to the provisions in Section 2.09, “Earthwork” of the technical specifications and these special provisions and as shown on the Drawings.

Payment of Structure Excavation (Retaining Walls 3 and 4) shall conform to the requirements specified in Section 19-3, “Structure Excavation and backfill,” of the State Standard Specifications and these special provisions. The unit bid price paid per cubic yard for Structure Excavation (Retaining Walls 3 and 4) shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in Structure Excavation (Retaining Walls 3 and 4), as shown on the plans, as specified in the State Standard Specifications and these special provisions, and as directed by the Construction Manager.

ITEM NO. 12 - STRUCTURE BACKFILL (RETAINING WALLS 3 AND 4)

Structure Backfill (Retaining Walls 3 and 4) shall conform to the provisions in Section 2.09, "Earthwork" of the technical specifications and these special provisions and as shown on the Drawings.

Payment of Structure Backfill (Retaining Walls 3 and 4) shall conform to the requirements specified in Section 19-3, "Structure Excavation and Backfill," of the State Standard Specifications and these special provisions. The unit bid price paid per cubic yard for Structure Backfill (Bridge) shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in Structure Backfill (Bridge), as shown on the plans, as specified in the State Standard Specifications and these special provisions, and as directed by the Construction Manager.

ITEM NO. 13 - NORTH RETENTION POND GRADING

This item includes all excavation, surface preparation, placement, and compaction necessary to construct the North Retention Pond as shown on the Drawings. The work shall be in conformance with Section 2.09, "EARTHWORK" of Section 2 - Technical Specifications in these Special Provisions.

Any excess material remaining after completion of the North Retention Pond Grading shall remain the property of the property owner IA Sacramento Holdings L.L.C. and shall be placed in a stockpile per the Soil Stockpile plan in Appendix G for future use at the discretion of IA Sacramento Holdings L.L.C.. Hauling and stockpiling of excess material shall be included in the contract bid price per cubic yard for this item.

Vegetation and man-made buried objects encountered during over-excavation are to be removed and are included in the contract bid price per cubic yard for this item. Vegetation and man-made buried objects removed with overexcavation, except concrete, shall be disposed of onsite to a location on the Railyards property to be determined by the Construction Manager and is included in the contract bid price per cubic yard for this item. Concrete will be hauled and crushed under Item No. 15 – Crush Concrete.

All excavated material not suitable for use as fill and is not otherwise considered Suspect or Impacted Soil as defined in the Soil and Groundwater Management Plan shall be disposed of onsite at a location specified by the Construction Manager.

If it is determined by the Construction Manager in coordination with the Contractor that Suspect or Impacted Soils are encountered, the Contractor shall implement the procedures described in the SGMP per Section 1.36 of these Special Provisions. For bidding purposes, 5% of the material excavated is assumed to be either Suspect or Impacted soil which must be handled in conformance with the SGMP. The additional cost for excavation, hauling and stockpiling of Suspect or Impacted soil in conformance with the SGMP encountered in performing the work covered under this item shall be included in Bid Item No. 14 – Excavate, Haul, and Stockpile Suspect or Impacted Soil.

Payment shall be made per cubic yard of material excavated for the North Retention Pond Grading and shall be full compensation for furnishing all labor, materials, tools, equipment and

incidentals, and for doing all work involved as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager. Pay quantity will be based on the differential volume calculated between the ground surface prior to the start of pond grading and the ground surface after completion of pond grading. Ground surveys will be performed by City survey crews.

ITEM NO. 14 - EXCAVATE, HAUL, AND STOCKPILE SUSPECT OR IMPACTED SOIL

This item includes the additional cost to excavate, haul, and stockpile suspect or impacted soil, in conformance with the SGMP, encountered performing work included in Item No. 9 – Overexcavate and Recompact and Item No. 13 – North Retention Pond Grading. For bidding purposes, 5% of the material excavated in Item No. 9 and Item No. 13 is assumed to be either Suspect or Impacted soil.

Payment shall be made per cubic yard of suspect or impacted soil excavated, hauled, and stockpiled and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 15 - CONCRETE CRUSHING

This item includes the cost to haul, sort, screen, crush, and reincorporate crushed concrete into the embankments in conformance with Section 2.09, "EARTHWORK" of Section 2 - Technical Specifications in these Special Provisions. The Contractor shall anticipate that some of the concrete will be reinforced (rebar, rail, etc.). The concrete shall be crushed to a size of 3-inches or less. After crushing the crushed concrete will be tested by the City in conformance with the SGMP. Crushed concrete determined to be unsuitable for use as fill shall be stockpiled on the Railyards property at a location to be determined by the Construction Manager. The cost for stockpiling unsuitable crushed concrete shall be included in the contract bid price per cubic yard for this item.

For bidding purposes, 5% of the material excavated in Item No. 9 – Overexcavate and Recompact and Item No. 13 – North Retention Pond Grading is assumed to be concrete. This item also includes crushing concrete (reinforced and unreinforced) generated with previous work at the Railyards site. The quantity of previously generated concrete is estimated to be 3,000 cubic yards.

Payment shall be made per cubic yard of concrete crushed, measured by City surveyors at completion of crushing, and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

RETAINING WALLS

ITEM NO. 16 - CELLULAR CONCRETE BACKFILL (MIX NO. 1)

Cellular Concrete Backfill (Mix No. 1) shall conform to the provisions in Section 2.14 "LIGHTWEIGHT EMBANKMENT MATERIAL (CELLULAR CONCRETE BACKFILL)," of the technical specifications and these special provisions.

Payment shall be made based on the unit price per cubic yard Cellular Concrete Backfill (Mix No. 1) which shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in furnishing and placing the Cellular Concrete Backfill (Mix No. 1), complete in place, as shown on the Drawings, as specified in the State Standard Specifications and these special provisions, or as directed by the Construction Manager.

ITEM NO. 17 - CELLULAR CONCRETE BACKFILL (MIX NO. 2)

Cellular Concrete Backfill (Mix No. 2) shall conform to the provisions in Section 2.14 "LIGHTWEIGHT EMBANKMENT MATERIAL (CELLULAR CONCRETE BACKFILL)," of the technical specifications and these special provisions.

Payment shall be made based on the unit price per cubic yard Cellular Concrete Backfill (Mix No. 2) which shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in furnishing and placing the Cellular Concrete Backfill (Mix No. 2), complete in place, as shown on the Drawings, as specified in the State Standard Specifications and these special provisions, or as directed by the Construction Manager.

ITEM NO. 18 - EARTH RETAINING STRUCTURE, WALL 1

Earth Retaining Structure, Wall 1 shall conform to the provisions in Section 2.15, "EARTH RETAINING STRUCTURES," of the technical specifications and these special provisions.

Earth Retaining Structure, Wall 1 will be measured and paid for by the square foot. The square foot area for payment will be based on the length and vertical height of each section of earth retaining structure shown on the Drawings. The vertical height of each section will be taken as the difference in elevation on the outer face from the bottom of the lowermost face panel to the top of wall profile.

The contract price paid per square foot for Earth Retaining Structure, Wall 1 shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing the earth retaining structure and inspection elements, including leveling pad, bearing pads, neoprene plugs, drainage systems, treated permeable base, furnishing and testing sample mechanical connectors, waterproofing (including steel bolts and plates), and geomembrane (gasoline resistant), complete in place, as shown on the Drawings, as specified in the Standard Specifications and these special provisions, and as directed by the Construction Manager.

Full compensation for revisions to the barrier support, drainage system, or other facilities made necessary by the use of an alternative earth retaining system shall be considered as included in the contract price paid per square foot for earth retaining structure, and no separate payment will be made therefor.

ITEM NO. 19 - EARTH RETAINING STRUCTURE, WALL 2

See Item No. 18

ITEM NO. 20 - STRUCTURAL CONCRETE RETAINING WALL

Structural Concrete, Retaining Wall shall conform to the provisions in Section 2.22, "CONCRETE STRUCTURES," of the technical specifications and these special provisions.

Measurement and Payment for Structural Concrete, Retaining Wall shall conform to the requirements specified in Section 51-1.22, "Measurement" and Section 51-1.23, "Payment," of the State Standard Specifications and these special provisions. The unit price bid per cubic yard for Structural Concrete, Retaining Wall and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in Structural Concrete, Retaining Wall, complete in place, as shown on the plans, as specified in these Special Provisions and State Standard Specifications, and as directed by the Construction Manager.

ITEM NO. 21 - BAR REINFORCING STEEL (RETAINING WALL)

Bar Reinforcing Steel (Retaining Wall) shall conform to the provisions in Section 2.27, "REINFORCEMENT" of the technical specifications and these special provisions.

Measurement and payment for Bar Reinforcing Steel (Retaining Wall) shall conform to the provisions in Section 52-1.10, "Measurement," and Section 52-1.11, "Payment," of the State Standard Specifications and these special provisions. The unit price bid per pound for Bar Reinforcing Steel (Retaining Wall) and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in Bar Reinforcing Steel (Retaining Wall), including service splices, complete in place, as shown on the plans, as specified in these Special Provisions and State Standard Specifications, and as directed by the Construction Manager.

ITEM NO. 22 - STRUCTURAL CONCRETE, BARRIER SLAB

Structural Concrete, Barrier Slab shall conform to the provisions in Section 2.22, "CONCRETE STRUCTURES," of the technical specifications and these special provisions.

Full compensation for furnishing and installing bar reinforcing steel for concrete barrier slab as shown on the Drawings shall be considered as included in the contract price paid per cubic yard for Structural Concrete, Barrier Slab and no additional compensation will be allowed therefore.

Measurement and Payment for Structural Concrete, Barrier Slab shall conform to the requirements specified for Structural Concrete, Approach Slab in Section 51-1.22, "Measurement," Section 5-1.23, "Payment," and Section 52-1.11, "Payment," of the State Standard Specifications and these special provisions. Payment shall be based on the unit price bid per cubic yard for Structural Concrete, Barrier Slab and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in Structural Concrete, Barrier Slab, complete in place, including bar reinforcing steel, as shown on the Drawings, as specified in these Special Provisions and State Standard Specifications, or as directed by the Construction Manager.

ITEM NO. 23 - MINOR CONCRETE, SIDEWALK

Minor Concrete, Sidewalk shall conform to the provisions in Section 2.22, "CONCRETE STRUCTURES," of the technical specifications and these special provisions. Minor Concrete

Sidewalk includes all sidewalk supported by an Earth Retaining Structure or Structural Concrete Retaining Wall including reinforcing steel within the sidewalk.

Measurement and Payment for Minor Concrete, Sidewalk shall conform to the requirements specified for minor concrete in Section 51-1.22, "Measurement," Section 5-1.23, "Payment," and Section 52-1.11, "Payment," of the State Standard Specifications and these special provisions. Payment shall be based on the unit price bid per cubic yard for Minor Concrete, Sidewalk and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in Minor Concrete, Sidewalk, including furnishing an placement of bar reinforcing steel and finishing and coloring of sidewalk, complete in place, as shown on the Drawings, as specified in these Special Provisions and State Standard Specifications, or as directed by the Construction Manager.

ITEM NO. 24 - ARCHITECTURAL TREATMENT (RETAINING WALL)

Architectural Treatment (Retaining Wall) shall conform to the provisions in Section 2.24, "ARCHITECTURAL TREATMENT" of the technical specifications and these special provisions.

Payment for Architectural Treatment (Retaining Wall) shall be based on the unit price paid per square foot for Architectural Treatment and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in Architectural Treatment (Retaining Wall), complete in place, as shown on the Drawings, as specified in these Special Provisions and State Standard Specifications, or as directed by the Construction Manager.

ITEM NO. 25 - PREPARE AND PAINT CONCRETE (RETAINING WALL)

Prepare And Paint Concrete shall conform to the provisions in Section 2.29 "PREPARE AND PAINT CONCRETE SURFACES" of the technical specifications and these special provisions.

Concrete surfaces to be prepared and painted will be measured by the square foot. Measurement will be determined along the surface of the actual areas painted.

Payment shall be based at the unit price paid per square foot for Prepare And Paint Concrete shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in preparing of and applying , complete in place, anti-graffiti coating, construction of test panels and repairing damaged areas, as shown on the plans, as specified in the State Standard Specifications and these special provisions, and as directed by the Construction Manager.

ITEM NO. 26 - CALIFORNIA ST-40 BRIDGE RAIL (MOD), RETAINING WALL

California ST-40 Bridge Rail (MOD), Retaining Wall shall conform to the provision in Section 2.33, "Metal Bridge Railing" of the technical specifications and these special provisions.

Full compensation for furnishing and installing galvanized cable and cabling accessories as shown on the Drawings shall be considered as included in the contract price paid per linear foot for California ST-40 Bridge Rail (MOD), Retaining Wall and no additional compensation will be allowed therefore.

Measurement and Payment for California ST-40 Bridge Rail (MOD), Retaining Wall shall conform to the provision in Section 83-2.03, "Measurement," and Section 83-2.04, "Payment," of the State Standard Specifications and these special provisions. Payment shall be based on the unit price bid per linear foot for California ST-40 Bridge Rail (MOD), Retaining Wall and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in California ST-40 Bridge Rail (MOD), Retaining Wall, complete in place, including galvanized cable and cabling accessories, as shown on the Drawings, as specified in these Special Provisions and State Standard Specifications, or as directed by the Construction Manager.

ITEM NO. 27 - STRUCTURAL CONCRETE, APPROACH SLAB TYPE N(30S)

Architectural Treatment shall conform to the provisions in Section 2.22, "Structure Approach Slabs Type N(30S)" of the technical specifications and these special provisions.

Structural concrete, approach slab Type N(30S) will be measured and paid for in conformance with the provisions in Section 51-1.22, "Measurement," and Section 51-1.23, "Payment," of the Standard Specifications and these special provisions.

Full compensation for the structure approach drainage system including geocomposite drain, plastic pipe, and drainage pads, treated permeable base, and filter fabric, shall be considered as included in the contract price paid per cubic yard for structural concrete, approach slab of the type shown in the Engineer's Estimate, and no additional compensation will be allowed therefor.

ITEM NO. 28 - JOINT SEAL TYPE B(MR=2")

Joint Seal Type B (MR=2") shall conform to the provisions in State Standard Specifications 51-1.12F "Sealed Joints".

Joint Seal Type B (MR=2") will be measured by the linear foot from end to end along the centerline of the completed seal including return sections at curb faces or as shown on the plans. Where individual seals are overlapped or are superimposed, each seal will be measured separately.

The contract prices paid per linear foot for joint seals of the types and Movement Ratings listed in the contract items shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in the constructing the joint seals, including protecting, repairing, cleaning and saw cutting joints complete in place, as shown the plans, as specified in the State Standard Specifications, in these Special Provisions, and as directed by the Construction Manager.

ITEM NO. 29 - JOINT SEAL TYPE A (MR=1")

Joint Seal Type A (MR=1") shall conform to the provisions in State Standard Specifications 51-1.12F "Sealed Joints".

Joint Seal Type A (MR=1") will be measured by the linear foot from end to end along the centerline of the completed seal including return sections at curb faces or as shown on the plans. Where individual seals are overlapped or are superimposed, each seal will be measured separately.

The contract prices paid per linear foot for joint seals of the types and Movement Ratings listed in the contract items shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in the constructing the joint seals, including protecting, repairing, cleaning and saw cutting joints complete in place, as shown the plans, as specified in the State Standard Specifications, in these Special Provisions, and as directed by the Construction Manager.

ITEM NO. 30 - CONCRETE BARRIER (TYPE 26 MODIFIED)

Concrete Barrier (Type 26 Modified) shall conform to the provisions in Section 2.32 "Concrete Barrier" of the technical specifications and these special provisions

Full compensation for grooves and broom finish on the sidewalk shall be considered as included in the contract price paid per linear foot for Concrete Barrier (Type 26 Modified) and no separate payment will be made therefor.

Concrete Barrier (Type 26 Modified) will be measured and paid for by the linear foot as specified for in Section 83-2.03, "Measurement," and Section 83-2.04, "Payment," of the State Standard Specifications and these special provisions. Payment shall be based at the unit price bid per linear foot for Concrete Barrier (Type 26 Modified) and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in Concrete Barrier (Type 26 Modified), complete in place, including the grooves and broom finish and edging on the sidewalk and creating voids and additional bar reinforcing steel, as shown on the plans, as specified in these Special Provisions and State Standard Specifications, and as directed by the Construction Manager.

ITEM NO. 31 - CHAIN LINK RAILING

Chain Link Railing shall conform to the provisions in Section 2.31, "Chain Link Railing" of the technical specifications and these special provisions.

Chain Link Railing will be measured and paid for by the linear foot as specified for in Section 83-1.03, "Measurement," and Section 83-1.04, "Payment," of the State Standard Specifications and these special provisions. Payment shall be based at the unit price bid per linear foot for Chain Link Railing and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in Chain Link Railing, complete in place, including painting, as shown on the plans, as specified in these Special Provisions and State Standard Specifications, and as directed by the Construction Manager.

ITEM NO. 32 - ARCHITECTURAL TREATMENT (BARRIER)

Architectural Treatment shall conform to the provisions in Section 2.24, "Architectural Treatment" of the technical specifications and these special provisions.

Full compensation for creating gaps within the Architectural Treatment, as shown on the plans, shall be considered as included in the contract unit price paid per for Architectural Treatment and no additional compensation will be allowed therefor.

Payment for Architectural Treatment shall be based on the unit price paid per square foot for Architectural Treatment shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in Architectural Treatment,

complete in place, as shown on the plans, as specified in the State Standard Specifications and these special provisions, and as directed by the Construction Manager.

ITEM NO. 33 - PREPARE AND PAINT CONCRETE (BARRIER)

Prepare And Paint Concrete shall conform to the provisions in Section 2.29, "Prepare and Paint Concrete Surfaces" of the technical specifications and these special provisions.

Concrete surfaces to be prepared and painted will be measured by the square foot. Measurement will be determined along the surface of the actual areas painted.

Payment shall be based at the unit price paid per square foot for Prepare And Paint Concrete shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in preparing of and applying , complete in place, anti-graffiti coating, construction of test panels and repairing damaged areas, as shown on the plans, as specified in the State Standard Specifications and these special provisions, and as directed by the Construction Manager.

ITEM NO. 34 - ARCHITECTURAL TREATMENT (RETAINING WALL 3 AND 4)

Architectural Treatment (Retaining Wall 3 and 4) shall conform to the provisions in Section 2.24, "ARCHITECTURAL TREATMENT" of the technical specifications and these special provisions.

Payment for Architectural Treatment (Retaining Wall 3 and 4) shall be based on the unit price paid per square foot for Architectural Treatment and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in Architectural Treatment (Retaining Wall 3 and 4), complete in place, as shown on the Drawings, as specified in these Special Provisions and State Standard Specifications, or as directed by the Construction Manager.

SANITARY SEWER

ITEM NO. 35 - 8" PVC SDR-35 SANITARY SEWER PIPE

Item shall conform to the provisions of Section 10, "CONSTRUCTION MATERIALS" and Section 26 "LAYING SEWER AND DRAIN PIPE" of the City Standard Specifications. This item shall include trenching, pipe bedding, and installation of PVC sanitary sewer pipe, connection of pipe to proposed or existing structures, trench backfill and compaction.

Payment shall be made per lineal foot of sanitary sewer pipe installed and ready for service and shall be full compensation for furnishing all labor, materials, tools, and equipment and incidentals as required to furnish and install Sanitary Sewer pipe and appurtenances as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 36 - 30" PVC PS46 SANITARY SEWER PIPE

See Item No. 35

ITEM NO. 37 - 36" PVC PS46 SANITARY SEWER PIPE

See Item No. 35

ITEM NO. 38 - 48" DIAMETER STANDARD MANHOLE 3A (SEWER)

Item shall conform to the provisions in Section 25 "SANITARY SEWER AND STORM DRAIN MANHOLES" of the City Standard Specifications and City of Sacramento Standard Drawing S-80. This item shall include excavation for structure, installation of manhole, backfill and compaction.

Payment shall be made for each 48" Diameter Standard Manhole installed and ready for service and shall be full compensation for furnishing all labor, materials, tools, and equipment and incidentals as required to furnish and install sanitary sewer manholes and appurtenances as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 39 - 60" DIAMETER STANDARD MANHOLE 4 (SEWER)

Item shall conform to the provisions in Section 25 "SANITARY SEWER AND STORM DRAIN MANHOLES" of the City Standard Specifications and City of Sacramento Standard Drawing S-110. This item shall include excavation for structure, installation of manhole, backfill and compaction.

Payment shall be made for each 60" Diameter Standard Manhole installed and ready for service and shall be full compensation for furnishing all labor, materials, tools, and equipment and incidentals as required to furnish and install sanitary sewer manholes and appurtenances as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 40 - OUTSIDE DROP CONNECTION

Item shall conform to the provisions in Section 25 "SANITARY SEWER AND STORM DRAIN MANHOLES" of the City Standard Specifications and City of Sacramento Standard Drawing S-130.

Payment shall be made for each Outside Drop Connection installed and ready for service and shall be full compensation for furnishing all labor, materials, tools, and equipment and incidentals as required to furnish and install sanitary sewer manholes and appurtenances as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 41 - 18" STEEL CASING PIPE

The contractor shall furnish and install an 18-inch steel pipe casing in conformance with the Drawings, Section 2 of the Technical Specifications, and these special provisions. This item shall include all preconstruction utility locating, excavation and backfill for bore and receiving pits, trenchless installation of the 18" Steel Pipe Casing, pipe spacers, coordination with Regional Transit, and traffic control related to this item.

Payment shall be at a lump sum price bid and shall include all labor, materials, tools, equipment and incidentals for doing all work as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 42 - FLUSHER BRANCH

Item shall conform to the provisions in Section 25 "SANITARY SEWER AND STORM DRAIN MANHOLES" of the City Standard Specifications and City of Sacramento Standard Drawing S-240.

Payment shall be made for each Flusher Branch installed and ready for service and shall be full compensation for furnishing all labor, materials, tools, and equipment and incidentals as required to furnish and install sanitary sewer manholes and appurtenances as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

STORM DRAINAGE

ITEM NO. 43 - 12" PVC PS46 STORM DRAIN PIPE

This item shall conform to the provisions of Section 10 "CONSTRUCTION MATERIALS", and Section 26 "LAYING SEWER AND DRAIN PIPE" of the City Standard Specifications. This item shall include trenching, pipe bedding, and installation of PVC, RCP and RGRCP storm drain pipe, connection of pipe to proposed or existing structures, trench backfill and compaction.

Payment shall be made per lineal foot of storm drain pipe installed and ready for service and shall be full compensation for furnishing all labor, materials, tools, and equipment and incidentals as required to furnish and install storm drain pipe and appurtenances as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 44 - 18" PVC PS46 STORM DRAIN PIPE

See Item No. 43

ITEM NO. 45 - 24" PVC PS46 STORM DRAIN PIPE

See Item No. 43

ITEM NO. 46 - 30" PVC PS46 STORM DRAIN PIPE

See Item No. 43

ITEM NO. 47 - 36" PVC PS46 STORM DRAIN PIPE

See Item No. 43

ITEM NO. 48 - 42" RGRCP STORM DRAIN PIPE

See Item No. 43

ITEM NO. 49 - 48" RGRCP STORM DRAIN PIPE

See Item No. 43

ITEM NO. 50 - 54" RGRCP STORM DRAIN PIPE

See Item No. 43

ITEM NO. 51 - 60" RGRCP STORM DRAIN PIPE

See Item No. 43

ITEM NO. 52 - 66" RGRCP STORM DRAIN PIPE

See Item No. 43

ITEM NO. 53 - 72" RGRCP STORM DRAIN PIPE

See Item No. 43

ITEM NO. 54 - 8" PVC SDR 35 STORM DRAIN PIPE

See Item No. 43

ITEM NO. 55 - 6" PVC SDR 35 STORM DRAIN PIPE

See Item No. 43

ITEM NO. 56 - 8" STORM DRAIN CLEANOUT

Item shall conform to the drawings and the provisions of the City Standard Specifications and City of Sacramento Standard Drawing S-260, except SDR 35 PVC pipe and fittings shall be used in place ABS pipe.

Payment shall be made for each 8" Storm Drain Cleanout installed and ready for service and shall be full compensation for furnishing all labor, materials, tools, and equipment and incidentals as required to furnish and install 8" Storm Drain Cleanouts and appurtenances as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 57 - 48" DIAMETER STANDARD MANHOLE No. 3A (STORM DRAIN)

Item shall conform to the provisions in Section 25 "SANITARY SEWER AND STORM DRAIN MANHOLES" of the City Standard Specifications and City of Sacramento Standard Drawing S-80. This item shall include excavation for structure, installation of manhole, backfill and compaction.

Payment shall be made for each 48" Diameter Standard Manhole 3A installed and ready for service and shall be full compensation for furnishing all labor, materials, tools, and equipment and incidentals as required to furnish and install sanitary sewer manholes and appurtenances as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 58 - 48" DIAMETER STANDARD MANHOLE No. 3 (STORM DRAIN)

Item shall conform to the provisions in Section 25 "SANITARY SEWER AND STORM DRAIN MANHOLES" of the City Standard Specifications and City of Sacramento Standard Drawing S-70. This item shall include excavation for structure, installation of manhole, backfill and compaction.

Payment shall be made for each 48" Diameter Standard Manhole 3 installed and ready for service and shall be full compensation for furnishing all labor, materials, tools, and equipment and incidentals as required to furnish and install sanitary sewer manholes and appurtenances as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 59 - 48" DIAMETER STANDARD MANHOLE No. 3 WITH SLOTTED COVER (STORM DRAIN)

Item shall conform to the provisions in Section 25 "SANITARY SEWER AND STORM DRAIN MANHOLES" of the City Standard Specifications and City of Sacramento Standard Drawing S-70. The storm drain manhole shall be installed with a slotted manhole cover in conformance with City of Sacramento Standard Drawing S-160. This item shall include excavation for structure, installation of manhole, backfill and compaction.

Payment shall be made for each 48" Diameter Standard Manhole No. 3 with slotted cover installed and ready for service and shall be full compensation for furnishing all labor, materials, tools, and equipment and incidentals as required to furnish and install sanitary sewer manholes and appurtenances as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 60 - 60" DIAMETER STANDARD MANHOLE No. 4 (STORM DRAIN)

Item shall conform to the provisions in Section 25 "SANITARY SEWER AND STORM DRAIN MANHOLES" of the City Standard Specifications and City of Sacramento Standard Drawing S-110. This item shall include excavation for structure, installation of manhole, backfill and compaction.

Payment shall be made for each 60" Diameter Standard Manhole No. 4 installed and ready for service and shall be full compensation for furnishing all labor, materials, tools, and equipment and incidentals as required to furnish and install sanitary sewer manholes and appurtenances as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 61 - 60" DIAMETER STANDARD SADDLE TYPE MANHOLE (STORM DRAIN)

Item shall conform to the provisions in Section 25 "SANITARY SEWER AND STORM DRAIN MANHOLES" of the City Standard Specifications and City of Sacramento Standard Drawing S-120. This item shall include excavation for structure, installation of manhole, backfill and compaction.

Payment shall be made for each 60" Diameter Standard Saddle Type Manhole installed and ready for service and shall be full compensation for furnishing all labor, materials, tools, and equipment and incidentals as required to furnish and install sanitary sewer manholes and appurtenances as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 62 - 96" DIAMETER MANHOLE (STORM DRAIN)

Item shall conform to the drawings and the provisions in Section 25 "SANITARY SEWER AND STORM DRAIN MANHOLES" of the City Standard Specifications. This item shall include excavation for structure, installation of manhole, backfill and compaction.

Payment shall be made for each 96" Diameter Manhole installed and ready for service and shall be full compensation for furnishing all labor, materials, tools, and equipment and incidentals as required to furnish and install sanitary sewer manholes and appurtenances as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 63 - 6.5' x 7' CONCRETE JUNCTION BOX

Item shall conform to the provisions in Section 25 "SANITARY SEWER AND STORM DRAIN MANHOLES" of the City Standard Specifications and City of Sacramento Standard Drawing S-310. This item shall include excavation for structure, installation of manhole, backfill and compaction.

Payment shall be made for each 6.5' x 7' Concrete Junction Box installed and ready for service and shall be full compensation for furnishing all labor, materials, tools, and equipment and incidentals as required to furnish and install sanitary sewer manholes and appurtenances as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 64 - DROP INLET WITH GRATED TOP

Item shall conform to the drawings and the provisions in Section 25 "SANITARY SEWER AND STORM DRAIN MANHOLES" of the City Standard Specifications and City of Sacramento Standard Drawing S-30. Except the box shall not have side openings. This item shall include excavation for structure, installation of manhole, backfill and compaction.

Payment shall be made for each Drop Inlet with Grated Top installed and ready for service and shall be full compensation for furnishing all labor, materials, tools, and equipment and incidentals as required to furnish and install sanitary sewer manholes and appurtenances as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 65 - STORMWATER QUALITY INLET (6'x8')

This item shall conform to the drawings and Technical Specifications, Section 2.16 "STORMWATER QUALITY INLET," and these special provisions. This item includes furnishing and installing all filter and planter media as specified by the manufacturer.

Payment shall be made on a unit price basis and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 66 - STORMWATER QUALITY INLET (6'x10')

See Item No. 65

ITEM NO. 67 - STORMWATER QUALITY INLET (6'x12')

See Item No. 65

ITEM NO. 68 - STORMWATER QUALITY INLET (6'x15')

See Item No. 65

ITEM NO. 69 - TYPE "B" DRAIN INLET

Item shall conform to the drawings and the provisions in Section 25 "SANITARY SEWER AND STORM DRAIN MANHOLES" of the City Standard Specifications and City of Sacramento Standard Drawing S-10.

Payment shall be made for each Type "B" Drain Inlet installed and ready for service and shall be full compensation for furnishing all labor, materials, tools, and equipment and incidentals as required to furnish and install sanitary sewer manholes and appurtenances as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 70 - STORMWATER QUALITY VAULT (4 CARTRIDGE)

This item shall conform to the Technical Specifications, Section 2.17 "STORMWATER QUALITY VAULT," and these special provisions.

Payment shall be made on a unit price basis and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 71 - STORMWATER QUALITY VAULT (8'X6')

This item shall conform to the Technical Specifications, Section 2.17 "STORMWATER QUALITY VAULT," and these special provisions.

Payment shall be made on a unit price basis and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 72 - 6" PERIMETER WALL (STORMWATER QUALITY PLANTER)

This item shall include all work necessary to construct the 6" concrete wall around the perimeter of the stormwater water quality planters as shown on the drawings. All materials and work shall be in conformance with Section 20 "Concrete in Structures" of the City of Sacramento Standard Specifications. The item also includes required excavation within the interior of the stormwater planter as shown on the drawings.

The unit bid price paid per cubic yard for 6" Perimeter Wall (Stormwater Quality Planter) shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in constructing the 6" Perimeter Wall (Stormwater Quality Planter), as shown on the plans, and as specified in these special provisions, and as directed by the Construction Manager.

ITEM NO. 73 - 12" SEAT WALL (STORMWATER QUALITY PLANTER)

This item shall include all work necessary to construct the 12" concrete seat wall at the back of the stormwater water quality planters as shown on the drawings. All materials and work shall be in conformance with Section 20 "Concrete in Structures" of the City of Sacramento Standard Specifications. The item also includes required excavation and backfill required to construct the seat wall.

The unit bid price paid per cubic yard for 12" Seat Wall (Stormwater Quality Planter) shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in constructing the 12" Seat Wall (Stormwater Quality Planter), as shown on the plans, and as specified in these special provisions, and as directed by the Construction Manager.

ITEM NO. 74 - FILTER FABRIC (STORMWATER QUALITY PLANTER)

Filter Fabric shall conform to the provisions of the State Standard Specifications and shall be placed in accordance with the drawings. The pay quantity is based on the interior dimensions of the planter. Necessary overlap at seams and walls shall be included in the unit price bid.

The unit bid price paid per square yard for Filter Fabric (Stormwater Quality Planter) shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in Filter Fabric (Stormwater Quality Planter), as shown on the plans, as specified in the State Standard Specifications and these special provisions, and as directed by the Construction Manager.

ITEM NO. 75 - TOPSOIL (STORMWATER QUALITY PLANTER)

Item shall conform to Section 20-2.01 "Topsoil" of the State Standard Specifications and the following:

A. Soil Analysis

The Contractor shall perform a laboratory soil analysis on:

- a) Existing soils, and
- b) Imported topsoil proposed for use.

The tests shall be performed at Contractor's expense. The results of these tests shall be reviewed by the Owner's Representative for a decision on whether to accept the soil.

Tests shall be performed by an approved soil testing laboratory, such as Soil and Plant Laboratory, Inc. 352 Matthew Street, Santa Clara, California 95050, (408)727-0330.

CONTRACTOR SHALL REQUEST THAT THE LABORATORY MAKE AMENDMENT RECOMMENDATIONS BASED ON AN 'ORGANIC' APPROACH TO SOIL AND LANDSCAPE MANAGEMENT.

Take soil samples as directed by lab from the proposed topsoil and the in-place soil. The lab shall perform complete soil fertility analysis, and shall make recommendations for acceptance or rejection of the topsoil and for application rates of organic soil amendments. The tests must bear the project name and date.

B. Backfill Mix

Backfill Mix shall consist of three parts native soil to one part import topsoil. Soil shall be amended as per recommendations of the approved Site Soils Analysis.

C. Native Topsoil Native Topsoil shall be on-site existing topsoil after all rocks over one and one-half inches in size and all foreign debris have been removed. Native topsoil shall be free of any substance harmful to plant growth and shall have organic material and soil characteristics capable of sustaining healthy plant life. Heavy clay soil shall not be considered for use as topsoil. Suitable native topsoil shall be stockpiled for re-use where required to replace existing topsoil.

If the stockpile of existing topsoil is not adequate to meet the requirement to place minimum of 6 inches of topsoil in all planting areas (except bioretention planters and stormwater bulbouts) import topsoil shall be used to meet the requirement.

D. Import Topsoil

Imported topsoil shall be a light sandy loam, free of rocks larger than two (2) inches and free of any deleterious materials which may be harmful to plant growth. All imported topsoil shall have a laboratory soil analysis, dated within thirty (30) days of delivery, by a qualified soils laboratory as above. Results shall be sent to the Construction Manager.

The unit bid price paid per cubic yard for Topsoil (Stormwater Quality Planter) shall include full compensation for furnishing all labor, materials, tools, equipment, laboratory testing and incidentals and for doing all the work involved in Topsoil (Stormwater Quality Planter), as shown on the plans, as specified in the State Standard Specifications and these special provisions, and as directed by the Construction Manager.

ITEM NO. 76 - BIORETENTION SOIL (STORMWATER QUALITY PLANTER)

Item includes furnishing and install Bioretention Soil conforming to Section 2.18 "Bioretention Soil" of these Special Provisions.

The unit bid price paid per cubic yard for Bioretention Soil (Stormwater Quality Planter) shall include full compensation for furnishing all labor, materials, tools, equipment, laboratory testing and incidentals and for doing all the work involved in Bioretention Soil (Stormwater Quality Planter), as shown on the plans, as specified in the State Standard Specifications and these special provisions, and as directed by the Construction Manager.

ITEM NO. 77 - CRUSHED ROCK (STORMWATER QUALITY PLANTER)

Crushed Rock (Stormwater Quality Planter) shall conform to the provisions of Section 10-14 of the City Standard Specifications and shall be placed in accordance with the drawings.

The unit bid price paid per cubic yard for Crushed Rock (Stormwater Quality Planter) shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in furnishing and placing Crushed Rock (Stormwater Quality Planter), as shown on the plans, as specified in the State Standard Specifications and these special provisions, and as directed by the Construction Manager.

ITEM NO. 78 - 8" SUBDRAIN (STORMWATER QUALITY PLANTER)

This item shall conform to the provisions of Section 10 "CONSTRUCTION MATERIALS", and Section 26 "LAYING SEWER AND DRAIN PIPE" of the City Standard Specifications. This item shall include trenching, pipe bedding, and installation of PVC storm drain pipe, connection of pipe to proposed or existing structures, trench backfill and compaction. Pipe shall be perforated and wrapped in filter fabric.

Payment shall be made per lineal foot of subdrain installed and ready for service and shall be full compensation for furnishing all labor, materials, tools, and equipment and incidentals as required to furnish and install storm drain pipe and appurtenances as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 79 - 8" CLEANOUT (STORMWATER QUALITY PLANTER)

Item shall conform to the drawings and the provisions of the City Standard Specifications and City of Sacramento Standard Drawing S-260, except SDR 35 PVC pipe and fittings shall be used in place ABS pipe.

Payment shall be made for each 8" Cleanout (Stormwater Quality Planter) installed and ready for service and shall be full compensation for furnishing all labor, materials, tools, and equipment and incidentals as required to furnish and install 8" Cleanout (Stormwater Quality Planter) and appurtenances as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 80 - LINE NORTH BASIN

Item includes furnishing, installing, and backfilling basin liner including all incidentals necessary to complete the work as shown on the drawings.

Payment shall be at the lump sum price bid and shall include full compensation for furnishing all labor, materials, tools, testing, equipment, incidentals and appurtenances, and for doing all work involved as shown on the Drawings, as specified in these Special Provisions and as directed by the Construction Manager.

ITEM NO. 81 - NORTH BASIN HEADWALL

Item shall conform to the provisions of the City Standard Specifications and City of Sacramento Standard Drawing S-280. This item shall also include a trash rack per City of Sacramento Standard Drawing S-290. This item shall include excavation for structure, installation of headwall and trash rack, backfill and compaction.

Payment shall be made for the North Basin Headwall installed and ready for service and shall be full compensation for furnishing all labor, materials, tools, and equipment and incidentals as required to furnish and install sanitary sewer manholes and appurtenances as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 82 - NORTH BASIN CHAIN LINK FENCE

The contractor shall furnish and install 6' chain link fencing around the north basin as shown on the Drawings, in conformance with City Standard Drawing T-90, and these special provisions. This item also includes the installation of gates as shown in the Drawings.

Payment shall be made per lineal foot of 6' chain link fence including gates installed and ready for use shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals as required to furnish and install the silt fence as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 83 - 6" AB ACCESS ROAD

The contractor shall construct an access road around the perimeter of the north basin of 6" aggregate base on the Drawings. Aggregate Base shall be in conformance with Section 10-7 of the City Standard Specifications.

Payment shall be made per square foot of 6" AB Access Road constructed and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals as required to furnish and install the 6" AB Access Road as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 84 - HYDROSEED NORTH BASIN

This item shall conform to the provisions of Section 35 "LANDSCAPE PLANTING" of the City Standard Specifications. This item shall include the application of non-irrigated hydro-seed mix as shown on the Drawings.

Payment shall be made per square yard of hydro-seed applied and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals as required to apply hydro-seed mix as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

WATER

ITEM NO. 85 - 12" DIP WATER PIPE

This item shall conform to the provisions of Section 10 "CONSTRUCTION MATERIALS", and Section 27 "WATER DISTRIBUTION SYSTEMS" of the City Standard Specifications. This item shall include trenching, pipe bedding, and installation of ductile iron water pipe, connection of pipe to proposed or existing structures, trench backfill and compaction. This item also includes installing the steel sleeve at 7th Street as shown on the plans.

Payment shall be made per lineal foot of 12" ductile iron water pipe installed complete and ready for service and shall be full compensation for trenching, pipe bedding, pipe and pipe ancillary materials, backfill and compaction, connections to existing water mains, pressure testing, traffic control, and furnishing all labor, materials, tools, equipment and incidentals, as required to furnish and install water distribution pipe and appurtenances as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 86 - 8" GATE VALVES

This item shall conform to the provisions in Section 27 "WATER DISTRIBUTION SYSTEMS" the City Standard Specifications, City of Sacramento Standard Drawing W-303, and these special provisions.

Payment shall be made for each 8" gate valve installed and ready for service and shall be full compensation for trenching, bedding, backfill and compaction, pressure testing, valve box, riser, tracing wire and furnishing all labor, materials, tools, equipment and incidentals, as required to furnish and install gate valves as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 87 - 12" GATE VALVES

See Item No. 86

ITEM NO. 88 - 2" BLOW-OFF ASSEMBLY

Item shall conform to the provisions in Section 27 "WATER DISTRIBUTION SYSTEMS" the City Standard Specifications, City of Sacramento Standard Drawing W-301, and these special provisions.

Payment shall be made for each 2" blow-off assembly installed complete and ready for service and shall be full compensation for trenching, bedding, pipe and pipe ancillary materials, backfill and compaction, pressure testing and furnishing all labor, materials, tools, equipment and incidentals, as required to furnish and install blow-offs as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 89 - 12" BALL JOINT

This item shall conform to the provisions in Section 27 "WATER DISTRIBUTION SYSTEMS", as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

Payment shall be made for each 12" Ball Joint assembly installed complete and ready for service and shall be full compensation for trenching, bedding, valve and valve ancillary materials, backfill and compaction, pressure testing, and furnishing all labor, materials, tools, equipment and incidentals, as required to furnish and install the 12" Ball Joint as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 90 - 12" FORCED BALANCED FLEX-TEND

This item shall conform to the provisions in Section 27 "WATER DISTRIBUTION SYSTEMS", as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

Payment shall be made for each 12" Forced Balanced Flex-Tend assembly installed complete and ready for service and shall be full compensation for trenching, bedding, vault, valve and valve ancillary materials, backfill and compaction, pressure testing, and furnishing all labor, materials, tools, equipment and incidentals, as required to furnish and install the 12" Forced Balanced Flex-Tend as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 91 - FIRE HYDRANT ASSEMBLY

This item shall conform to the provisions in Section 27 "WATER DISTRIBUTION SYSTEMS" and drawing No. W-201 of the City of Sacramento Standard Specifications.

Payment shall be made for each fire hydrant assembly installed complete and ready for service and shall be full compensation for trenching, bedding, pipe and pipe ancillary materials, backfill and compaction, pressure testing, and furnishing all labor, materials, tools, equipment and incidentals, as required to furnish and install fire hydrants as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 92 - 24" STEEL CASING PIPE

The contractor shall furnish and install a 24-inch steel pipe casing under the light rail tracks at 5th Street in conformance with the Drawings, Section 2 of the Technical Specifications, and

these special provisions. This item shall include all preconstruction utility locating, excavation and backfill for bore and receiving pits, micro-tunneling of the 24" Steel Pipe Casing, pipe spacers, coordination with Regional Transit, and traffic control related to this item.

Payment shall be at a lump sum price bid and shall include all labor, materials, tools, equipment and incidentals for doing all work as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 93 - INSTALL CUT IN TEE

The Contractor shall install Cut In Tee at the locations shown on the Drawings in conformance with City of Sacramento Standard Drawing W-105. All work shall be in conformance with the City of Sacramento Standard Specifications.

Payment shall be made for each Cut In Tee installed complete and ready for service and shall be full compensation for pavement cutting, trenching, bedding, pipe and pipe ancillary materials, backfill and compaction, pavement replacement, traffic control, pressure testing, and furnishing all labor, materials, tools, equipment and incidentals, as required to furnish and install fire hydrants as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ROADWAY

ITEM NO. 94 - ASPHALT CONCRETE PAVEMENT, TYPE A

Asphalt concrete pavement shall be placed as shown on the Drawings and shall conform to the provisions in Section 22 "ASPHALTIC CONCRETE" of the City Standard Specifications and these special provisions.

Before the asphalt concrete is placed, a tack coat of asphalt emulsion shall be applied to the edges of the existing pavement, curb faces, and gutter lips.

Payment shall be made per Ton of asphalt concrete pavement installed and ready for use and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 95 - AGGREGATE BASE, CLASS 2

Aggregate Base, Class 2 shall be placed as shown on the Drawings and conform to the provisions in Section 10-7 of the City Standard Specifications and Section 17 "LAYING AGGREGATE BASE" of the City Standard Specifications these special provisions.

Payment shall be made per cubic yard of aggregate base material installed and ready for use and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

Aggregate Base Material under sidewalks, valley gutters, curb ramps, and any location other than described above shall not be paid under this bid item and shall be considered part of the work and material required to complete the work for each of the other items.

ITEM NO. 96 - CONCRETE SIDEWALK

The contractor shall construct concrete sidewalks of the specified thickness as shown on the Drawings, in conformance with Section 24 "CURBS, GUTTERS, AND SIDEWALKS" of the City Standard Specifications and City of Sacramento Standard Drawing T-11 and these special provisions. This item includes all sidewalks not supported by retaining walls.

A minimum of 6" Aggregate Base, Class 2 shall be placed under sidewalks and conform to the provisions in Section 10-7 of the City Standard Specifications and Section 17 "LAYING AGGREGATE BASE" of the City Standard Specifications. Finish score lines and expansion joints shall be as shown on the Drawings.

Payment shall be made per square foot of concrete sidewalk installed and ready for use and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals as required to furnish and install concrete sidewalk as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager .

ITEM NO. 97 - VERTICAL CURB AND GUTTER No. 2

The contractor shall construct the Vertical Curb and Gutter in conformance with the Drawings, in conformance with Section 24 "CURBS, GUTTERS, SIDEWALKS, GUTTER DRAINS" of the City Standard Specifications and these special provisions. A minimum of 6" of Aggregate Base, Class 2 shall be placed under the vertical curb and gutter and conform to the provisions in Section 10-7 of the City Standard Specifications and Section 17 "LAYING AGGREGATE BASE" of the City Standard Specifications.

Payment shall be made per lineal foot of curb and gutter installed and ready for use and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals as required to furnish and install the vertical curb and gutter as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 98 - VERTICAL CURB AND GUTTER No. 2 - REINFORCED

The contractor shall construct the Vertical Curb and Gutter with reinforcement in conformance with the Drawings, in conformance with Section 24 "CURBS, GUTTERS, SIDEWALKS, GUTTER DRAINS" of the City Standard Specifications and these special provisions. A minimum of 6" of Aggregate Base, Class 2 shall be placed under the vertical curb and gutter and conform to the provisions in Section 10-7 of the City Standard Specifications and Section 17 "LAYING AGGREGATE BASE" of the City Standard Specifications.

Payment shall be made per lineal foot of curb and gutter installed and ready for use and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals as required to furnish and install the vertical curb and gutter as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 99 - CONCRETE SURVEY MONUMENT

The contractor shall construct concrete survey monuments as shown on the Drawings and in conformance with City of Sacramento Standard Drawing T-350 and these special provisions.

Payment shall be made for each concrete survey monument installed complete and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals as required to furnish and install the concrete survey monument as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 100 - SINGLE FLARE CURB RAMP WITH TRUNCATED DOMES

The contractor shall construct single flare curb ramps with truncated domes as shown on the Drawings and in conformance with City of Sacramento Standard Drawing T-73, T-78 and T-79, and these special provisions.

Payment shall be made for each single flare ramp installed complete and ready to use and shall be full compensation for minor grading, bedding, compaction, for furnishing all labor, materials, tools, equipment and incidentals and for doing all work as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 101 - DOUBLE FLARE CURB RAMP WITH TRUNCATED DOMES

The contractor shall construct double flare curb ramps with truncated domes as shown on the Drawings and in conformance with City of Sacramento Standard Drawing T-74, T-78 and T-79, and these special provisions.

Payment shall be made for each double flare ramp installed complete and ready to use and shall be full compensation for minor grading, bedding, compaction, for furnishing all labor, materials, tools, equipment and incidentals and for doing all work as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 102 - SINGLE FLARE CURB RAMP WITH TRUNCATED DOMES (5TH AND H STREETS)

The contractor shall construct single flare curb ramps with truncated domes as shown on the Drawings and in conformance with City of Sacramento Standard Drawing T-73, T-78 and T-79, and these special provisions. This item shall include all work associated with sawcutting and removing existing improvements in the area of the new ramp, conforming the new ramps with the existing improvements, pedestrian traffic control, and vehicular traffic control.

Payment shall be made for each single flare ramp installed complete and ready to use and shall be full compensation for minor grading, bedding, compaction, for furnishing all labor, materials, tools, equipment and incidentals and for doing all work as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 103 - DOUBLE FLARE CURB RAMP WITH TRUNCATED DOMES (5TH AND H STREETS)

The contractor shall construct double flare curb ramps with truncated domes as shown on the Drawings and in conformance with City of Sacramento Standard Drawing T-74, T-78 and T-79, and these special provisions. This item shall include all work associated with sawcutting and removing existing improvements in the area of the new ramp, conforming the new ramps with the existing improvements, pedestrian traffic control, and vehicular traffic control.

Payment shall be made for each double flare ramp installed complete and ready to use and shall be full compensation for minor grading, bedding, compaction, for furnishing all labor, materials, tools, equipment and incidentals and for doing all work as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 104 - STREET BARRICADE

The contractor shall construct street barricades as shown on the Drawings and in conformance with City of Sacramento Standard Drawing T-101 and these special provisions.

Payment shall be made per lineal foot of street barricade installed and ready for use and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals as required to furnish and install the street barricade as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 105 - SIDEWALK BARRICADE

The contractor shall construct sidewalk barricades as shown on the Drawings and in conformance with City of Sacramento Standard Drawing T-102 and these special provisions.

Payment shall be made per lineal foot of sidewalk barricade installed and ready for use and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals as required to furnish and install the sidewalk barricade as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

STREET LIGHTS

ITEM NO. 106 - STREET LIGHTING SYSTEM (5TH STREET SOUTH)

The contractor shall construct the specified Street Light as shown on the Drawings, in conformance with Section 34 "ELECTRICAL" of the City Standard Specifications and City of Sacramento Standard Drawing E-60, and these special provisions. This item shall include excavation, forming and placing concrete foundation, installing street light pole and luminaire, backfill and compaction, pull boxes, conduits and wiring.

Payment shall be at the lump sum price bid and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals as required to furnish and install Street Lights as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 107 - STREET LIGHTING SYSTEM (VIADUCT)

The contractor shall construct the specified Street Light as shown on the Drawings, in conformance with Section 34 "ELECTRICAL" of the City Standard Specifications and City of Sacramento Standard Drawing E-60, and these special provisions. This item shall include excavation, forming and placing concrete foundation, installing street light pole and luminaire, backfill and compaction, pull boxes, conduits and wiring.

Payment shall be at the lump sum price bid and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals as required to furnish and install

Street Lights as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 108 - STREET LIGHTING SYSTEM (5TH STREET NORTH)

The contractor shall construct the specified Street Light as shown on the Drawings, in conformance with Section 34 "ELECTRICAL" of the City Standard Specifications and City of Sacramento Standard Drawing E-60, and these special provisions. This item shall include excavation, forming and placing concrete foundation, installing street light pole and luminaire, backfill and compaction, pull boxes, conduits and wiring.

Payment shall be at the lump sum price bid and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals as required to furnish and install Street Lights as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 109 - STREET LIGHTING SYSTEM (RAILYARDS BOULEVARD)

The contractor shall construct the specified Street Light as shown on the Drawings, in conformance with Section 34 "ELECTRICAL" of the City Standard Specifications and City of Sacramento Standard Drawing E-60, and these special provisions. This item shall include excavation, forming and placing concrete foundation, installing street light pole and luminaire, backfill and compaction, pull boxes, conduits and wiring.

Payment shall be at the lump sum price bid and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals as required to furnish and install Street Lights as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

SIGNAGE AND STRIPING

ITEM NO. 110 - TRAFFIC SIGNING, STRIPING AND LEGENDS (5TH STREET SOUTH)

Under this item, the Contractor shall place all interim pavement striping, markers, and markings of the types shown on the Drawings. Items shall conform to Section 32 "TRAFFIC SIGNS, MARKINGS, AND BARRICADES" of the City Standards Specification. All striping and markings shall be thermoplastic. Future pavement striping, markers and markings is not included as part of the item. This item shall include the removal of all existing signing and striping as shown on the plans.

Payment shall be at the lump sum price bid and shall include full compensation for the furnishing of all labor, material, tools, equipment and incidentals, and for doing all work involved as shown on the Drawings, as specified in these Special Provisions and as directed by the Construction Manager.

ITEM NO. 111 - TRAFFIC SIGNING, STRIPING AND LEGENDS (VIADUCT AND 5TH STREET NORTH)

Under this item, the Contractor shall place all interim pavement striping, markers, and markings of the types shown on the Drawings. Items shall conform to Section 32 "TRAFFIC SIGNS, MARKINGS, AND BARRICADES" of the City Standards Specification. All striping

and markings shall be thermoplastic. Future pavement striping, markers and markings is not included as part of the item.

Payment shall be at the lump sum price bid and shall include full compensation for the furnishing of all labor, material, tools, equipment and incidentals, and for doing all work involved as shown on the Drawings, as specified in these Special Provisions and as directed by the Construction Manager.

ITEM NO. 112 - TRAFFIC SIGNING, STRIPING AND LEGENDS (RAILYARDS BOULEVARD)

Under this item, the Contractor shall place all interim pavement striping, markers, and markings of the types shown on the Drawings. Items shall conform to Section 32 "TRAFFIC SIGNS, MARKINGS, AND BARRICADES" of the City Standards Specification. All striping and markings shall be thermoplastic. Future pavement striping, markers and markings is not included as part of the item. This item shall include the removal of all existing signing and striping as shown on the plans.

Payment shall be at the lump sum price bid and shall include full compensation for the furnishing of all labor, material, tools, equipment and incidentals, and for doing all work involved as shown on the Drawings, as specified in these Special Provisions and as directed by the Construction Manager.

TRAFFIC SIGNAL

ITEM NO. 113 - TRAFFIC SIGNAL – RAILYARDS BOULEVARD AND BER CUT DRIVE

Item shall consist of furnishing and installing the equipment for the traffic signals as shown on the Drawings in conformance with Section 34 "ELECTRICAL" of the City Standard Specifications and these Special Provisions.

Payment shall be at the lump sum price bid and shall include full compensation for furnishing all labor, materials, tools, testing, equipment, incidentals and appurtenances, and for doing all work involved as shown on the Drawings, as specified in these Special Provisions and as directed by the Construction Manager.

ITEM NO. 114 - TRAFFIC SIGNAL – RAILYARDS BOULEVARD AND HUNTINGTON STREET

Item shall consist of furnishing and installing all equipment for the traffic signal and the construction of new traffic signals as shown on the Drawings in conformance with Section 34 "ELECTRICAL" of the City Standard Specifications and these Special Provisions. This item shall include all layout, traffic control, trenching, backfill, and replacement of existing damaged facilities.

Payment shall be at the lump sum price bid for traffic signal installed and ready for use and shall include full compensation for furnishing all labor, materials, tools, testing, equipment, incidentals and appurtenances, and for doing all work involved as shown on the Drawings, as specified in these Special Provisions and as directed by the Construction Manager.

ITEM NO. 115 - TRAFFIC SIGNAL – RAILYARDS BOULEVARD AND CROCKER STREET

See item No. 114

ITEM NO. 116 - TRAFFIC SIGNAL – RAILYARDS BOULEVARD AND STANFORD STREET

See item No. 114

ITEM NO. 117 - TRAFFIC SIGNAL – RAILYARDS BOULEVARD AND 5TH STREET

See item No. 114

ITEM NO. 118 - TRAFFIC SIGNAL – RAILYARDS BOULEVARD AND 6TH STREET

See item No. 114

ITEM NO. 119 - TRAFFIC SIGNAL – RAILYARDS BOULEVARD AND 7TH STREET

Item shall consist of furnishing and installing all equipment for the traffic signal and the construction of new traffic signals as shown on the Drawings in conformance with Section 34 “ELECTRICAL” of the City Standard Specifications and these Special Provisions. This item shall include all layout, traffic control, trenching, backfill, and replacement of existing damaged facilities. This item shall include providing all traffic control and coordination with Sacramento Regional Transit as necessary to complete the installation of the traffic signal.

Payment shall be at the lump sum price bid for traffic signal installed and ready for use and shall include full compensation for furnishing all labor, materials, tools, testing, equipment, incidentals and appurtenances, and for doing all work involved as shown on the Drawings, as specified in these Special Provisions and as directed by the Construction Manager.

ITEM NO. 120 - TRAFFIC SIGNAL – 5TH STREET AND STEVENS STREET

See item No. 114

ITEM NO. 121 - TRAFFIC SIGNAL – 5TH STREET AND CAMILE LANE

See item No. 114

ITEM NO. 122 - TRAFFIC SIGNAL – 5TH STREET AND G STREET

See item No. 114

ITEM NO. 123 - TRAFFIC SIGNAL – 5TH STREET AND H STREET

See item No. 119

ITEM NO. 124 - TRAFFIC SIGNAL INTERCONNECT SYSTEM (H STREET TO NORTH END OF 5TH STREET OVERCROSSING)

Item shall consist of furnishing and installing all equipment for the traffic signal interconnect conduit, cable, and appurtances from the intersection of 5th Street and H Street to the north end of the existing 5th Street Overcrossing as shown on Sheet E3-20 of the the 5th Street South of UPRR Improvement Plan Drawings in conformance with Section 34 “ELECTRICAL” of the City Standard Specifications and these Special Provisions. This item shall include all trenching,

backfill, and repaving where necessary to install the system as shown on the Drawings. This item shall include all traffic control necessary to perform the work.

Payment shall be at the lump sum price bid for Traffic Signal Interconnect System (H Street to North End of 5th Street Overcrossing) installed and ready for use and shall include full compensation for furnishing all labor, materials, tools, testing, equipment, incidentals and appurtenances, and for doing all work involved as shown on the Drawings, as specified in these Special Provisions and as directed by the Construction Manager.

ITEM NO. 125 - TRAFFIC SIGNAL INTERCONNECT SYSTEM (INTERSECTION OF 5TH AND H STREETS TO INTERSECTION OF 7TH AND I STREETS)

Item shall consist of furnishing and installing all equipment for the traffic signal interconnect conduit, continuous 96 strand fiber cable, and appurtances from the intersection of 5th Street and H Street to the City's data center as shown on Sheet E3-21 of the 5th Street South of UPRR Improvement Plan Drawings, and in conformance with the Interconnect Installation Routing Exhibits included in Appendix I and with Section 34 "ELECTRICAL" of the City Standard Specifications and these Special Provisions. This item shall include all trenching, backfill, and repaving where necessary to install the system as shown on the Drawings.

This item shall also include installing interconnect cable within existing conduits and innerducts owned by Sacramento Regional Transit. This item shall include compliance with Sacramento Regional Transit Utility Permit 2012030901 including but not limit to obtaining a track warrant and paying the \$5,000 inspection deposit as required in the permit. This item shall include all traffic control necessary to perform the work.

This item shall also include all coordination with the City for the exact routing of cable and all work within the City's data center.

The City contact for data center installation is:

Manny Martinex – City IT, Telecommunications Engineer
Cell 916-804-2529
MMartinez@cityofsacramento.org

Or

Xavier Covarrubia – City IT, IT Supervisor
Desk 916-808-8512

Payment shall be at the lump sum price bid for Traffic Signal Interconnect System (Intersection of 5th And H Streets To City data center) installed and ready for use and shall include full compensation for furnishing all labor, materials, tools, testing, equipment, incidentals and appurtenances, and for doing all work involved as shown on the Drawings, as specified in these Special Provisions and as directed by the Construction Manager.

ITEM NO. 126 - TRAFFIC SIGNAL INTERCONNECT SYSTEM (5TH STREET NORTH AND VIADUCT)

Item shall consist of furnishing and installing all equipment for the traffic signal interconnect conduit, cable, and appurtenances along 5th Street from the south end of the Viaduct to Railyards Boulevard as shown on Sheet E3-20 of the the 5th Street North of UPRR Improvement Plan Drawings in conformance with Section 34 "ELECTRICAL" of the City Standard Specifications and these Special Provisions. This item shall include all trenching, backfill, and repaving where necessary to install the system as shown on the Drawings.

Payment shall be at the lump sum price bid for Traffic Signal Interconnect System (5th Street North and Viaduct) installed and ready for use and shall include full compensation for furnishing all labor, materials, tools, testing, equipment, incidentals and appurtenances, and for doing all work involved as shown on the Drawings, as specified in these Special Provisions and as directed by the Construction Manager.

ITEM NO. 127 - TRAFFIC SIGNAL INTERCONNECT SYSTEM (RAILYARDS BOULEVARD)

Item shall consist of furnishing and installing all equipment for the traffic signal interconnect conduit, cable, and appurtenances along Railyards Boulevard as shown on Sheets E3-10 and E3-11 of the the Railyards Boulevard Improvement Plan Drawings in conformance with Section 34 "ELECTRICAL" of the City Standard Specifications and these Special Provisions. This item shall include all trenching, backfill, and repaving where necessary to install the system as shown on the Drawings.

Payment shall be at the lump sum price bid for Traffic Signal Interconnect System (Railyards Boulevard) installed and ready for use and shall include full compensation for furnishing all labor, materials, tools, testing, equipment, incidentals and appurtenances, and for doing all work involved as shown on the Drawings, as specified in these Special Provisions and as directed by the Construction Manager.

HARDSCAPE, IRRIGATION, AND PLANTING

ITEM NO. 128 - ROOT BARRIER

This item shall consist of furnishing and placing root barriers as shown on the drawings in conformance with these Special Provisions. Root Barrier shall be of type and manufacture called for on the Drawings. Top edge of root barrier shall be 2" below finish grade. Bottom edge shall be 20" below finish grade. Install per manufacturer's specifications and per Drawings.

Payment shall be made per lineal foot of root barrier installed and ready for use and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved as shown on the Drawings, as specified in these Special Provisions or as directed by the Construction Manager.

ITEM NO. 129 - IRRIGATION SYSTEM (5TH STREET SOUTH)

This item shall consist of furnishing and installing an Automatic Irrigation System as shown on the drawings in conformance with Section 2.13 "IRRIGATION SYSTEM" of the technical specifications, Sections 10 and 36 of the City Standard Specifications and these Special Provisions. Item shall include connection to City water system as shown on the Drawings. This

item also consists of of furnishing and installing a Central Control System as shown on the Drawings in conformance with Section 34 of the City Standard Specifications and these Special Provisions.

Payment shall be at the lump sum price bid for irrigation system installed and ready to use and shall include full compensation for furnishing all labor, materials, tools, testing, equipment and incidentals, and for doing all work involved as shown on the Drawings, as specified in these Special Provisions or as directed by the Construction Manager.

ITEM NO. 130 - IRRIGATION SYSTEM (5TH STREET NORTH)

This item shall consist of furnishing and installing an Automatic Irrigation System as shown on the drawings in conformance with Section 2.13 "IRRIGATION SYSTEM" of the technical specifications, Sections 10 and 36 of the City Standard Specifications and these Special Provisions. Item shall include connection to City water system as shown on the Drawings. This item also consists of of furnishing and installing a Central Control System as shown on the Drawings in conformance with Section 34 of the City Standard Specifications and these Special Provisions.

Payment shall be at the lump sum price bid for irrigation system installed and ready to use and shall include full compensation for furnishing all labor, materials, tools, testing, equipment and incidentals, and for doing all work involved as shown on the Drawings, as specified in these Special Provisions or as directed by the Construction Manager.

ITEM NO. 131 - IRRIGATION SYSTEM (RAILYARDS BOULEVARD)

This item shall consist of furnishing and installing an Automatic Irrigation System as shown on the drawings in conformance with Section 2.13 "IRRIGATION SYSTEM" of the technical specifications, Sections 10 and 36 of the City Standard Specifications and these Special Provisions. Item shall include connection to City water system as shown on the Drawings. This item also consists of of furnishing and installing a Central Control System as shown on the Drawings in conformance with Section 34 of the City Standard Specifications and these Special Provisions.

Payment shall be at the lump sum price bid for irrigation system installed and ready to use and shall include full compensation for furnishing all labor, materials, tools, testing, equipment and incidentals, and for doing all work involved as shown on the Drawings, as specified in these Special Provisions or as directed by the Construction Manager.

ITEM NO. 132 - 1-GALLON SHRUB

This item shall consist of furnishing, preparing and planting 1 gallon shrubs as shown on the Drawings in conformance with Section 10 "Construction Materials" and Section 35 "Landscape Planting" of the City Standard Specifications, including backfill mix, fertilizer and mulch called for in these sections.

Payment shall be at the unit price bid and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 133 - 15-GALLON SHRUB

This item shall consist of furnishing, preparing and planting 15 gallon shrubs as shown on the Drawings in conformance with Section 10 "Construction Materials" and Section 35 "Landscape Planting" of the City Standard Specifications, including backfill mix, fertilizer and mulch called for in these sections.

Payment shall be at the unit price bid and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 134 - 24" BOX TREE – "EMERALD SUNSHINE" ELM

The above items shall consist of furnishing, preparing and planting shrubs and trees in conformance with Section 10 "Construction Materials" and Section 35 "Landscape Planting" of the City Standard Specifications, including all soil amendments, backfill mix, fertilizer, weed control, and mulch called for in these sections.

Payment shall be at the unit price bid and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved as shown on the Drawings, as specified in these Special Provisions or as directed by the Construction Manager.

ITEM NO. 135 - NOT USED

ITEM NO. 136 - 24" BOX TREE – "REDPOINT" MAPLE

See Item No. 134

ITEM NO. 137 - 8' X 6' TREE BOX

Contractor shall install 8' X 6' concrete tree box as shown on the Drawings. This item includes but is not limited to construction, excavation, bedding, fluid-applied waterproofing, perforated drain pipe, filter fabric, backfill and compaction as shown on the Drawings and as described in these special provisions.

Payment shall be at the unit price bid and shall include all labor, materials, tools, equipment and incidentals for doing all work as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 138 - TOPSOIL MIX (TREE WELLS)

Item shall conform to Section 20-2.01 "Topsoil" of the State Standard Specifications and the following:

E. Soil Analysis

The Contractor shall perform a laboratory soil analysis on:

- a) Existing soils, and
- b) Imported topsoil proposed for use.

The tests shall be performed at Contractor's expense. The results of these tests shall be reviewed by the Owner's Representative for a decision on whether to accept the soil.

Tests shall be performed by an approved soil testing laboratory, such as Soil and Plant Laboratory, Inc. 352 Matthew Street, Santa Clara, California 95050, (408)727-0330.

CONTRACTOR SHALL REQUEST THAT THE LABORATORY MAKE AMENDMENT RECOMMENDATIONS BASED ON AN 'ORGANIC' APPROACH TO SOIL AND LANDSCAPE MANAGEMENT.

Take soil samples as directed by lab from the proposed topsoil and the in-place soil. The lab shall perform complete soil fertility analysis, and shall make recommendations for acceptance or rejection of the topsoil and for application rates of organic soil amendments. The tests must bear the project name and date.

F. Backfill Mix

Backfill Mix shall consist of three parts native soil to one part import topsoil. Soil shall be amended as per recommendations of the approved Site Soils Analysis.

G. Native Topsoil Native Topsoil shall be on-site existing topsoil after all rocks over one and one-half inches in size and all foreign debris have been removed. Native topsoil shall be free of any substance harmful to plant growth and shall have organic material and soil characteristics capable of sustaining healthy plant life. Heavy clay soil shall not be considered for use as topsoil. Suitable native topsoil shall be stockpiled for re-use where required to replace existing topsoil.

If the stockpile of existing topsoil is not adequate to meet the requirement to place minimum of 6 inches of topsoil in all planting areas (except bioretention planters and stormwater bulbouts) import topsoil shall be used to meet the requirement.

H. Import Topsoil

Imported topsoil shall be a light sandy loam, free of rocks larger than two (2) inches and free of any deleterious materials which may be harmful to plant growth. All imported topsoil shall have a laboratory soil analysis, dated within thirty (30) days of delivery, by a qualified soils laboratory as above. Results shall be sent to the Landscape Architect.

Payment shall be at the unit price bid and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved as shown on the Drawings, as specified in these Special Provisions or as directed by the Construction Manager.

ITEM NO. 139 - BARK

Mulch shall be evenly spread in all shrub and groundcover areas and around the base of trees to a three-inch (3") finished depth as specified on the Drawings.

Mulch material shall be locally produced Arbor Mulch: wood waste from tree trimming, 100% recycled material, composted to reduce weed seeds, with the largest allowable pieces not larger than 2" in any direction. Shredded redwood bark mulch ("Gorilla hair") shall be avoided.

Mulch may be obtained from Beeler Blend, Sacramento, CA (916-729-7485) or approved local equivalent.

Payment shall be at the unit price bid and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved as shown on the Drawings, as specified in these Special Provisions or as directed by the Construction Manager.

ITEM NO. 140 - FURNISH/INSTALL 6' ALUMINUM BENCH

Contractor shall install 6 foot aluminum bench, model "Plainwell" by Landscape Forms or approved equal, surface mount, with powder-coated black color, as shown on Drawings.

Payment shall be at the unit price bid and shall include all compensation for furnishing all labor, materials, tools, equipment and incidentals for doing all the work involved as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 141 - FURNISH/INSTALL TRASH RECEPTACLES

Contractor shall install trash receptacles with dome lids, model "Plainwell" by Landscape Forms or approved equal, with side panels. Color to be powder-coated black, as shown on Drawings.

Payment shall be at the unit price bid and shall include all compensation for furnishing all labor, materials, tools, equipment and incidentals for doing all the work involved as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 142 - FURNISH/INSTALL 6'X8' TREE GRATE W/CAST IN PLACE FRAME

Contractor shall install tree grates with cast in place frames by Urban Accessories, or approved equal, in locations as shown on Drawings and details. Model shall be "OT Title 24, 6' X 8' size, powder-coated black color, with standard "s" frame installation, or approved equal.

Payment shall be at the unit price and shall include all compensation for furnishing all labor, materials, tools, equipment and incidentals for doing all work involved as shown on the Drawings, as specified in these Special provisions, or as directed by the Construction Manager.

ITEM NO. 143 - FURNISH/INSTALL 8'X8' TREE GRATE W/CAST IN PLACE FRAME

Contractor shall install tree grates with cast in place frames by Urban Accessories, or approved equal, in locations as shown on Drawings and details. Model shall be "OT Title 24, 8' X 8' size, powder-coated black color, with standard "s" frame installation, or approved equal.

Payment shall be at the unit price and shall include all compensation for furnishing all labor, materials, tools, equipment and incidentals for doing all work involved as shown on the Drawings, as specified in these Special provisions, or as directed by the Construction Manager.

ITEM NO. 144 - FURNISH AND INSTALL TREE GUARD

Contractor shall install tree guard, model "Fillmore" by Urban Accessories, or approved equal, in locations as shown on the Drawings, one guard per location. Color to be powder-coated black, surface mounted,

Payment shall be at a the unit price bid and shall include all compensation for furnishing all labor, materials, tools, equipment and incidentals for doing all work involved as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 145 - FURNISH/INSTALL BIKE RACKS

Contractor shall install bike racks, model "Ring" by Landscape Form, in locations as shown on the plans, two racks per location spaced 2'-6" apart. Color to be powder-coated black, surface mounted,

Payment shall be at a the unit price bid and shall include all compensation for furnishing all labor, materials, tools, equipment and incidentals for doing all work involved as shown on the plans, as specified in these Special Provisions, and as directed by the Construction Manager.

ITEM NO. 146 - FURNISH/INSTALL BUS SHELTER

Contractor shall install Bus Shelter, Duo Guard 5' by 12', Product #3009-12 (See Appendix J), powder-coated black, or approved equal, in the location shown on the plans. Contact Kevin Chown, Transit Sales Manager, at 734-207-9700 x 1146.

Payment shall be at a the unit price bid and shall include all compensation for furnishing all labor, materials, tools, equipment and incidentals for doing all work involved as shown on the plans, as specified in these Special Provisions, and as directed by the Construction Manager.

ITEM NO. 147 - 1" IRRIGATION WATER SERVICE, METER, BACKFLOW PREVENTER AND ENCLOSURE

This item shall include the installation of 1" irrigation water service, meter, backflow preventer and enclosure conforming to the provisions in Section 27, "WATER DISTRIBUTION SYSTEMS," Section 36, "IRRIGATION SYSTEM," of the City of Sacramento Standard Specifications, City of Sacramento Standard Drawing W-606, and these special provisions. Backflow preventer shall be Wilkens 975XLSE 1 1/2" RP w/ Thermal Blanket, to be placed in V.I.T. Strongbox SBBC-30CR Enclosure (Black) or approved equal. The Contractor shall pay the water fees as shown on the Drawings.

Payment shall be at a unit price bid and shall include all compensation for furnishing all labor, materials, tools, equipment, testing, backfill, compaction and incidentals for doing all work as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 148 - 2" IRRIGATION WATER SERVICE, METER, BACKFLOW PREVENTER AND ENCLOSURE

This item shall include the installation of 2" irrigation water service, meter, backflow preventer and enclosure conforming to the provisions in Section 27, "WATER DISTRIBUTION SYSTEMS," Section 36, "IRRIGATION SYSTEM," of the City of Sacramento Standard Specifications, City of Sacramento Standard Drawing W-606, and these special provisions. Backflow preventer shall be Wilkens 975XLSE 1 1/2" RP w/ Thermal Blanket, to be placed in

V.I.T. Strongbox SBBC-30CR Enclosure (Black) or approved equal. The Contractor shall pay the water fees as shown on the Drawings.

Payment shall be at a unit price bid and shall include all compensation for furnishing all labor, materials, tools, equipment, testing, backfill, compaction and incidentals for doing all work as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

EROSION CONTROL

ITEM NO. 149 - STABILIZED CONSTRUCTION ENTRANCE

The contractor shall construct the stabilized construction entrance as shown on the Drawings, in conformance with City of Sacramento Standard Drawing Q-10, and these special provisions. The Contractor is responsible to maintain the Stabilized Construction Entrance to the satisfaction of the Construction Manager through the duration of the project. The Contractor shall remove all temporary erosion control measures upon completion and establishment of permanent erosion control measures.

Payment shall be made per square yard of stabilized construction entrance installed and ready for service and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals as required to furnish and install the stabilized construction entrance as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 150 - INLET SEDIMENT CONTROL AND FILTER BAGS

The contractor shall furnish and install inlet sediment control and filter bags as shown on the Drawings, in conformance with City of Sacramento Standard Drawing Q-20 and Q-30, and these special provisions. The Contractor is responsible to maintain the Inlet Sediment Control and Filter Bags to the satisfaction of the Construction Manager through the duration of the project. The Contractor shall remove all temporary erosion control measures upon completion and establishment of permanent erosion control measures.

Payment shall be made for each inlet sediment control and filter bag installed and ready for use and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals as required to furnish and install the inlet sediment control and filter bags as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 151 - INSTALL SAND BAGS TO CONTROL DRAINAGE VELOCITY

The contractor shall furnish and install sand bags as shown on the Drawings. Sand Bags will be made of burlap having dimensions of 14" x 26" with the top of each bag hemmed and treated for Ultra Violet protection meeting Class A Requirements of U.S. Military Specification CID A-A-52141. If sand bags are to be filled on site, a tie string will be attached four-inches below the top of the bag. Bags are to be filled with 50-pounds of sand material. The Contractor is responsible to maintain the Sand Bags to the satisfaction of the Construction Manager through the duration of the project. The Contractor shall remove all temporary erosion control measures upon completion and establishment of permanent erosion control measures.

The bags shall be placed by hand to the required length, width and thickness as shown on the Drawings. The bags shall be placed in horizontal rows. Each bag shall be firmly bedded into the slope and securely butted against the adjacent bags. The tied end of the bag shall rest on and against the face of the slope.

Payment shall be at the lump sum price bid for sand bags installed and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals as required to furnish and install sand bags as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 152 - INSTALL SILT FENCE

The contractor shall furnish and install silt fence as shown on the Drawings, in conformance with City Standard Drawing Q-50, and these special provisions. The Contractor is responsible to maintain the Silt Fence to the satisfaction of the Construction Manager through the duration of the project. The Contractor shall remove all temporary erosion control measures upon completion and establishment of permanent erosion control measures.

Payment shall be made per lineal foot of silt fence installed and ready for use and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals as required to furnish and install the silt fence as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 153 - INSTALL ROCK RIP RAP AT MANHOLES WITH SLOTTED COVERS

The contractor shall install rock rip rap at manholes with slotted covers as shown on the Drawings, and these special provisions.

Payment shall be made per square foot of rip rap installed and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals as required to install temporary field inlets and erosion protection as shown on the Drawings and, as specified in the Special Provisions, or as directed by the Construction Manager.

ITEM NO. 154 - INSTALL EMBANKMENT SLOPE FIBER ROLLS

The contractor shall furnish and install silt fence as shown on the Drawings, in conformance with City of Sacramento Standard Drawing Q-40, and these special provisions.

Payment shall be made per lineal foot of fiber rolls installed and ready for use and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals as required to furnish and install the silt fence as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 155 - APPLY HYDRO-SEED MIX

This item shall conform to the provisions of Section 35 "LANDSCAPE PLANTING" of the City Standard Specifications. This item shall include the application of non-irrigated hydro-seed mix as shown on the Drawings.

Payment shall be made per square yard of hydro-seed applied and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals as required to apply hydro-seed mix as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 156 - 6' CHAIN LINK FENCE

The contractor shall furnish and install 6' chain link fencing as shown on the Drawings, in conformance with City Standard Drawing T-90, and these special provisions.

Payment shall be made per lineal foot of 6' chain link fence installed and ready for use and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals as required to furnish and install the silt fence as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 157 - 16' GATE

The contractor shall furnish and install 16' gate as shown on the Drawings, in conformance with City Standard Drawing T-90, and these special provisions.

Payment shall be made per each 16' gate installed and ready for use and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals as required to furnish and install the silt fence as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

BRIDGE (VIADUCT)

ITEM NO. 158 - BRIDGE REMOVAL (PORTION)

Bridge Removal (Portion) shall conform to the provisions in Section 2.08, "Bridge Removal (Portion)" of the technical specifications and these special provisions.

The work to be performed in Section 15-4, "Bridge Removal (Portion)," will be paid for on a lump sum basis for bridge removal.

The above prices and payments shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in removing bridges or portions thereof, including excavation, backfill, and salvaging materials not to be reused in the project when salvaging is specified and not otherwise paid for, as shown on the plans, as specified in these specifications and the special provisions, and as directed by the Construction Manager.

Full compensation for removing materials that are to be reused in the project shall be considered as included in the contract prices paid for reconstructing, relocating or resetting the items involved, or in such other contract pay items that may be designated in the special provisions, and no additional compensation will be allowed therefor.

ITEM NO. 159 - STRUCTURE EXCAVATION (BRIDGE)

Structure Excavation (Bridge) shall conform to the provisions in Section 2.09, "Earthwork" of the technical specifications and these special provisions.

Payment of Structure Excavation (Bridge) shall conform to the requirements specified in Section 19-3, "Structure Excavation and backfill," of the State Standard Specifications and these special provisions. The unit bid price paid per cubic yard for Structure Excavation (Bridge) shall

include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in Structure Excavation (Bridge), as shown on the plans, as specified in the State Standard Specifications and these special provisions, and as directed by the Construction Manager.

ITEM NO. 160 - STRUCTURE BACKFILL (BRIDGE)

Structure Backfill (Bridge) shall conform to the provisions in Section 2.09, "Earthwork" of the technical specifications and these special provisions.

Payment of Structure Backfill (Bridge) shall conform to the requirements specified in Section 19-3, "Structure Excavation and Backfill," of the State Standard Specifications and these special provisions. The unit bid price paid per cubic yard for Structure Backfill (Bridge) shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in Structure Backfill (Bridge), as shown on the plans, as specified in the State Standard Specifications and these special provisions, and as directed by the Construction Manager.

ITEM NO. 161 - FURNISH PILING (CLASS 200) (ALTERNATIVE W)

Furnish Piling (Class 200) (Alternative W) shall conform to the provisions in Section 2.10, "Piling" of the technical specifications and these special provisions.

Measurement and payment for the Furnish Piling (Class 200) (Alternative W) shall conform to the provisions in Sections 49-6.01, "Measurement," and 49-6.02, "Payment," of the State Standard Specifications and these special provisions. The unit bid price paid per linear foot for Furnish Piling (Class 200) (Alternative W) shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in Furnish Piling (Class 200) (Alternative W), complete in place, as shown on the plans, as specified in the State Standard Specifications and these special provisions, and as directed by the Construction Manager.

Full compensation for conforming to the provisions in "Steel Pipe Piling" of these special provisions shall be considered as included in the contract prices paid for the various items of work involved, and no additional compensation will be allowed therefor.

Full compensation for redriving piles shall be considered as included in the contract unit price paid for drive pile, and no separate payment will be made therefor. The length of piling to be paid for as furnish piling of the classes listed in the Engineer's Estimate shall include the lengths that monitored piles are redriven.

ITEM NO. 162 - DRIVING PILING (CLASS 200) (ALTERNATIVE W)

Drive piling (Class 200) (Alternative W) shall conform to the provisions in Section 2.10, "Piling" of the technical specifications and these special provisions.

Measurement and payment for the Drive Pile (Class 200) (Alternative W) shall conform to the provisions in Sections 49-6.01, "Measurement," and 49-6.02, "Payment," of the State Standard Specifications. The unit bid price paid per each for Drive Pile (Class 200) (Alternative W) shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in Drive Pile (Class 200) (Alternative W), complete in place, including and restrikes, as shown on the plans, as specified in the State

Standard Specifications and these special provisions, and as directed by the Construction Manager.

ITEM NO. 163 - PRESTRESSING CAST-IN-PLACE CONCRETE (MOD)

Prestressing Cast-In-Place Concrete (Mod) shall conform to the provisions in Section 2.21, "Prestressing Concrete" of the technical specifications and these special provisions.

Contractor should note that there is limited access for Bent 4 Anchorage because of the existing bridge. No additional compensation due to hand threading strands into anchor plates, additional access accommodations or any inefficiencies for reduced access will be allowed.

Payment for Prestressing Cast-In-Place Concrete (Mod) shall conform to the requirements specified in Section 50-1.11, "Payment," of the State Standard Specifications and these special provisions. The lump sum price bid for Prestressing Cast-In-Place Concrete (Mod) and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved with Prestressing Cast-In-Place Concrete (Mod), complete in place, as shown on the plans, as specified in these Special Provisions and State Standard Specifications, and as directed by the Construction Manager.

ITEM NO. 164 - STRUCTURAL CONCRETE, BRIDGE FOOTING

Structural Concrete, Bridge Footing shall conform to the provisions in Section 2.22, "Concrete Structures" of the technical specifications and these special provisions.

Measurement and Payment for Structural Concrete, Bridge Footing shall conform to the requirements specified in Section 51-1.22, "Measurement" and Section 51-1.23, "Payment," of the State Standard Specifications and these special provisions. The unit price bid per cubic yard for Structural Concrete, Bridge Footing and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in Structural Concrete, Bridge Footing, complete in place, as shown on the plans, as specified in these Special Provisions and State Standard Specifications, and as directed by the Construction Manager.

ITEM NO. 165 - STRUCTURAL CONCRETE, BRIDGE

Structural Concrete, Bridge shall conform to the provisions in Section 2.22, "Concrete Structures" of the technical specifications and these special provisions.

Full compensation for street lighting anchor bolts shall be considered as included in the contract price paid per cubic yard for Structural Concrete, Bridge and no additional compensation will be allowed therefor.

Full compensation for removing polystyrene and hardboard, where shown on the plans, shall be considered as included in the contract price paid per cubic yard for Structural Concrete, Bridge and no separate payment will be made therefor.

Full compensation for capped 4" plastic pipe shall be considered as included in the contract price paid per cubic yard for Structural Concrete, Bridge and no additional compensation will be allowed therefor.

Full compensation for falsework shall be considered as included in the contract price paid per cubic yard for Structural Concrete, Bridge and no separate payment will be made therefor.

Full compensation for CRIP shall be considered as included in the contract price paid per cubic yard for Structural Concrete, Bridge and no separate payment will be made therefor.

Full compensation for elastomeric bearing pads shall be considered as included in the contract price paid per cubic yard for Structural Concrete, Bridge and no separate payment will be made therefor.

Full compensation for slide bearings shall be considered as included in the contract price paid per cubic yard for Structural Concrete, Bridge and no separate payment will be made therefor.

Full compensation for forming blockouts for joint seal assemblies, utility openings, and sidewalks, as shown on the plans, shall be considered as included in the contract price paid per cubic yard for Structural Concrete, Bridge and no separate payment will be made therefor.

Full compensation for public notification and airborne monitoring for deck crack treatment shall be considered as included in the contract price paid per cubic yard for Structural Concrete, Bridge, and no additional compensation will be allowed therefor.

Measurement and Payment for Structural Concrete, Bridge shall conform to the requirements specified in Section 51-1.22, "Measurement" and Section 51-1.23, "Payment," of the State Standard Specifications and these special provisions. The unit price bid per cubic yard for Structural Concrete, Bridge and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in Structural Concrete, Bridge, complete in place, including furnishing and installing 4" capped plastic pipe, for street lighting anchor bolts and traffic signal light anchor bolts, access openings, removing polystyrene and hardboard, for falsework, CRIP, slide bearings, elastomeric bearing pads, forming blockouts, public notification and airborne monitoring, as shown on the plans, as specified in these Special Provisions and State Standard Specifications, and as directed by the Construction Manager.

Full compensation for furnishing and installing access opening covers in soffits of new cast-in-place box girder bridges shall be considered as included in the contract price paid per cubic yard for structural concrete, bridge and no separate payment will be made therefor.

ITEM NO. 166 - STRUCTURAL CONCRETE, APPROACH SLAB TYPE EQ(10)

Structural Concrete, Approach Slab Type EQ(10) shall conform to the provisions in Section 2.23, "Structure Approach Slabs Type EQ(10) and Type N(30S)" of the technical specifications and these special provisions.

Structural concrete, approach slab Type EQ(10) will be measured and paid for in conformance with the provisions in Section 51-1.22, "Measurement," and Section 51-1.23, "Payment," of the Standard Specifications and these special provisions.

Full compensation for the structure approach drainage system including geocomposite drain, plastic pipe, and drainage pads, treated permeable base, and filter fabric, shall be considered as included in the contract price paid per cubic yard for structural concrete, approach slab of the type shown in the Engineer's Estimate, and no additional compensation will be allowed therefor.

ITEM NO. 167 - ARCHITECTURAL TREATMENT (BRIDGE)

Architectural Treatment (Bridge) shall conform to the provisions in Section 2.24, "Architectural Treatment" of the technical specifications and these special provisions.

Full compensation for creating gaps within the Architectural Treatment, as shown on the plans, shall be considered as included in the contract unit price paid per for Architectural Treatment and no additional compensation will be allowed therefor.

Payment for Architectural Treatment shall be based on the unit price paid per square foot for Architectural Treatment shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in Architectural Treatment, complete in place, as shown on the plans, as specified in the State Standard Specifications and these special provisions, and as directed by the Construction Manager.

ITEM NO. 168 - JOINT SEAL (TYPE B MR=2") (BRIDGE)

Joint Seal Type B (MR=2") (Bridge) shall conform to the provisions in State Standard Specifications 51-1.12F "Sealed Joints".

Joint Seal Type B (MR=2") (Bridge) will be measured by the linear foot from end to end along the centerline of the completed seal including return sections at curb faces or as shown on the plans. Where individual seals are overlapped or are superimposed, each seal will be measured separately.

Payment The contract prices paid per linear foot for joint seals of the types and Movement Ratings listed in the contract items shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in the constructing the joint seals, including protecting, repairing, cleaning and saw cutting joints complete in place, as shown the plans, as specified in the State Standard Specifications, in these Special Provisions, and as directed by the Construction Manager.

ITEM NO. 169 - JOINT SEAL ASSEMBLY (MR=6") (MOD)

Joint Seal Assembly (MR=6") (Mod) shall conform to the provisions in Section 2.25 "Joint Seal Assembly (Movement Rating Exceeding 4 Inches)" of the technical specifications and these special provisions.

Full compensation for removing 1/2" concrete recess from existing Type 26 Concrete barrier, furnishing barrier plate and fill plate and for doing all the work involved in installing these plates including furnishing labor and materials complete in place and as shown on the plans shall be considered as included in the contract unit price paid per linear foot for Joint Seal Assembly (MR=6") (Mod), and no separate payment will be made therefor.

Full compensation for additional materials and design required to satisfy the support exclusion zones shown on the plans shall be considered as included in the contract unit price paid per linear foot for Joint Seal Assembly (MR=6") (Mod) and no separate payment will be made therefor.

Full compensation for cleaning and painting of joint seal assemblies shall be considered as included in the contract unit price paid per linear foot for Joint Seal Assembly (MR=6") (Mod), and no separate payment will be made therefor.

Measurement and payment for Joint Seal Assembly (MR=6") (Mod) shall conform to the provisions in Section 51-1.22, "Measurement," and Section 51-1.23, "Payment," of the State Standard Specifications and these special provisions. The unit price bid per linear foot for Joint Seal Assembly (MR=6") (Mod) and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in constructing joint seal assemblies, complete in place, including protecting, repairing, cleaning and saw cutting joints, as shown on the plans, as specified in these Special Provisions and State Standard Specifications, and as directed by the Construction Manager.

ITEM NO. 170 - WABO SEISMIC SPAN II

WABO Seismic Span II shall conform to the provisions in Section 2.26 "WABO Seismic Span II" of the technical specifications and these special provisions.

The unit price bid per linear foot for WABO Seismic Span II and shall include full compensation for furnishing all labor, materials, tools, equipment, coatings, and incidentals, and for doing all the work involved in WABO Seismic Span II, complete in place, as shown on the plans, as specified in these Special Provisions and State Standard Specifications, and as directed by the Construction Manager.

ITEM NO. 171 - BAR REINFORCING STEEL (BRIDGE)

Bar Reinforcing Steel (Bridge) shall conform to the provisions in Section 2.27, "Reinforcement" of the technical specifications and these special provisions.

Measurement and payment for Bar Reinforcing Steel (Bridge) shall conform to the provisions in Section 52-1.10, "Measurement," and Section 52-1.11, "Payment," of the State Standard Specifications and these special provisions. The unit price bid per pound for Bar Reinforcing Steel (Bridge) and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in Bar Reinforcing Steel (Bridge), including service splices, complete in place, as shown on the plans, as specified in these Special Provisions and State Standard Specifications, and as directed by the Construction Manager.

ITEM NO. 172 - BAR REINFORCING STEEL (EPOXY COATED) (BRIDGE)

Bar Reinforcing Steel (Epoxy Coated) (Bridge) shall conform to the provisions in Section 2.27, "Reinforcement" of the technical specifications and these special provisions.

Measurement and payment for Bar Reinforcing Steel (Epoxy Coated) (Bridge) shall conform to the provisions in Section 52-1.10, "Measurement," and Section 52-1.11, "Payment," of the State Standard Specifications and these special provisions. The unit price bid per pound for Bar Reinforcing Steel (Epoxy Coated) (Bridge) and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in Bar Reinforcing Steel (Epoxy Coated) (Bridge), complete in place, as shown on the plans, as specified in these Special Provisions and State Standard Specifications, and as directed by the Construction Manager.

ITEM NO. 173 - PREPARE AND PAINT CONCRETE (BRIDGE)

Prepare And Paint Concrete shall conform to the provisions in Section 2.29, "Prepare and Paint Concrete Surfaces" of the technical specifications and these special provisions.

Concrete surfaces to be prepared and painted will be measured by the square foot. Measurement will be determined along the surface of the actual areas painted.

Payment shall be based at the unit price paid per square foot for Prepare And Paint Concrete shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in preparing of and applying , complete in place, anti-graffiti coating, construction of test panels and repairing damaged areas, as shown on the plans, as specified in the State Standard Specifications and these special provisions, and as directed by the Construction Manager.

ITEM NO. 174 - BRIDGE DECK DRAINAGE SYSTEM

Bridge Deck Drainage System shall conform to the provisions in Section 2.30 "Bridge Deck Drainage System" of the technical specifications and these special provisions.

Bridge deck drainage systems will be measured and paid for by the pound in the same manner specified for miscellaneous metal (bridge) in Section 75-1.06, "Measurement," and Section 75-1.07, "Payment," of the State Standard Specifications. The unit price bid per pound for Bridge Deck Drainage System and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in Bridge Deck Drainage System, complete in place, including pipe, hangers, reinforcement of hangers, bolts and bicycle proof grates, as shown on the plans, as specified in these Special Provisions and State Standard Specifications, and as directed by the Construction Manager.

Full compensation for furnishing including incidentals and all labor, tools and equipment for installing and doing all the work for welded steel pipe casing around the deck drainage pipe underneath the approach slabs as shown on the contract plans and directed by the Construction Manager shall be considered as included in the measurement and payment of Bridge Deck Drain System and no separate payment will be allowed therefor.

ITEM NO. 175 - CALIFORNIA ST-40 BRIDGE RAIL (MOD) (BRIDGE)

California ST-40 Bridge Rail (MOD) shall conform to the provisions in Section 2.33 "Metal Bridge Railing" of the technical specifications and these special provisions.

Full compensation for concrete, bar reinforcing steel, grooves, broom finish and coloring on the sidewalk shall be considered as included in the contract price paid per linear foot for California ST-40 Bridge Rail (MOD) and no separate payment will be made therefor.

California ST-40 Bridge Rail (MOD) will be measured and paid for by the linear foot as specified for in Section 83-2.03, "Measurement," and Section 83-2.04, "Payment," of the State Standard Specifications and these special provisions. The unit price bid per linear foot for California ST-40 Bridge Rail (MOD) and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in California ST-40 Bridge Rail (MOD), complete in place, including the grooves, broom finish and coloring on the sidewalk, the concrete parapet steel plates, and saw cutting, removal, cleaning and all materials incidentals for construction of the sidewalk ramp as shown on the plans, as specified in these Special Provisions and State Standard Specifications, and as directed by the Construction Manager.

ITEM NO. 176 - UTILITY CONDUITS (BRIDGE)

Utility Conduits (Bridge) shall conform to the provisions in Section 2.11, "Utility Conduits" of the technical specifications and these special provisions.

Payment shall be the lump sum unit price for Utility Conduits and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in furnishing and installing Utility Conduits as shown on the plans, as specified in these specifications and the special provisions, and as directed by the Construction Manager. Full compensation for all additional materials and labor, not shown or specified necessary to complete the installation of the Utility Conduits, shall be considered as included in the lump sum price for Utility Conduits, and no additional compensation will be allowed therefore.

The Contractor shall comply with the provisions of Section 86-1.03, "Cost Break-down," of the Caltrans Standard Specifications.

Conduit – list by each size and type

ITEM NO. 177 - WATERLINE (BRIDGE)

Waterline shall conform to the provisions in Section 2.12, "Waterline (Bridge)" of the technical specifications and these special provisions.

Payment shall be the lump sum unit price for Waterline and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in furnishing and installing the Waterline and appurtenances as shown on the plans, as specified in these specifications and the special provisions, and as directed by the Construction Manager, including but not limited to pipe, casing, air release valve, expansion joints, pipe supports, access lids, frames and pressure testing. Full compensation for all additional materials and labor, not shown or specified necessary to complete the installation of the Waterline, shall be considered as included in the lump sum price for Waterline, and no additional compensation will be allowed therefore.

The Contractor shall comply with the provisions of Section 86-1.03, "Cost Break-down," of the Caltrans Standard Specifications.

The cost break-down shall, as a minimum, include the following items:

- water pipe – list by linear feet
- casing – list by linear feet
- expansion joints
- pipe supports
- access manhole lids and frames

ITEM NO. 178 - VIBRATION MONITORING

Vibration Monitoring shall conform to the provisions in Section 2.13, "Vibration Monitoring" of the technical specifications and these special provisions.

This item includes the provision of all labor, supervision, materials, tools and equipment required to install and maintain vibration-monitoring instrumentation, collecting vibration data, interpreting, and reporting the results of vibration monitoring as stated in these specifications. This item shall include but is not limited to the following: the implementation by the Contractor of any required remedial and precautionary measures, using the vibration

monitoring data, to protect the building facilities within the vicinity of the project from excess vibration during construction activities as specified in the Standard Specifications and these special provisions, and as directed by the Construction Manager.

Measurement and payment shall be at the contract unit price bid per lump sum.

MISCELLANEOUS

ITEM NO. 179 - JOINT UTILITY TRENCH - EXCAVATION, BACKFILL, AND COMPACTION (5TH STREET SOUTH)

The contractor shall perform all excavation, backfill, and compaction of joint utility trenches for electric, gas, telephone, or cable tv conduits in conformance with the Drawings, Section 2 of the Technical Specifications, and these Special Provisions. This item includes all excavation, backfill, and compaction necessary to provide the required spacing of facilities within the common trench as well as crossings of other utilities. All backfill material shall be approved by the Construction Manager prior to placement and shall be in conformance with current utility provider and City of Sacramento Construction Specifications. Joint Utility Trenches within areas containing Cellular Concrete Backfill shall be backfilled with like material. This item shall also include any acceptable trenchless operation necessary to install joint utility conduits and pipe lines beneath the existing light rail tracks as well as all pavement replacement within existing streets to the satisfaction of the City of Sacramento. The Contractor shall coordinate all required inspections with the appropriate utility companies.

Payment shall be at the lump sum bid price for Joint Utility Trench – Excavation, Backfill, and Compaction and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals as required to furnish Joint Utility Trench – Excavation, Backfill, and Compaction as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 180 - JOINT UTILITY TRENCH EXCAVATION, BACKFILL, AND COMPACTION (5TH STREET NORTH, RAILYARDS BLVD)

The contractor shall perform all excavation, backfill, and compaction of joint utility trenches for electric, gas, telephone, or cable tv conduits in conformance with the Drawings, Section 2 of the Technical Specifications, and these Special Provisions. This item includes all excavation, backfill, and compaction necessary to provide the required spacing of facilities within the common trench as well as crossings of other utilities. All backfill material shall be approved by the Construction Manager prior to placement and shall be in conformance with current utility provider and City of Sacramento Construction Specifications. All pavement replacement within existing streets to the satisfaction of the City of Sacramento. The Contractor shall coordinate all required inspections with the appropriate utility companies.

Payment shall be at the lump sum bid price for Joint Utility Trench – Excavation, Backfill, and Compaction and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals as required to furnish Joint Utility Trench – Excavation, Backfill, and Compaction as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 181 - SMUD CONDUIT SYSTEM (5TH STREET SOUTH)

The contractor shall furnish and install all SMUD conduits in conformance with the Drawings, Section 2 of the Technical Specifications, and these Special Provisions. All conduits shall be in conformance with SMUD Engineering Specification T007 included in Appendix F of Volume 2 of these Special Provisions. The Contractor shall coordinate all required inspections with SMUD prior to placing backfill over any conduit. Any conduit found deficient by SMUD shall be replaced at the Contractor's expense.

Payment shall be at the lump sum bid price for SMUD conduit system and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals as required to furnish and install the SMUD Conduit System as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 182 - SMUD CONDUIT SYSTEM (5TH STREET NORTH, RAILYARDS BLVD.)

The contractor shall furnish and install all SMUD conduits in conformance with the Drawings, Section 2 of the Technical Specifications, and these Special Provisions. All conduits shall be in conformance with SMUD Engineering Specification T007 included in Appendix F of Volume 2 of these Special Provisions. The Contractor shall coordinate all required inspections with SMUD prior to placing backfill over any conduit. Any conduit found deficient by SMUD shall be replaced at the Contractor's expense.

Payment shall be at the lump sum bid price for SMUD conduit system and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals as required to furnish and install the SMUD Conduit System as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 183 - SMUD SPLICE BOX (17" x 30")

The contractor shall furnish and install SMUD Splice Box (17" x 30") as shown on the Drawings and in conformance with these Special Provisions. The splice box shall be in conformance with SMUD Engr. Spec. T007. The lid and box shall be H-20 traffic rated where placed within a vehicle traffic area. This item includes all excavation, bedding, and backfill necessary for a complete installation. The Contractor shall coordinate all required inspections with SMUD.

Payment shall be made for each SMUD Splice Box (17"x30") installed and ready for service and shall be full compensation for furnishing all labor, materials, tools, and equipment and incidentals as required to furnish and install SMUD Splice Box (17"x30") and appurtenances as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 184 - SMUD SPLICE BOX (24" x 36")

The contractor shall furnish and install SMUD Splice Box (24"x36") as shown on the Drawings and in conformance with these Special Provisions. The splice box shall be in conformance with SMUD Engr. Spec. T007. The lid and box shall be H-20 traffic rated where placed within a vehicle traffic area. This item includes all excavation, bedding, and backfill necessary for a complete installation. The Contractor shall coordinate all required inspections with SMUD.

Payment shall be made for each SMUD Splice Box (24"x36") installed and ready for service and shall be full compensation for furnishing all labor, materials, tools, and equipment and incidentals as required to furnish and install SMUD Splice Box (24"x36") and appurtenances as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 185 - SMUD SPLICING VAULT (6' x 8')

The contractor shall furnish and install SMUD Splicing Vault (6'x8') as shown on the Drawings and in conformance with these Special Provisions. The splicing vault shall be in conformance with SMUD Engr. Spec. T007, drawings UVC1.6. The vault cover shall be spring assist where placed in future landscape or sidewalk areas per SMUD drawing UVC1.6.1. Where placed in areas subject to current or future vehicle traffic, the vault shall be installed with a full traffic vault cover per SMUD drawing UVC1.6.2. This item includes all excavation, bedding, and backfill necessary for a complete installation. The Contractor shall coordinate all required inspections with SMUD.

Payment shall be made for each SMUD Splicing Vault (6'x8') installed and ready for service and shall be full compensation for furnishing all labor, materials, tools, and equipment and incidentals as required to furnish and install SMUD Splicing Vault (6'x8') and appurtenances as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 186 - SMUD PRIMARY SPLICING ENCLOSURE (8'x14'x8')

The contractor shall furnish and install SMUD Primary Splicing Enclosure (8'x14'x8') as shown on the Drawings and in conformance with these Special Provisions. The splice box shall be in conformance with SMUD Drawing UVC1.8B included in Appendix F of Volume 2 of these Special Provisions.. The lid and box shall be H-20 traffic rated where placed within a vehicle traffic area. This item includes all excavation, bedding, and backfill necessary for a complete installation. The Contractor shall coordinate all required inspections with SMUD.

Payment shall be made for each SMUD Primary Splicing Enclosure (8'x14'x8') installed and ready for service and shall be full compensation for furnishing all labor, materials, tools, and equipment and incidentals as required to furnish and install SMUD Primary Splicing Enclosure (8'x14'x8') and appurtenances as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 187 - SMUD 3 PHASE TRANSFORMER PAD

The contractor shall furnish and install SMUD 3 Phase Transformer Pad as shown on the Drawings and in conformance with these Special Provisions. The transformer pad shall be in conformance with SMUD Drawing UVD2.2. This item includes all excavation, bedding, and backfill necessary for a complete installation. The Contractor shall coordinate all required inspections with SMUD.

Payment shall be made for each SMUD 3 Phase Transformer Pad installed and ready for service and shall be full compensation for furnishing all labor, materials, tools, and equipment and incidentals as required to furnish and install SMUD 3 Phase Transformer Pad and appurtenances as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 188 - PG&E GAS SYSTEM (5TH STREET SOUTH)

The contractor shall furnish and install all PG&E gas lines in conformance with the Drawings, Section 2 of the Technical Specifications, and these Special Provisions. All gas lines shall be in conformance with PG&E requirements. The Contractor shall coordinate all required inspections with PG&E prior to placing backfill over any conduit. This item shall include all testing required by PG&E. Any gas line found deficient by PG&E shall be replaced and retested at the Contractor's expense.

Payment shall be at the lump sum bid price for PG&E Gas System and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals as required to furnish and install the PG&E Gas System as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 189 - PG&E GAS SYSTEM (5TH STREET NORTH, RAILYARDS BLVD)

The contractor shall furnish and install all PG&E gas lines in conformance with the Drawings, Section 2 of the Technical Specifications, and these Special Provisions. All gas lines shall be in conformance with PG&E requirements. The Contractor shall coordinate all required inspections with PG&E prior to placing backfill over any conduit. This item shall include all testing required by PG&E. Any gas line found deficient by PG&E shall be replaced and retested at the Contractor's expense.

Payment shall be at the lump sum bid price for PG&E Gas System and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals as required to furnish and install the PG&E Gas System as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 190 - COMCAST CONDUIT SYSTEM (5TH STREET SOUTH)

The contractor shall furnish and install all Comcast conduits in conformance with the Drawings, Section 2 of the Technical Specifications, and these Special Provisions. All conduits shall be in conformance with Comcast specifications included in Appendix F of Volume 2 of these Special Provisions.. The Contractor shall coordinate all required inspections with Comcast prior to placing backfill over any conduit. Any conduit found deficient by Comcast shall be replaced at the Contractor's expense.

Payment shall be at the lump sum bid price for Comcast Conduit System and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals as required to furnish and install the Comcast Conduit System as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 191 - COMCAST CONDUIT SYSTEM (5TH STREET NORTH, RAILYARDS BLVD)

The contractor shall furnish and install all Comcast conduits in conformance with the Drawings, Section 2 of the Technical Specifications, and these Special Provisions. All conduits shall be in conformance with Comcast specifications included in Appendix F of Volume 2 of these Special Provisions.. The Contractor shall coordinate all required inspections with Comcast prior to placing backfill over any conduit. Any conduit found deficient by Comcast shall be replaced at the Contractor's expense.

Payment shall be at the lump sum bid price for Comcast Conduit System and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals as required to furnish and install the Comcast Conduit System as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 192 - CABLE TV (17"x30") VAULT

The contractor shall furnish and install Cable TV (17"x30") Vault as shown on the Drawings and in conformance with these Special Provisions. The vault shall be in conformance with the Comcast Vault Installation Detail. This item includes all excavation, bedding, and backfill necessary for a complete installation. The Contractor shall coordinate all required inspections with Comcast.

Payment shall be made for each Cable TV (17" x 30") Vault installed and ready for service and shall be full compensation for furnishing all labor, materials, tools, and equipment and incidentals as required to furnish and install Cable TV (17" x 30") Vault and appurtenances as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 193 - AT&T CONDUIT SYSTEM (5TH STREET SOUTH)

The contractor shall furnish and install all AT&T conduits in conformance with the Drawings, Section 2 of the Technical Specifications, and these Special Provisions. All conduits shall be in conformance with AT&T specifications included in Appendix F of Volume 2 of these Special Provisions.. The Contractor shall coordinate all required inspections with AT&T prior to placing backfill over any conduit. Any conduit found deficient by AT&T shall be replaced at the Contractor's expense.

Payment shall be at the lump sum bid price for AT&T Conduit System and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals as required to furnish and install the AT&T Conduit System as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 194 - AT&T CONDUIT SYSTEM (5TH STREET NORTH, RAILYARDS BLVD)

The contractor shall furnish and install all AT&T conduits in conformance with the Drawings, Section 2 of the Technical Specifications, and these Special Provisions. All conduits shall be in conformance with AT&T specifications included in Appendix F of Volume 2 of these Special Provisions.. The Contractor shall coordinate all required inspections with AT&T prior to placing backfill over any conduit. Any conduit found deficient by AT&T shall be replaced at the Contractor's expense.

Payment shall be at the lump sum bid price for AT&T Conduit System and shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals as required to furnish and install the AT&T Conduit System as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 195 - AT&T PTS 65 PHONE VALUT

The contractor shall furnish and install AT&T PTS 65 Phone Vault as shown on the Drawings and in conformance with these Special Provisions. The vault shall be in conformance with AT&T PID: 000600098 included in Appendix F of Volume 2 of these Special Provisions.

The lid and box shall be H-20 traffic rated where placed within a vehicle traffic area. This item includes all excavation, bedding, and backfill necessary for a complete installation. The Contractor shall coordinate all required inspections with AT&T.

Payment shall be made for each AT&T PTS 65 Phone Vault installed and ready for service and shall be full compensation for furnishing all labor, materials, tools, and equipment and incidentals as required to furnish and install AT&T PTS 65 Phone Vault and appurtenances as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 196 - AT&T PTS 3660 PHONE VAULT

The contractor shall furnish and install AT&T PTS 3660 Phone Vault as shown on the Drawings and in conformance with these Special Provisions. The vault shall be in conformance with AT&T PID: 000600072 included in Appendix F of Volume 2 of these Special Provisions. The lid and box shall be H-20 traffic rated where placed within a vehicle traffic area. This item includes all excavation, bedding, and backfill necessary for a complete installation. The Contractor shall coordinate all required inspections with AT&T.

Payment shall be made for each AT&T PTS 3660 Phone Vault installed and ready for service and shall be full compensation for furnishing all labor, materials, tools, and equipment and incidentals as required to furnish and install AT&T PTS 3660 Phone Vault and appurtenances as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 197 - INJECT CRACK (EPOXY)

The basis of payment for inject crack (epoxy) shall be a total of the lengths of the cracks which are designated by the Engineer to be injected and which have been filled with epoxy.

Where cracks are designated for injection on opposite sides of a concrete member and the epoxy adhesive injected on one side penetrates through the members to completely fill the crack on the opposite side, payment will be made for cracks on both sides, as though injection has been performed on both sides, except that no payment will be made for such cracks on the opposite side that were not designated by the Engineer for injection.

Where a crack designated for injection extends around a corner of a concrete member, the length of crack on both faces will be measured for payment.

The contract price paid per foot for inject crack (epoxy) shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in preparing and injecting the cracks in existing concrete, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

ITEM NO. 198 - BRIDGE CANOPIES

The contractor shall provide design for bridge canopies consistent with the Pedestrian Shaded Structure Concept / Details included in Appendix C and in conformance to with the provisions in Section 2.35, "STRUCTURAL STEEL FRAMING (BRIDGE CANOPIES)", Section 2.36, "ARCHITECTURALLY EXPOSED STEEL (BRIDGE CANOPIES)", and Section 2.37, "METAL FABRICATIONS (BRIDGE CANOPIES)" of the technical specification and these

special provisions. The contractor shall provide a design for City review and comment at 65%, 95% and 100% design completion. The bridge canopy design must satisfy all applicable building codes. The contractor is responsible for obtaining all necessary building permits for the construction of the bridge canopies. This item includes the design, installation, and permitting for similar bridge canopies at the two (2) lookout points on the 5th Street bridge.

The bridge canopies shall at a minimum meet the following requirements:

1. 50-year design life
2. Design consistent in size and appearance with the conceptual drawings included in Appendix C.
3. Vandal resistant
4. Incorporate down lighting, provide a minimum of 2.0 foot candles of lighting in the area covered by the canopy.
5. Roof runoff must be directed toward the street. Runoff cannot fall to the railroad right of way below.
6. Color and material finish samples to be provided to the City for review and approval.

Payment shall be at the lump sum bid price for bridge canopies and shall be full compensation for furnishing all labor, materials, tools, equipment, designs, permits and incidentals as required to provide bridge canopies as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 199 - RELOCATE 7TH STREET CONSTRUCTION ENTRANCE

The contractor shall relocate the existing automated electric gate at 7th Street to the location shown on the Construction Staging and Access Plan. This item shall include all equipment, labor, and materials to relocate the existing gate, track, solar panel, touch pad and other appurtenances necessary to operate the gate. This item shall also include installing 6 foot high chain link fence across the opening created by relocating the existing gate, removing existing fence to create a new opening for the relocated gate, and installing new 6 foot high chain link fence as necessary to connect the relocated gate to the existing fence. This item shall also include furnishing and installing new asphalt pavement (3" AC over 9" AB minimum) at least 20 feet wide from the existing asphalt pavement at the 7th Street entrance to the interior of the site 20 feet west of the relocated gate.

Payment shall be at the lump sum price bid and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals as required to furnish and install Street Lights as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 200 - CONSTRUCT PAVED ACCESS AT F STREET ENTRANCE

The contractor shall construct a 20 foot wide paved access of 3" AC over 9" AB minimum as shown on the Construction Staging and Access Plan. This item shall include all equipment, labor, and materials to prepare the area prior to paving, place the aggregate base, and place the asphalt paving.

Payment shall be at the lump sum price bid and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals as required to furnish and install

Street Lights as shown on the Drawings and, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 201 - ADJUST EXISTING RIM TO GRADE

The contractor shall provide all labor and materials necessary to adjust the rim elevation of existing storm drain manholes to match the elevation of the new pavement. The work includes but is not limited to removing the existing rim and lid, adjusting the rim elevation flush with the new pavement surface and replacing the rim and lid.

Payment shall be made for each rim adjusted and ready for service and shall be full compensation for furnishing all labor, materials, tolls, and equipment and incidentals as required to adjust utility rims to grade as shown on the Drawings, as specified in these Special Provisions, or as directed by the Construction Manager.

ITEM NO. 202 - 1 YEAR MAINTENANCE PERIOD

This item shall consist of maintaining the landscape planted areas installed in this contract as shown on the Drawings in conformance with Sections 35-8 "Planting Shrub and Groundcover Areas" through 35-16 "Landscape Maintenance" of the City Standard Specifications and as amended by these Special Provisions.

- A. Start of Maintenance Period shall conform to Section 35-15 "Start of Maintenance Period" of the City Standard Specifications.
- B. Watering shall conform to Section 35-13 "Watering" of the City Standard Specifications and these Special Provisions, using the installed irrigation system.
- C. Plant Replacement shall conform to Sections 35-14 "Replacement" of the City Standard Specifications.
- D. Plant Establishment period or Landscape Maintenance Period shall conform to Section 35-16 "Landscape Maintenance" of the Standard Specifications and be amended as follows: The Landscape Maintenance Period shall be one (1) year and shall begin on the date of the Start of Maintenance Period. Plant Establishment and Landscape Maintenance, including maintenance of the irrigation system, shall continue until final acceptance of the work.
- E. Tree and Shrub Maintenance: Trees and shrubs shall be pruned and shaped as directed by the Construction Manager. Trees shall be re-staked as necessary. Maintain waering basins and shrub areas free of weeds.
- F. Pre-Final Inspection shall conform to Section 35-17 "Pre-Final Inspection" of the City Standard Specifications and be amended as follows: One (1) year after the Start of Maintenance Period, the Construction Manger shall conduct a pre-final inspection. At the pre-final inspection or at any time thereafter, should the Construction Manager determine that the project meets the requirements of the final acceptance of the work, he may issue final acceptance of the project to the Contractor.
- G. Final Inspection shall conform to Section 35-18 "Final inspection" of the City Standard Specifications.

Payment shall be at the lump sum price bid and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved as shown on the Drawings, as specified in these Special Provisions or as directed by the Construction Manager.

ITEM NO. 203 - CDF INITIAL TRENCH BACKFILL

This item includes furnishing and installing CDF Initial Trench Backfill conforming to Section 10-16 of the City Standard Specifications in accordance with the drawings and Special Provisions.

The unit bid price paid per cubic yard of CDF Initial Trench Backfill shall include full compensation for furnishing all labor, materials, tools, equipment, laboratory testing and incidentals and for doing all the work involved in placing CDF Initial Trench Backfill, as shown on the plans, as specified in the State Standard Specifications and these special provisions, and as directed by the Construction Manager.

SECTION 5.0 - STANDARD DRAWINGS

CITY STANDARD DRAWINGS

Use City standard drawings as provided in City of Sacramento Standard Specifications for Public Works Construction, dated June 2007, unless more current version of standard drawing is provided herein.

<u>Title</u>	<u>Dwg No.</u>
Single Flare Curb Ramp	T-73
Dual Flare Curb Ramps	T-74
Truncated Dome Standard Layout	T-78
Truncated Dome Detail	T-79
Curb Painting	T-160
Concrete Survey Monument	T-350
Type "B" Drop Inlet	S-10
Standard Manhole No. 3A	S-80
Inside/Outside Drop Connection for Main Lines $\geq 8"$	S-130
Storm Drain Message Layout	Q-70
Fire Hydrant Installations	W-201
Standard 2-inch and 4-inch Blow-Off	W-301
Std Water Service Taps 1-inch Thru 2-inch	W-403
2-inch & Smaller RP Assembly w/Meter on all City	
Irrigation Systems	W-606
Backfilling and Resurfacing In Paved Areas	W-701
Ornamental Street Light Style I	E-60
Concrete Pull Box	E-210

STATE STANDARD PLANS LIST

The State Standard Plan sheets applicable to this contract include, but are not limited to those indicated below. Applicable Revised Standard Plans (RSP) and New Standard Plans (NSP) indicated below are included in the project plans as Standard Plan sheets.

	ACRONYMS, ABBREVIATIONS AND SYMBOLS
A10A	Acronyms and Abbreviations (Sheet 1 of 2)
A10B	Acronyms and Abbreviations (Sheet 2 of 2)
A10C	Symbols (Sheet 1 of 2)
A10D	Symbols (Sheet 2 of 2)
	EXCAVATION AND BACKFILL
A62C	Limits of Payment for Excavation and Backfill – Bridge
	BRIDGE DETAILS
B0-1	Bridge Details
B0-3	Bridge Details
B0-5	Bridge Details
B0-13	Bridge Details
	PILES
RSP B2-8	Pile Details – Class 200
	JOINT SEALS
RSP B6-21	Joint Seals (Maximum Movement Rating = 2")
	BOX GIRDER DETAILS
B7-1	Box Girder Details
	DECK DRAINS
B7-5	Deck Drains
B7-6	Deck Drains – Types D-1 and D-2
B7-8	Deck Drainage Details
	UTILITY OPENING
B7-10	Utility Opening – Box Girder
B7-11	Utility Details
	CAST-IN-PLACE PRESTRESSED GIRDER
B8-5	Cast-In-Place Prestressed Girder Details
B14-5	Water Supply Line (Details) (Pipe Sizes Less Than 4")
	ROADSIDE SIGNS
RS1	Roadside Signs, Typical Installation Details No. 1
RS2	Roadside Signs – Wood Post, Typical Installation Details No. 2
RS4	Roadside Signs, Typical Installation Details No. 4

PROJECT #: T15135800
PROJECT NAME: CM Services for 5th Street Viaduct
DEPARTMENT: Public Works
DIVISION: Engineering Services

CITY OF SACRAMENTO

**PROFESSIONAL SERVICES AGREEMENT
FOR ARCHITECTS, LANDSCAPE
ARCHITECTS, PROFESSIONAL ENGINEERS,
AND PROFESSIONAL LAND SURVEYORS**

THIS AGREEMENT is made at Sacramento, California, as of October 15, 2013, by and between the **CITY OF SACRAMENTO**, a municipal corporation ("CITY"), and

*Vali Cooper & Associates, Inc.
1760 Creekside Oaks Drive, STE 140, Sacramento CA 95833
P: 916-925-0952/F: 916-925-0954*

("CONTRACTOR"), who agree as follows:

- 1. Services.** Subject to the terms and conditions set forth in this Agreement, CONTRACTOR shall provide to CITY the services described in Exhibit A. CONTRACTOR shall provide said services at the time, place, and in the manner specified in Exhibit A. CONTRACTOR shall not be compensated for services outside the scope of Exhibit A unless prior to the commencement of such services: (a) CONTRACTOR notifies CITY and CITY agrees that such services are outside the scope of Exhibit A; (b) CONTRACTOR estimates the additional compensation required for these additional services; and (c) CITY, after notice, approves in writing a Supplemental Agreement specifying the additional services and amount of compensation therefor. CITY shall have no obligations whatsoever under this Agreement and/or any Supplemental Agreement, unless and until this Agreement or any Supplemental Agreement is approved by the Sacramento City Manager or the City Manager's authorized designee, or by the Sacramento City Council, as required by the Sacramento City Code.
- 2. Payment.** CITY shall pay CONTRACTOR for services rendered pursuant to this Agreement at the times and in the manner set forth in Exhibit B. The payments specified in Exhibit B shall be the only payments to be made to CONTRACTOR for the services rendered pursuant to this Agreement unless pursuant to Section 1, above, CITY approves additional compensation for additional services. CONTRACTOR shall submit all billings for said services to CITY in the manner specified in Exhibit B, or, if not specified in Exhibit B, according to the usual and customary procedures and practices that CONTRACTOR uses for billing clients similar to CITY.
- 3. Facilities and Equipment.** Except as set forth in Exhibit C, CONTRACTOR shall, at its sole cost and expense, furnish all facilities and equipment that may be required for furnishing services pursuant to this Agreement. CITY shall furnish to CONTRACTOR only the facilities and equipment listed in Exhibit C according to any terms and conditions set forth in Exhibit C.
- 4. General Provisions.** The General Provisions set forth in Exhibit D, that include indemnity and insurance requirements, are part of this Agreement. In the event of any conflict between the General Provisions and any terms or conditions of any document prepared or provided by CONTRACTOR and made a part of

this Agreement, including without limitation any document relating to the scope of services or payment therefor, the General Provisions shall control over said terms or conditions.

- 5. **Non-Discrimination in Employee Benefits.** This Agreement is subject to the provisions of Sacramento City Code Chapter 3.54, Non-Discrimination in Employee Benefits by City Contractors. The requirements of Sacramento City Code Chapter 3.54 are summarized in Exhibit E. CONTRACTOR is required to sign the attached Declaration of Compliance (Equal Benefits Ordinance), to assure compliance with these requirements.
- 6. **Authority.** The person signing this Agreement for CONTRACTOR hereby represents and warrants that he/she is fully authorized to sign this Agreement on behalf of CONTRACTOR and to bind CONTRACTOR to the performance of its obligations hereunder.
- 7. **Exhibits.** All exhibits referred to herein are attached hereto and are by this reference incorporated as if set forth fully herein.

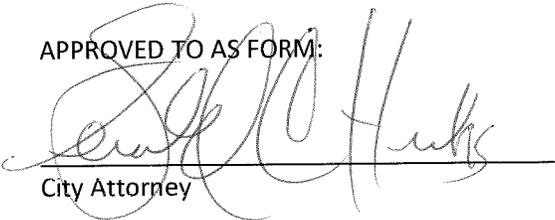
Executed as of the day and year first above stated.

CITY OF SACRAMENTO
A Municipal Corporation

By: _____
Print name: _____
Title: _____

For: John F. Shirey, City Manager

APPROVED TO AS FORM:



City Attorney

ATTEST:

City Clerk

Attachments

- Exhibit A - Scope of Service
- Exhibit B - Fee Schedule/Manner of Payment
- Exhibit C - Facilities/Equipment Provided
- Exhibit D - General Provisions
- Exhibit E - Non-Discrimination in Employee Benefits

CONTRACTOR:

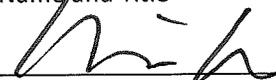
VALI COPPER ASSOCIATES, INC.
NAME OF FIRM
68.0284873
Federal I.D. No.
78.926.7895
State I.D. No.
100770F
City of Sacramento Business Op. Tax Cert. No.

TYPE OF BUSINESS ENTITY (check one):

- Individual/Sole Proprietor
- Partnership
- Corporation (may require 2 signatures)
- Limited Liability Company
- Other (please specify: _____)



Signature of Authorized Person
JOHN COOPER, C.O.O.
Print Name and Title



Additional Signature (if required)
Marian Ross, CFO
Print Name and Title

**DECLARATION OF COMPLIANCE
Equal Benefits Ordinance**

Name of Contractor: VALL COOPER & ASSOCIATES, INC.

Address: 2000 POWELL STREET, SUITE 550, EMERYVILLE, CA 94608

The above named Contractor ("Contractor") hereby declares and agrees as follows:

1. Contractor has read and understands the Requirements of the Non-Discrimination In Employee Benefits Code (the "Requirements") attached hereto as Exhibit E.
2. As a condition of receiving this Agreement, Contractor agrees to fully comply with the Requirements, as well as any additional requirements that may be specified in the City of Sacramento's Non-Discrimination In Employee Benefits Code codified at Chapter 3.54 of the Sacramento City Code (the "Ordinance").
3. Contractor understands, to the extent that such benefits are not preempted or prohibited by federal or state law, employee benefits covered by the Ordinance are any of the following:
 - a. Bereavement Leave
 - b. Disability, life, and other types of insurance
 - c. Family medical leave
 - d. Health benefits
 - e. Membership or membership discounts
 - f. Moving expenses
 - g. Pension and retirement benefits
 - h. Vacation
 - i. Travel benefits
 - j. Any other benefit offered to employees

Contractor agrees that if Contractor offers any of the above-listed employee benefits, Contractor will offer those benefits, without discrimination between employees with spouses and employees with domestic partners, and without discrimination between the spouses and domestic partners of such employees.

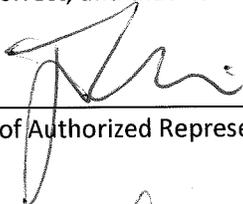
4. Contractor understands that Contractor will not be considered to be discriminating in the provision or application of employee benefits under the following conditions or circumstances:
 - a. If the actual cost of providing a benefit to a domestic partner or spouse exceeds the cost of providing the same benefit to a spouse or domestic partner of an employee, Contractor will not be required to provide the benefit, nor shall it be deemed discriminatory, if Contractor requires the employee to pay the monetary difference in order to provide the benefit to the domestic partner or to the spouse.

- b. If Contractor is unable to provide a certain benefit, despite taking reasonable measures to do so, if Contractor provides the employee with a cash equivalent Contractor will not be deemed to be discriminating in the application of that benefit.
 - c. If Contractor provides employee benefits neither to employee's spouses nor to employee's domestic partners.
 - d. If Contractor provides employee benefits to employees on a basis unrelated to marital or domestic partner status.
 - e. If Contractor submits written evidence of making reasonable efforts to end discrimination in employee benefits by implementing policies that will be enacted before the first effective date after the first open enrollment process following the date this Agreement is executed by the City of Sacramento ("City"). Contractor understands that any delay in the implementation of such policies may not exceed one (1) year from the date this Agreement is executed by the City, and applies only to those employee benefits for which an open enrollment process is applicable.
 - f. Until administrative steps can be taken to incorporate nondiscrimination in employee benefits. The time allotted for these administrative steps will apply only to those employee benefits for which administrative steps are necessary and may not exceed three (3) months from the date this Agreement is executed by the City.
 - g. Until the expiration of a current collective bargaining agreement(s) if employee benefits are governed by such collective bargaining agreement(s).
 - h. Contractor takes all reasonable measures to end discrimination in employee benefits by either requesting that the union(s) involved agree to reopen the agreement(s) in order for Contractor to take whatever steps are necessary to end discrimination in employee benefits or by ending discrimination in employee benefits without reopening the collective bargaining agreement(s).
 - i. In the event Contractor cannot end discrimination in employee benefits despite taking all reasonable measures to do so, Contractor provides a cash equivalent to eligible employees for whom employee benefits are not available. Unless otherwise authorized in writing by the City Manager, Contractor understands this cash equivalent must begin at the time the union(s) refuse to allow the collective bargaining agreement(s) to be reopened or not longer than three (3) months after the date this Agreement is executed by the City.
5. Contractor understands that failure to comply with the provisions of Section 4(a) through 4(i), above, will subject Contractor to possible suspension and/or termination of this Agreement for cause; repayment of any or all of the Agreement amount disbursed by the City; debarment for future agreements until all penalties and restitution have been paid in full and/or for up to two (2) years; and/or the imposition of a penalty, payable to the City, in the sum of \$50.00 for each employee, for each calendar day during which the employee was discriminated against in violation of the provisions of the Ordinance.
6. Contractor understands and agrees to provide notice to each current employee and, within ten (10) days of hire, to each new employee, of their rights under the Ordinance. Contractor further agrees to

maintain a copy of each such letter provided, in an appropriate file for inspection by authorized representatives of the City. Contractor also agrees to prominently display a poster informing each employee of these rights.

7. Contractor understands that Contractor has the right to request a waiver of, or exemption from, the provisions of the Ordinance by submitting a written request to the City's Procurement Services Division prior to Agreement award, which request shall identify the provision(s) of the Ordinance authorizing such waiver or exemption and the factual basis for such waiver or exemption. The City shall determine in its sole discretion whether to approve any such request.
8. Contractor agrees to defend, indemnify and hold harmless, the City, its officers and employees, against any claims, actions, damages, costs (including reasonable attorney fees), or other liabilities of any kind arising from any violation of the Requirements or of the Ordinance by Contractor.

The undersigned declares under penalty of perjury under the laws of the State of California that the foregoing is true and correct, and that he or she is authorized to bind the Contractor to the provisions of this Declaration.



Signature of Authorized Representative

9.24.13

Date

Tom Owens

Print Name

C.O.O.

Title

EXHIBIT A

PROFESSIONAL SERVICES AGREEMENT FOR DESIGN PROFESSIONALS

SCOPE OF SERVICES

1. Representatives.

The CITY Representative for this Agreement is:

Jon Blank, Project Manager

City of Sacramento, Department of Public Works, 915 I Street, Room 2000, Sacramento, CA 95814

Phone: 916-808-7914 / Fax: 916-808-7903 / E-mail: jblank@cityofsacramento.org

All CONTRACTOR questions pertaining to this Agreement shall be referred to the CITY Representative or the Representative's designee.

The CONTRACTOR Representative for this Agreement is:

Hank Doll, Project Manager

Vali Cooper & Associates, 1760 Creekside Oaks Drive, Ste 140, Sacramento, CA 95833

Phone: 916-925-0952 / Fax: 916-925-0954

All CITY questions pertaining to this Agreement shall be referred to the CONTRACTOR Representative. All correspondence to CONTRACTOR shall be addressed to the address set forth on page one of this Agreement. Unless otherwise provided in this Agreement, all correspondence to the CITY shall be addressed to the CITY Representative.

- 2. Professional Liability Insurance.** Professional Liability (Errors and Omissions) insurance is X_ is not ___ required for this Agreement. If required, such coverage must be continued for at least ___2___ year(s) following the completion of all Services and Additional Services under this Agreement. (See Exhibit D, Section 11, for complete insurance requirements.)

3. Conflict of Interest Requirements.

- A. **Generally.** Under the California Political Reform Act, Government Code §§ 81000 et seq., designated employees of the CITY are required to comply with the CITY's Conflict of Interest Code. The term "designated employees" is a term of art and includes individuals who are working for contractors who are providing services or performing work for the CITY and who are considered to be "consultants" under the Political Reform Act. The term "consultant" generally includes individuals who make, or participate in making, governmental decisions or who serve in a staff capacity. Individuals who perform work that is solely clerical, ministerial, manual or secretarial are not "consultants."

The CITY's Conflict of Interest Code requires designated employees, including individuals who qualify as "consultants", to file the following statements of economic interests:

- (1) An "assuming office" statement of economic interests to be filed within 30 days after execution of the agreement between the City and the contractor;
- (2) Annual statements of economic interests while the agreement remains in effect, to be filed not later than April 30 of each year; and
- (3) A "leaving office" statement of economic interests to be filed within 30 days of completion of the contract.

The above statements of economic interests are public records subject to public disclosure under the California Public Records Act.

The CITY's Conflict of Interest Code also requires individuals who qualify as "consultants" under the Political Reform Act to comply with the conflict of interest provisions of the Political Reform Act, which generally prohibit individuals from making or participating in the making of decisions that will have a material financial effect on their economic interests.

- B. **Conflict of Interest Statements.** The individual(s) who will provide services or perform work pursuant to this Agreement are "consultants" within the meaning of the Political Reform Act and the CITY's Conflict of Interest Code: yes no

If "yes" is checked above, CONTRACTOR shall cause the following to occur within 30 days after execution of this Agreement:

- (1) Identify the individuals who will provide services or perform work under this Agreement as "consultants";
- (2) Cause these individuals to file with the CITY Representative the "assuming office" statements of economic interests required by the CITY's Conflict of Interest Code.

Thereafter, throughout the term of the Agreement, CONTRACTOR shall cause these individuals to file with the CITY Representative annual statements of economic interests, and "leaving office" statements of economic interests, as required by the CITY's Conflict of Interest Code. The CITY may withhold all or a portion of any payment due under this Agreement until all required statements are filed.

4. Scope of Services.

The services provided shall be as set forth in Attachment 1 to Exhibit A, attached hereto and incorporated herein.

- 5. Time of Performance.** The services described herein shall be provided through December 31, 2014.

ATTACHMENT 1 TO EXHIBIT A

SCOPE OF SERVICES

FOR

CONSTRUCTION MANAGEMENT SERVICES

FOR THE

SACRAMENTO RAILYARDS IMPROVEMENT OF 5TH STREET/RAILYARDS BOULEVARD
ROADWAY PROJECT PN: T 15135800

To follow is a description of the scope of services that Vali Cooper & Associates, Inc. (VC&A) will provide staffing level as dictated by the cost proposal. Most subtasks are performed in conjunction with one another. All tasks hours are estimated on a time and material basis that may need adjustment should the contractor's schedule differ from the staffing plan proposed or changes beyond the control of VC&A are imposed.

Task 1: Pre-Construction Services

1.1 Meetings

VC&A will attend weekly owner's meetings. VC&A will prepare agenda and minutes for this weekly owner's meetings in a format acceptable to the client. VC&A will attend the various design coordination meetings to provide construction insight and adapt lessons learned in previous Railyards projects into the process.

Deliverable(s): Minutes to all attendees. Previous meeting minutes will be used as the agenda.

Staff: Hank Doll (HD)

1.2 Project Documents Review

If authorized by the client, VC&A will provide review of the project plans, specifications using VC&A's review checklist.

Deliverable(s): Review comments in an electronic spreadsheet.

Staff: HD, Ramon Montes De Oca (RO), Steve Tuthill (ST), Elias Rashmawi (ER) and Juan Zermeno (JZ)

1.3 Bid-Ad-Award Assistance

VC&A Staff will assist the owner, as directed, with setting up the project documents for bidding purposes. VC&A understands that the City of Sacramento will advertise the project. VC&A will assist at any pre-bid meetings and host any on-site tours of the project to prospective bidders using the owner-approved release from liability form. VC&A will assist with the review of bids for responsiveness as directed.

Deliverable(s): Electronic documentation as may be needed.

Staff: HD and JZ

1.4 Utility Coordination

This subtask includes overseeing utility coordination and attending coordination meetings during the preconstruction phase of the project. Malcolm White (MW) will provide hands-on utility coordination through a separate contract. VC&A will be provided reports from those meetings.

Deliverable(s): Client updates via email.

Staff: HD and MW

1.5 Project Set-Up

This subtask includes setting up the project files in accordance with the City of Sacramento and State of California Local Assistance Procedures guidelines, familiarizing staff with the plans and construction contract, meeting other stakeholders, and taking preconstruction photos and videos.

Prior to set-up, a meeting will be held with the owners, CM and OE to discuss various documentation formats and protocols (timing and distribution). The results of this meeting will be memorialized and provided to all parties present.

Documents will be setup in hard copy files as well as electronically (pdf, word and excel formats). The project office and amenities will be provided by the owner.

Deliverable(s): Set-up meeting memorialization letter. Client updates via email.

Staff: HD, Jennifer Clark (JC) and JZ

1.6 Preconstruction Biological and Cultural Surveys and Training

This subtask includes performance and reporting of pre-construction surveys as required by the mitigation monitoring plan. This work does not include the study on the historic foundry as this is anticipated to be complete prior to construction under a different contract. Requisite training of personnel will be performed as well.

Deliverable(s): Electronic reports to owner, City and State; training documentation for files

Staff: HD and ICF Jones & Stokes (ICF).

1.7 Preconstruction Meeting

The Construction Manager (CM) will hold the pre-construction meeting. All appropriate persons will be invited, including the selected contractor, JZ, JC, ER, inspectors, owner, utility companies, and at the owner's discretion, any other involved entities.

At this meeting, project specifics are typically discussed, including:

- Contract submittal requirements
- Progress payments
- Change order procedures
- Potential claims procedures
- Site security
- Labor Compliance
- Access and material storage
- The inspection process
- Construction schedule requirements
- Technical issues and safety procedures
- Various regulatory permit requirements
- Historic Building Protection

VC&A will prepare an agenda, action items and meeting minutes for this meeting.

Deliverable(s): agenda, action items and meeting minutes in electronic format

Staff: All

1.8 Mitigation Monitoring

The CM with the assistance of ICF and the ER will monitor the construction contractor's compliance with the mitigation monitoring plan. The team will document the successful implementation in a final project report.

Deliverable(s): Electronic reports to owner, City and State; training documentation for files

Staff: HD, ER, ICF

Task 2: Construction Task

2.1 Contract Management

VC&A will use our in-house Electronic Contract Tracking System (ECATS) to address construction contract management and record keeping requirements. Our OE will be responsible for setting up and implementing our ECATS system. The owner will have access to the project documents at any time.

CATS satisfies the following aspects of document control:

- ✓ Conforms to City of Sacramento and State Procedures
- ✓ Maintaining project files
- ✓ Submittal
- ✓ RFI
- ✓ Tracking status of contract change orders
- ✓ Tracking progress pay estimates and overall project budget
- ✓ Tracking potential claims
- ✓ Tracking materials testing results and follow-up

- ✓ Correspondence tracking
- ✓ Inspections and releases

- ✓ Can be modified to accept other documentation
- ✓ Various progress reports

Deliverable(s): Electronic reports to owner and files
Staff: HD, JC and JZ

2.2 Utility Coordination

This task includes implementing successful utility coordination for the project including meetings, as needed. VC&A will prepare an agenda, action items and meeting minutes for all meetings.

Deliverable(s): agenda, action items and meeting minutes
Staff: HD and MW

2.3 Environmental Management

The CM will work with the ER and City designee to oversee environmental aspects of the projects. ER will monitor and manage soils and groundwater in accordance with Railyards site documents including the various owner's management plans. ER will also oversee the preparation of soils and groundwater documentation as directed by the client. ER will regularly correspond and meet with DTSC and other regulatory agencies as authorized by the client. Sampling and results will be reported and provided to client as needed. Testing of samples will be performed by Sunstar Labs under subagreement with Stantec.

Deliverable(s): Electronic reports as dictated by the client.
Staff: HD, ER, Stantec and Sunstar

2.4 Coordination and Correspondence

The CM will serve as the day-to-day focal point for coordination among the owner, contractor, designer, stakeholders, materials testers and surveyors. VC&A will document all communications with the contractor in correspondence and daily diaries. Our CM will hold weekly progress meetings to address the status of the project and project issues, and will review contractor correspondence and prepare responses applicable to technical issues.

Deliverable(s): letters, emails, correspondence, meeting agenda/action items/meeting minutes electronically as dictated by task 1.6 and available on ECATS website.
Staff: HD, JZ and ER

2.5 Schedule Management, Progress Meetings and Reports

The schedule will be used as a tool to track construction progress and monitor construction delays. Our CM, OE, and ER will first review and approve the contractor's baseline schedule for conformance with the contract and for reasonableness of the sequence and duration of activities prior to commencement of work. Schedule updates will be required monthly and for any schedule conflicts. These will be reviewed for completeness and clarity by the VC&A staff. Scheduling meetings will be held as needed.

In weekly progress meetings, VC&A will receive from the contractor, in at least, a "one-week back and two-week look-ahead schedule" at progress meetings. This allows VC&A to manage and plan for the upcoming work. It also assists in managing the contractor's progress and allows us to coordinate and schedule the testing, monitoring and surveying more efficiently. Inconsistencies with the approved project schedule and associated updates will be addressed and corrected. Meetings will also include updates on CCO's, RFI's and outstanding issues.

Monthly progress reports will be provided to the owner that contains information regarding the work completed and any key issues. The ECATS has a consistently updated progress report that can be used for this task if the format is acceptable to the owner.

Deliverable(s): schedules, letters, emails, correspondence, meeting agenda/action items/meeting minutes electronically and on ECATS website.
Staff: HD, JZ and ER

2.6 Mitigation Monitoring

The CM with the assistance of ER and ICF will monitor the project's mitigation monitoring plan (MMP). The team will document the successful implementation in a final project report.

Deliverable(s): Electronic reports to owner, City and State as requested

Staff: HD, ER, ICF

2.7 Safety

This project will inherently pose potential hazards to personnel. This project will have a contractor site specific safety plan that is required to be reviewed by VC&A personnel. Safety meetings will be held bi-weekly and when major items of work are imminent. Our inspectors will periodically attend the contractor's tailgate meetings on site. Although sole responsibility for site safety lies with the construction contractor, VC&A will monitor the contractor's site safety and inform the contractor when safety issues are discovered.

Deliverable(s): Bi Weekly meetings for files, incidence reports, safety non-conformance reports

Staff: All

2.8 Public Relations

VC&A has a recognized familiarity in public relations (PR). Working with the City's PR staff, VC&A will assist the Owner with personable project staff. VC&A can assist with personal contact with local business owners, and overseeing the overall public image of the project at owner's discretion.

Deliverable(s): Electronic correspondence to owner

Staff: All

2.9 Submittals

ECATS includes logs for tracking submittals. JZ, JC and/or inspectors will stamp and log all submittals and review and distribute them as necessary. The log will be monitored to verify that submittal responses are submitted in a timely manner. VC&A recommend that the submittal log be reviewed at each weekly meeting so that everyone is on the same page in regard to the status of submittals. Submittals to be reviewed by VC&A staff may include:

- | | |
|-----------------------------|--|
| ✓ Trenching & Shoring Plans | ✓ Shop Drawings |
| ✓ Signal and Lighting | ✓ Storm Water Pollution Prevention Plans |
| ✓ Quality Control Plan | ✓ Concrete/AC Mix Designs |
| ✓ Architectural treatments | ✓ Falsework |
| ✓ Shoring | ✓ Schedule |
| ✓ Materials | ✓ Work plans |

All submittals will be reviewed for completeness and in accordance with all contract procedures.

Deliverable(s): Electronic status log available on ECATS website

Staff: All

2.10 Requests for Information (RFI)

VC&A will use the ECATS RFI log to track all inquires from the contractor regarding design or constructability issues. For general construction issues, VC&A will prepare RFI responses in a timely manner. Design related RFI's will be routed to the designer and followed up on to ensure timely turn-around. VC&A will also schedule meetings, if necessary, to resolve more difficult RFI's. RFI's will be reviewed and responded appropriately in an effort to minimize additional project expenses due to claims and/or redesign.

Deliverable(s): Electronic status log available on ECATS website.

Staff: All

2.11 Not Used

2.12 Pay Estimates

Pay estimate requests will be submitted monthly by the contractor with any approved CCO payments as mandated by the City to meet HCD invoicing schedules. VC&A will review quantities, prepare back up documentation for each item, then prepare a pay request signed by the contractor, City Labor Compliance, City DOT and VC&A. Using the City's pay request system, VC&A will coordinate with the contractor and then submit electronically and by hard copy to the City. The City will work with Inland for insertion into their next

payment "Draw Request." Additionally, and within the body of the pay request will be any required waivers signed by the contractor. VC&A will track all correspondence required including conditional and unconditional waivers required by the contract. VC&A can prepare a draft Draw request if requested by the Client.
Deliverable(s): Electronic pay request, waiver and status log and on ECATS website.
Staff: HD, JZ and inspectors

2.13 Change Orders

Prior to construction, procedures for contract change order (CCO) approval will be established with the Owner. During construction, our CM and OE will assist with resolving contract change order issues and will review all contract change orders. Prior to work, and if needed prior to execution of CCO, the CM will prepare an authorization form for the owner to review, modify and sign. VC&A will prepare an independent cost estimate for each change order prior to negotiation with the contractor. VC&A will also assist with coordinating any design change orders with the designer and the Owner. Change order files will be maintained in accordance with City of Sacramento and Local Assistance procedures and documented on the red-lined as-built drawings.
Deliverable(s): Electronic change orders, back up information, status log and authorization forms available upon request and in project files.
Staff: HD, JC and JZ

2.14 Potential Claims

ECATS has a file category dedicated to potential claims. All information relative to a potential claim is filed and logged in this category. The Owner will be kept informed regarding the status of potential claims. Our CM and OE will assist in determining the merit of the potential claim and recommend a course of action. Our objective is to work closely with the contractor and Owner to head off potential claims early.
Deliverable(s): Electronic status log and correspondence available on ECATS website.
Staff: All

2.15 Inspection

VC&A will serve as inspector for all day-to-day activities. All work will be inspected for compliance with contract requirements. All field inspections will be documented on the field inspector's daily diary in accordance with the City of Sacramento and State Local Assistance procedures. Digital pictures are taken prior to and during construction, logged and filed with the project files. Field activities include:

- ✓ Monitoring the contractor's work for general conformance with the plans and specifications
- ✓ Documenting the progress of the work with daily diaries and photographs/videos
- ✓ Carefully monitoring contract change order work in the field
- ✓ Measuring and calculating quantities
- ✓ Coordinating and documenting material testing
- ✓ Coordinating surveying and construction staking
- ✓ Reviewing and logging materials test results and addressing non-conforming tests
- ✓ Performing and documenting Storm Water Pollution Prevention Plan requirements
- ✓ Verifying extra work for approved contract change orders
- ✓ Coordinating and conducting final inspections
- ✓ Public relations

Deliverable(s): Electronic diaries, photos and photo logs available on ECATS website
Staff: All

2.16 Storm Water Quality Management

VC&A is a recognized expert in storm water pollution prevention. Under the guidance of our CM, a registered QSD, all of our staff are trained in monitoring contractors' Storm Water Pollution Prevention Plans (SWPPP) and Water Quality Management Plans. Our CM will review the contractor's SWPPP and document SWPPP site inspections. Our inspectors will perform the required periodic inspections along side the contractor's personnel. The owner will be required to upload documents to State website, unless owner allows VC&A access to perform.
Deliverable(s): Electronic status log, periodic reports and non-conformity reports available.
Staff: HD, JZ and inspectors

2.17 Record Drawings

Our CM, OE and/or inspectors will maintain red-lined as-built drawings by hand during the life of the project. Red-lined as-builts will be turned over to the designer at project completion. VC&A will also monitor the contractor's progress on their contract required as-builts.

Deliverable(s): Electronic Record Drawings and log in project files

Staff: All

2.18 Project Suspension

The Owner will make a reasonable effort to start work on this project so it will not be suspended. Should the project be suspended for any reason, VC&A will minimize its efforts, as directed by the Owner, until construction recommences.

Deliverable(s): As needed

Staff: HD

2.19 Punchlist

The CM with assistance from the RE and inspectors, will review the constructed project for general conformance to the project plans and specifications as the project proceeds and at completion. This will be done in close coordination with the City and/or future owner(s). All end-of-project deficiencies will be presented to the contractor and documented in punchlist letter. All non-conformance reports will be reviewed to ensure all corrections have been made. When all deficiencies have been corrected, the CM will draft a letter for the owner to accept the project.

Deliverable(s): Electronic punchlist and acceptance letter

Staff: HD, JZ and inspector(s)

2.20 Construction Staking

VC&A will provide peak-time construction staking through its subconsultant Andregg so as not to exceed the budgeted amount allowed for in the contract. The City will provide the bulk of the surveying duties. Staking will be performed in accordance with City and State Local Assistance procedures.

Deliverable(s): Electronic survey log including restakes, staking requests and staking notes available in project files

Staff: JZ, Andregg and City Staff

2.21 Materials Testing

JZ, JC and/or inspector will coordinate between the contractor and the materials tester for the estimated project-related material testing. Frequency of testing will be performed in accordance with the Local Assistance Procedures. Material test results will be reviewed, logged and filed in ECATS. Any failed tests will be addressed and appropriate correction measures implemented by the contractor and documented.

Certified materials testing technicians will perform batch plant inspection, field sampling and testing, and laboratory testing of the materials used during construction to determine compliance with project requirements. The laboratory will be certified and the firm will be familiar with required frequency of tests and test methods.

Source inspections beyond 60 miles of the site is excluded but may be required. This will constitute a change in scope and require cost modifications. The contractor's specifications should outline reimbursement to the owner for source inspection beyond 60 miles.

Deliverable(s): Electronic materials testing log, inspection reports and test reports

Staff: JZ, JC, inspectors and Blackburn

2.22 Biological Monitoring

This task includes training, performance and reporting of biological monitoring as required by the mitigation monitoring plan. This work will be performed by ICF.

Deliverable(s): Electronic reports to owner, City and State; training documentation for files

Staff: HD and ICF

2.23 Cultural Resource Monitoring

This task includes training, performance and reporting of cultural resource monitoring as required by the mitigation monitoring plan. This work will be performed by ICF.

Deliverable(s): Electronic reports to owner, City and State; training documentation for files
Staff: HD and ICF

2.24 Labor Compliance

This task includes monitoring the performance and reporting of labor compliance as required by State law. This work will be performed by DCM with the assistance of the CM, OE and inspectors.

Deliverable(s): Electronic reports to owner available in the project files.
Staff: HD, JZ, JC, inspectors and DCM.

Task 3: Post Construction Activities Task

7.1 Final Project Review

The project is only truly completed when all the construction is complete, including the punchlist items, the work is approved and accepted, and the project paperwork is completed and archived. VC&A, with the assistance of the owner will perform a final project review consisting of reviewing documentation for completeness, removing extraneous materials, negotiating final change orders and potential claims.

Deliverable(s): Electronic reports to owner available in the project files.
Staff: HD and JZ

7.2 Final Payment

This task includes preparing the proposed final payment, addressing the contractor's exceptions and submitting final payment requests in the time frame required by the contract.

Deliverable(s): Electronic reports and pay requests to owner available in the project files.
Staff: HD and JZ

7.3 O&M/Warranty Training and Documentation

The construction contractor should be required to provide O&M training and manuals. VC&A will oversee, review and approve and finally submit documentation to appropriate maintaining agencies. Documentation will also be made part of the record files. VC&A will coordinate with contractor and maintaining agency the required training.

Deliverable(s): Hard copies of documentation (as required by the contractor) to maintaining agency.
Staff: HD and JZ

7.4 Final Report

Along with the records, a project completion report is prepared in accordance with the City of Sacramento and Local Assistance procedures that include:

- ✓ Summary of change orders and potential claims
- ✓ Summary of the materials tested and incorporated into the work (material certification)
- ✓ Summary of work completed
- ✓ Final project schedule
- ✓ Final project expenditures
- ✓ Summary of final acceptance
- ✓ As-built drawings
- ✓ Environmental summary(s)

Deliverable(s): Electronic reports to owner available in the project files.
Staff: HD, JZ, ER and ICF

EXHIBIT B

PROFESSIONAL SERVICES AGREEMENT FOR DESIGN PROFESSIONALS

FEE SCHEDULE/MANNER OF PAYMENT

1. **CONTRACTOR's Compensation.** The total of all fees paid to the CONTRACTOR for the performance of all services set forth in Exhibit A, including normal revisions (hereafter the "Services"), and for all authorized Reimbursable Expenses, shall not exceed the total sum of \$1,648,015.00.
2. **Billable Rates.** CONTRACTOR shall be paid for the performance of Services on an hourly rate, daily rate, flat fee, lump sum or other basis, as set forth in Attachment 1 to Exhibit B, attached hereto and incorporated herein.
3. **CONTRACTOR's Reimbursable Expenses.** Reimbursable Expenses shall be limited to actual expenditures of CONTRACTOR for expenses that are necessary for the proper completion of the Services and shall only be payable if specifically authorized in advance by CITY.
4. **Payments to CONTRACTOR.**
 - A. Payments to CONTRACTOR shall be made within a reasonable time after receipt of CONTRACTOR's invoice, said payments to be made in proportion to services performed or as otherwise specified in Attachment 1 to Exhibit B. CONTRACTOR may request payment on a monthly basis. CONTRACTOR shall be responsible for the cost of supplying all documentation necessary to verify the monthly billings to the satisfaction of CITY.
 - B. All invoices submitted by CONTRACTOR shall contain the following information:
 - (1) Job Name
 - (2) Description of services billed under this invoice, and overall status of project
 - (3) Date of Invoice Issuance
 - (4) Sequential Invoice Number
 - (5) CITY's Purchase Order Number
 - (6) Total Contract Amount
 - (7) Amount of this Invoice (Itemize all Reimbursable Expenses)
 - (8) Total Billed to Date
 - (9) Total Remaining on Contract
 - (10) Updated project schedule. This shall identify those steps that shall be taken to bring the project back on schedule if it is behind schedule.
 - C. Items shall be separated into Services and Reimbursable Expenses. Billings that do not conform to the format outlined above shall be returned to CONTRACTOR for correction. CITY shall not be responsible for delays in payment to CONTRACTOR resulting from CONTRACTOR's failure to comply with the invoice format described below.

D. Requests for payment shall be sent to:

*City of Sacramento, Department of Public Works
915 I Street, Room 2000, Sacramento, CA 95814
Phone: 916-808-7481 / Fax: 916-808-7903
Attn: Jon Blank*

5. **Additional Services.** Additional Services are those services related to the scope of services of CONTRACTOR set forth in Exhibit A but not anticipated at the time of execution of this Agreement. Additional Services shall be provided only when a Supplemental Agreement authorizing such Additional Services is approved by CITY in accordance with CITY's Supplemental Agreement procedures. CITY reserves the right to perform any Additional Services with its own staff or to retain other consultants to perform said Additional Services.
6. **Accounting Records of CONTRACTOR.** During performance of this Agreement and for a period of three (3) years after completing all Services and Additional Services hereunder, CONTRACTOR shall maintain all accounting and financial records related to this Agreement, including, but not limited to, records of CONTRACTOR's costs for all Services and Additional Services performed under this Agreement and records of CONTRACTOR's Reimbursable Expenses, in accordance with generally accepted accounting practices, and shall keep and make such records available for inspection and audit by representatives of the CITY upon reasonable written notice.
7. **Taxes.** CONTRACTOR shall pay, when and as due, any and all taxes incurred as a result of CONTRACTOR's compensation hereunder, including estimated taxes, and shall provide CITY with proof of such payment upon request. CONTRACTOR hereby agrees to indemnify CITY for any claims, losses, costs, fees, liabilities, damages or injuries suffered by CITY arising out of CONTRACTOR's breach of this Section 7.

Part Time

Full Time

As Needed

Assumptions Used:

1. Assume construction activities between November 2013 and December 2014.
2. Used an average of 170 hours per month. This may need adjustment after review of contractor's schedule.
3. Assume contractor works 5 days/week, 8 hours/day and no Saturdays or holidays.
4. City to provide staking services. Andregg to be used for peak-times as needed

Notes:

1. All rates include base pay, fringe benefits, overhead, fee and equipment including laptop computers, vehicles, safety gear, and hand tools.
2. All hours are billed in conformance to the California Labor Code and prevailing wage requirements.
3. All billing is on a time and material basis. Client will be billed only for hours worked.
4. Reproduction, subcontractors & other direct costs billed at cost.
5. Contract time may be extended by weather or unforeseen delays that arise during construction. Cost proposal may need to be re-visited should this occur.
6. Task values are an approximation of hours for a given task. These hours may be shifted between tasks as needed.
7. All rates are negotiated flat rates and fall below the typical overhead/fee based rate structure.
8. Environmental, cultural and biological services are dependent on unknown buried conditions
9. All rates are shown in Attachment 2 of Exhibit B.
10. Office space, utilities, color Toshiba e-studio 3500C copier/scanner/printer/wireless (or equivalent), HS internet, furniture and other associated office amenities to be provided by the owner

Total VCA =	\$922,515
Total Quincy (S) =	\$234,600
Total Stantec =	\$100,000
Total Andregg =	\$50,000
Total Blackburn (S) =	\$200,000
Total M. White =	\$43,500
Total CPM(S)=	\$29,400
Total J&S=	\$9,000
Total DCM(S) =	\$60,000
TOTAL =	\$1,648,015
SBE(S) =	\$524,000
SBE(S) % =	31.8%

Typical Overhead Plus Fee Rate Structure (for information only)

Fringe Benefit %	Overhead %	General Administration	Combined %
0.00% +	139.57% +	0.00% =	139.57%
0.00% +	139.57% +	0.00% =	139.57%
FEE %			
10.00%			

The following rates do not exceed rates computed using the typical overhead plus fee rate structure.

Name/Classification	Negotiated Flat Hourly Billing		Effective Date of Hourly Rate From	To	% Escalation Increase (after 5/31/15)	Hourly Range For Class
	Straight	Overtime (1.5X)				
Hank Doll, P.E.	\$185.00	\$185.00	7/1/2013	5/31/2015	0%	
Construction Manager						
Juan Zermeno	\$133.00	\$156.40	7/1/2013	5/31/2015	0%	
Office Engineer/ Senior Inspector						
Jennifer Clark	\$133.00	\$156.40	7/1/2013	5/31/2015	0%	
Office Engineer/ Senior Inspector						
Steve Matranga, Tore Finnemthyr	\$133.00	\$156.40	7/1/2013	5/31/2015	0%	
Office Engineer/ Senior Inspector						
Sue Cervantez	\$85.00	\$100.00	7/1/2013	5/31/2015	0%	
Office Technician						
Don Black	\$133.00	\$156.40	7/1/2013	5/31/2015	0%	
Senior Inspector (Signals/Lighting)						
Steve Tutthill	\$133.00	\$156.40	7/1/2013	5/31/2015	0%	
Senior Inspector						

General Classifications

Construction Manager	\$185.00	\$185.00	7/1/2013	5/31/2015	0%	\$185.00
Senior Inspector	\$133.00	\$156.40	7/1/2013	5/31/2015	0%	\$133.00
Office Technician	\$85.00	\$100.00	7/1/2013	5/31/2015	0%	\$85.00
Office Engineer	\$133.00	\$156.40	7/1/2013	5/31/2015	0%	\$133.00

Typical Overhead Plus Fee Rate Structure (for information only)

	Fringe Benefit %	Overhead %	General Administration	Combined %
NORMAL	0.00% +	139.57% +	0.00% =	139.57%
OVERTIME	0.00% +	139.57% +	0.00% =	139.57%
		10.00%		

The following rates do not exceed rates computed using the typical overhead plus fee rate structure.

Name/Classification	Negotiated Flat Hourly Billing		Effective Date of Hourly Rate From	To	% Escalation Increase (after 5/31/15)	Hourly Range For Class
	Straight	Overtime (1.5x)				
DESCRIPTION OF ITEMS	UNIT	COST				
Special Tooling						
A. Printing		Note 1				
B. Specialty Equipment		Note 1				
Travel						
A. Per Diem		Note 3				
Tools of the Trade						
A. Computers		N/A				
B. Vehicle and Cell Phone		N/A				
C. Delivery Services		Note 1				

Attachment 2
 Exhibit B
 Sheet 2 of 23

1. Pre-approved actual costs are competitive prices from appropriate vendors in their respective industries and supported by receipts. Items such as special tooling will be reimbursed at actual cost with supporting documentation (invoice).
2. Parking, tolls and local transportation costs resulting from commuting to and from the employee's residence to the job site as defined in the Task Order are not reimbursable.
3. The Project will not reimburse the Consultant for costs to relocate its staff to the geographic area of the contract. The Project will not reimburse the Consultant for any per diem costs unless pre-approved by the Owner's Contract Manager.
4. ODC items are in compliance with CFR, Chapter 1, Part 31 (FAR cost principles) and are consistent with the firm's company-wide allocation policies and charging practices with all clients including federal government, state government, local agencies and private clients.
5. Names and/or rates and/or classifications other than those shown, will not be billed unless prior approval is obtained from Prime Consultant and Owner's Project Manager. Overtime will not be used unless specifically approved by Prime Consultant and Owner's Project Manager. Proposed items should be consistently billed directly to all clients (commercial entities, federal government, state government, local agencies) and not just when the client will pay for them as a direct cost.

Consultant: Andregg
Date: 09/13/13

Typical Overhead Plus Fee Rate Structure (for information only)		Fringe Benefit %		Overhead %		General Administration %		Combined %	
NORMAL	n/a	+	n/a	+	n/a	+	n/a	=	n/a
OVERTIME	n/a	+	n/a	+	n/a	+	n/a	=	n/a
FEE %									
n/a									

Name/Classification	Negotiated Flat Hourly Billing	Effective Date of Hourly Rate From	To	% Escalation Increase (after 5/31/15)	Hourly Range For Class
	Straight Overtime (1.5X) Overtime (2x)				
Tom Holmberg, LS	\$141.71	n/a	7/1/2013	5/31/2015	\$141.71
Survey Project Manager		n/a			
Jim Sutton	\$147.51	n/a	7/1/2013	5/31/2015	\$147.51
Sr. Project Surveyor		n/a			
Tim Barr	\$98.34	\$124.74	7/1/2013	5/31/2015	\$98.34
Survey Technician					
Ken Brison	\$98.34	\$124.74	7/1/2013	5/31/2015	\$98.34
Survey Technician					
Jacob Bardakjian	\$123.38	\$149.78	7/1/2013	5/31/2015	\$123.38
Party Chief					
John Stanowicz	\$123.38	\$149.78	7/1/2013	5/31/2015	\$123.38
Party Chief					
Wayne Schoeffler, LS	\$123.38	\$149.78	7/1/2013	5/31/2015	\$123.38
Party Chief					

General Classifications

Classification	Hourly Rate	Escalation	Effective Date	Escalation Date	Hourly Range
Sr. Project Surveyor	\$147.51	0%	7/1/2013	5/31/2015	\$147.51
Survey Technician	\$98.34	0%	7/1/2013	5/31/2015	\$98.34
2 Person Survey Crew (PC + ChM)	\$225.72	0%	7/1/2013	5/31/2015	\$225.72
Party Chief (PC) or 1 Person Crew	\$123.38	0%	7/1/2013	5/31/2015	\$123.38
Chainman (ChM)	\$102.34	0%	7/1/2013	5/31/2015	\$102.34

Straight time range*

SBE

City of Sacramento
 FLAT RATE COST PROPOSAL
 5th Street Viaduct/Roads and Railyards Blvd

Typical Overhead Plus Fee Rate Structure (for information only)

FIELD	Fringe Benefit %	Overhead %	General Administration %	Combined %
OFFICE (Straight and OT)	+	243.67%	=	243.67%
OVERTIME (Field only)	+	243.67%	=	243.67%
	+	185.00%	=	185.00%

10% FEE %

The following rates do not exceed rates computed using the typical overhead plus fee rate structure.

Name/Classification	Negotiated Flat Hourly Billing		Effective Date of Hourly Rate		% Escalation Increase (after 5/31/15)	Actual Hourly/Average Hourly Rate	Hourly Range For Class
	Straight	Overtime (1.5X)	Overtime (2x)	From			
Dave Morrell	\$190.00	NA	NA	7/1/2013	5/31/2015		\$190.00
Project Manager							
Bryce Moore	\$124.75	NA	NA	7/1/2013	5/31/2015		\$124.75
Technician Manager							
James Carro	\$129.18	\$156.40	\$182.80	7/1/2013	6/20/2015		\$129.18
Soil Technician							
Matt Minor	\$129.18	\$156.40	\$182.80	7/1/2013	6/20/2015		\$129.18
Soil Technician							
Sergio Tostado	\$129.18	\$156.40	\$182.80	7/1/2013	6/20/2015		\$129.18
Soil Technician							
Morgan Wright	\$129.18	\$156.40	\$182.80	7/1/2013	6/20/2015		\$129.18
Soil Technician							
Kimberly Lincoln	\$129.18	\$156.40	\$182.80	7/1/2013	6/20/2015		\$129.18
Soil Technician							
Ashley Lokteff	\$75.61	\$113.41	\$182.80	7/1/2013	6/20/2015		\$75.61
Project Assistant							

General Classifications

Project Manager	\$190.00	NA	NA	7/1/2013	6/20/2015	0%	\$190.00
Technician Manager	\$124.75	NA	NA	7/1/2013	6/20/2015	0%	\$124.75
Soil Technician	\$129.18	\$156.40	\$182.80	7/1/2013	6/20/2015	0%	\$129.18
Project Assistant	\$75.61	\$113.41	\$182.80	7/1/2013	6/20/2015	0%	\$75.61

City of Sacramento

FLAT RATE COST PROPOSAL

5th Street Viaduct/Roads and Railyards Blvd

SBE

Consultant: Blackburn

Date: 09/13/13

Typical Overhead Plus Fee Rate Structure (for information only)

FIELD	Fringe Benefit %	Overhead %	General Administration %	Combined %
OFFICE (Straight and OT)	+ 243.67%	+ 243.67%	= 243.67%	243.67%
OVERTIME (Field only)	+ 185.00%	+ 185.00%	= 185.00%	185.00%

10% FEE %

The following rates do not exceed rates computed using the typical overhead plus fee rate structure.

Name/Classification	Negotiated Flat Hourly Billing	Effective Date of Hourly Rate	% Escalation Increase (after 5/31/15)	Actual Hourly/Rate and/or Average Hourly Rate	Hourly Range For Class
	Straight	From	To		
	Overtime (1.5X)				
	Overtime (2x)				

Attachment 2 Exhibit B

Sheet 6 of 23

DESCRIPTION OF ITEMS	UNIT	COST
Special Tooling		
A. Printing		Note 1
B. Specialty Equipment		Note 1
C. Testing		Note 9
D. Nuclear Gauge	day	\$22.00
Travel		
A. Per Diem		Note 3
Tools of the Trade		
A. Computers		N/A
B. Vehicle and Cell Phone		N/A
C. Delivery Services	ea	@cost

1. Pre-approved actual costs are competitive prices from appropriate vendors in their respective industries and supported by receipts. Items such as special tooling will be reimbursed at actual cost with supporting documentation (invoice).
2. Parking, tolls and local transportation costs resulting from commuting to and from the employee's residence to the job site as defined in the Task Order are not reimbursable.
3. The Project will not reimburse the Consultant for costs to relocate its staff to the geographic area of the contract. The Project will not reimburse the Consultant for any per diem costs unless pre-approved by the Owner's Contract Manager.
4. ODC items are in compliance with CFR, Chapter 1, Part 31 (FAR cost principles) and are consistent with the firm's company-wide allocation policies and charging practices with all clients including federal government, state government, local agencies and private clients.
5. Names and/or rates and/or classifications other than those shown, will not be billed unless prior approval is obtained from Prime Consultant and Owner's Project Manager. Overtime will not be used unless specifically approved by Prime Consultant and Owner's Project Manager. Proposed items should be consistently billed directly to all clients (commercial entities, federal government, state government, local agencies) and not just when the client will pay for them as a direct cost.
6. See attached BCI lab Fee Schedule.

SBE

City of Sacramento

FLAT RATE COST PROPOSAL

5th Street Viaduct/Roads and Railyards Blvd

Typical Overhead Plus Fee Rate Structure (for information only)

Fringe Benefit %	38.00%	+	Overhead %	42.00%	+	General Administration %	42.00%	=	Combined %	122.00%
NORMAL	0.00%	+		0.00%	+		0.00%	=		0.00%
OVERTIME				10.00%						

FEE %

The following rates do not exceed rates computed using the typical overhead plus fee rate structure.

Name/Classification	Negotiated Flat Hourly Billing		Effective Date of Hourly Rate		% Escalation Increase (after 5/31/15)	Actual Hourly/Rate and/or Average Hourly Rate	Hourly Range For Class
	Straight	Overtime (1.5X)	From	To			
Ryan Tobias- Office Engineer	\$133.00	\$156.40	7/1/2013	5/31/2015	0%		
Ryan Tobias- Scheduler	\$147.00	\$147.00	7/1/2013	5/31/2015	0%		

General Classifications

Office Engineer	\$133.00	\$156.40	7/1/2013	5/31/2015	0%		\$133.00
Scheduler	\$147.00	\$147.00	7/1/2013	5/31/2015	0%		\$147.00

City of Sacramento

FLAT RATE COST PROPOSAL

5th Street Viaduct/Roads and Railyards Blvd

SBE

Consultant: CPM, Inc.
Date: 09/13/13

Typical Overhead Plus Fee Rate Structure (for information only)

NORMAL	Fringe Benefit %	Overhead %	General Administration %	Combined %
OVERTIME	38.00% +	42.00% +	42.00% =	122.00%
	0.00% +	0.00% +	0.00% =	0.00%
		10.00%		

FEE %

The following rates do not exceed rates computed using the typical overhead plus fee rate structure.

Name/Classification	Negotiated Flat Hourly Billing	Effective Date of Hourly Rate	% Escalation Increase (after 5/31/15)	Actual Hourly/Rate and/or Average Hourly Rate	Hourly Range For Class
	Straight	From	To		

Overtime (1.5X)
Overtime (2x)

Attachment 2 Exhibit B
Sheet 8 of 23

DESCRIPTION OF ITEMS	UNIT	COST
Special Tooling		
A. Printing	Note 1	
B. Speciality Equipment	Note 1	
Travel		
A. Per Diem	Note 3	
Tools of the Trade		
A. Computers	N/A	
B. Vehicle and Cell Phone	N/A	
C. Delivery Services	Note 1	

1. Pre-approved actual costs are competitive prices from appropriate vendors in their respective industries and supported by receipts. Items such as special tooling will be reimbursed at actual cost with supporting documentation (invoice).
2. Parking, tolls and local transportation costs resulting from commuting to and from the employee's residence to the job site as defined in the Task Order are not reimbursable.
3. The Project will not reimburse the Consultant for costs to relocate its staff to the geographic area of the contract. The Project will not reimburse the Consultant for any per diem costs unless pre-approved by the Owner's Contract Manager.
4. ODC items are in compliance with CFR, Chapter 1, Part 31 (FAR cost principles) and are consistent with the firm's company-wide allocation policies and charging practices with all clients including federal government, state government, local agencies and private clients.
5. Names and/or rates and/or classifications other than those shown, will not be billed unless prior approval is obtained from Prime Consultant and Owner's Project Manager. Overtime will not be used unless specifically approved by Prime Consultant and Owner's Project Manager. Proposed items should be consistently billed directly to all clients (commercial entities, federal government, state government, local agencies) and not just when the client will pay for them as a direct cost.

SBE

City of Sacramento

FLAT RATE COST PROPOSAL

5th Street Viaduct/Roads and Railyards Blvd

Consultant: DCM

Date: 09/13/13

Typical Overhead Plus Fee Rate Structure (for information only)

NORMAL	Fringe Benefit % n/a	+	Overhead % n/a	+	General Administration % n/a	=	Combined % n/a
OVERTIME	n/a	+	n/a	+	n/a	=	n/a
			n/a				

Name/Classification	Negotiated Flat Hourly Billing		Effective Date of Hourly Rate From	To	% Escalation Increase (after 5/31/15)	Hourly Range For Class
	Straight	Overtime (1.5X)				
DESCRIPTION OF ITEMS	UNIT	COST				
Special Tooling						
A. Printing		Note 1				
B. Specialty Equipment		Note 1				
Travel						
A. Per Diem		Note 3				
Tools of the Trade						
A. Computers		N/A				
B. Vehicle and Cell Phone		N/A				
C. Delivery Services		Note 1				

Attachment 2 Exhibit B
Sheet 10 of 23

1. Pre-approved actual costs are competitive prices from appropriate vendors in their respective industries and supported by receipts. Items such as special tooling will be reimbursed at actual cost with supporting documentation (invoice).
2. Parking, tolls and local transportation costs resulting from commuting to and from the employee's residence to the job site as defined in the Task Order are not reimbursable.
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Typical Overhead Plus Fee Rate Structure (for information only)									
Name/Classification	Fringe Benefit %		FEE %		Overhead %		General Administration %		Combined %
	n/a	+	n/a	+	n/a	+	n/a	=	
	Straight	Overtime (1.5X)	Negotiated Flat Hourly Billing	Overtime (2x)	Effective Date of Hourly Rate From	To	% Escalation Increase (after 5/31/15)	Hourly Range For Class	
Steve Mikesell	\$235.00	\$235.00	\$235.00	\$235.00	7/1/2013	5/31/2015	0%	\$235.00	n/a
Principal									n/a
Jennifer Haire	\$150.00	\$150.00	\$150.00	\$150.00	7/1/2013	5/31/2015	0%	\$150.00	n/a
Senior Consultant II									
Christiaan Havelaar	\$140.00	\$140.00	\$140.00	\$140.00	7/1/2013	5/31/2015	0%	\$140.00	n/a
Senior Consultant I									
Robin Hoffman	\$140.00	\$140.00	\$140.00	\$140.00	7/1/2013	5/31/2015	0%	\$140.00	n/a
Senior Consultant I									
John Howe	\$140.00	\$140.00	\$140.00	\$140.00	7/1/2013	5/31/2015	0%	\$140.00	n/a
Senior Consultant I									
Ed Yarbrough	\$140.00	\$140.00	\$140.00	\$140.00	7/1/2013	5/31/2015	0%	\$140.00	n/a
Senior Consultant I									
Tina Sorvari	\$120.00	\$120.00	\$120.00	\$120.00	7/1/2013	5/31/2015	0%	\$120.00	n/a
Associate Consultant II									
William Leyva	\$110.00	\$110.00	\$110.00	\$110.00	7/1/2013	5/31/2015	0%	\$110.00	n/a
Associate Consultant I									
Patrick Mailey	\$65.00	\$65.00	\$65.00	\$65.00	7/1/2013	5/31/2015	0%	\$65.00	n/a
Technician									
Andrea Gueyger	\$120.00	\$120.00	\$120.00	\$120.00	7/1/2013	5/31/2015	0%	\$120.00	n/a
Associate Consultant II									
Leila Harris	\$130.00	\$130.00	\$130.00	\$130.00	7/1/2013	5/31/2015	0%	\$130.00	n/a
Associate Consultant III									

Typical Overhead Plus Fee Rate Structure (for information only)

	Fringe Benefit %	Overhead %	General Administration %	Combined %
NORMAL	n/a +	n/a +	n/a =	n/a
OVERTIME	n/a +	n/a +	n/a =	n/a

FEE %

General Classifications

	\$175.00	\$150.00	\$140.00	\$130.00	\$120.00	\$110.00	\$65.00	7/1/2013	5/31/2015	0%	\$175.00
Senior Consultant III	\$175.00							7/1/2013	5/31/2015	0%	\$175.00
Senior Consultant II	\$150.00	\$150.00						7/1/2013	5/31/2015	0%	\$150.00
Senior Consultant I	\$140.00	\$140.00	\$140.00					7/1/2013	5/31/2015	0%	\$140.00
Associate Consultant III	\$130.00	\$130.00	\$130.00	\$130.00				7/1/2013	5/31/2015	0%	\$130.00
Associate Consultant II	\$120.00	\$120.00	\$120.00	\$120.00	\$120.00			7/1/2013	5/31/2015	0%	\$120.00
Associate Consultant I	\$110.00	\$110.00	\$110.00	\$110.00	\$110.00	\$110.00		7/1/2013	5/31/2015	0%	\$110.00
Technician	\$65.00	\$65.00	\$65.00	\$65.00	\$65.00	\$65.00		7/1/2013	5/31/2015	0%	\$65.00

Straight time range*

City of Sacramento

FLAT RATE COST PROPOSAL

5th Street Viaduct/Roads and Railyards Blvd

Consultant: ICF Jones & Stokes

Date: 09/13/13

Typical Overhead Plus Fee Rate Structure (for information only)

	Fringe Benefit %	Overhead %	General Administration %	Combined %
NORMAL	n/a +	n/a +	n/a =	n/a
OVERTIME	n/a +	n/a +	n/a =	n/a

DESCRIPTION OF ITEMS	UNIT	FEE %	COST
Special Tooling			
A. Printing			Note 1
B. Speciality Equipment			Note 1
Travel			
A. Per Diem (meals & incidentals)			Note 3
Tools of the Trade			
A. Computers			N/A
B. Vehicle and Cell Phone			N/A
C. Delivery Services			Note 1

Attachment 2 Exhibit B
Sheet 13 of 23

1. Pre-approved actual costs are competitive prices from appropriate vendors in their respective industries and supported by receipts. Items such as special tooling will be reimbursed at actual cost with supporting documentation (invoice).
2. Parking, tolls and local transportation costs resulting from commuting to and from the employee's residence to the job site as defined in the Task Order are not reimbursable.
3. The Project will not reimburse the Consultant for costs to relocate its staff to the geographic area of the contract. The Project will not reimburse the Consultant for any per diem costs unless pre-approved by the Owner's Contract Manager.
4. ODC items are in compliance with CFR, Chapter 1, Part 31 (FAR cost principles) and are consistent with the firm's company-wide allocation policies and charging practices with all clients including federal government, state government, local agencies and private clients.
5. Names and/or rates and/or classifications other than those shown, will not be billed unless prior approval is obtained from Prime Consultant and Owner's Project Manager. Overtime will not be used unless specifically approved by Prime Consultant and Owner's Project Manager. Proposed items should be consistently billed directly to all clients (commercial entities, federal government, state government, local agencies) and not just when the client will pay for them as a direct cost.

Typical Overhead Plus Fee Rate Structure (for information only)									
		Fringe Benefit %		Overhead %		General Administration %		Combined %	
		n/a	+	n/a	+	n/a	=	n/a	n/a
		n/a	+	n/a	+	n/a	=	n/a	n/a
		FEE %							
Name/Classification	Negotiated Flat Hourly Billing		Effective Date of Hourly Rate		% Escalation Increase (after 5/31/15)		Hourly Range For Class		
	Straight	Overtime (1.5X)	Overtime (2x)	From	To				
Malcolm White	\$150.00	\$150.00	\$150.00	7/1/2013	5/31/2015	0%			
Utility Coordinator									

City of Sacramento
FLAT RATE COST PROPOSAL
 5th Street Viaduct/Roads and Railyards Blvd

Consultant: MWC
 Date: 09/13/13

Typical Overhead Plus Fee Rate Structure (for information only)

Fringe Benefit %		Overhead %		General Administration %		Combined %	
NORMAL	n/a +	n/a +	n/a =	n/a =	n/a	n/a	n/a
OVERTIME	n/a +	n/a +	n/a =	n/a =	n/a	n/a	n/a

Name/Classification	Negotiated Flat Hourly Billing		Effective Date of Hourly Rate From	To	% Escalation Increase (after 5/31/15)	Hourly Range For Class
	Straight	Overtime (1.5X)				
DESCRIPTION OF ITEMS	UNIT	COST				
Special Tooling						
A. Printing		Note 1				
B. Specialty Equipment		Note 1				
Travel						
A. Per Diem		Note 3				
Tools of the Trade						
A. Computers		N/A				
B. Vehicle and Cell Phone		N/A				
C. Delivery Services		Note 1				

Attachment 2 Exhibit B
 Sheet 15 of 23

1. Pre-approved actual costs are competitive prices from appropriate vendors in their respective industries and supported by receipts. Items such as special tooling will be reimbursed at actual cost with supporting documentation (invoice).
2. Parking, tolls and local transportation costs resulting from commuting to and from the employee's residence to the job site as defined in the Task Order are not reimbursable.
3. The Project will not reimburse the Consultant for costs to relocate its staff to the geographic area of the contract. The Project will not reimburse the Consultant for any per diem costs unless pre-approved by the Owner's Contract Manager.
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5. Names and/or rates and/or classifications other than those shown, will not be billed unless prior approval is obtained from Prime Consultant and Owner's Project Manager. Overtime will not be used unless specifically approved by Prime Consultant and Owner's Project Manager. Proposed items should be consistently billed directly to all clients (commercial entities, federal government, state government, local agencies) and not just when the client will pay for them as a direct cost.

[SBE]

City of Sacramento
 FLAT RATE COST PROPOSAL
 5th Street Viaduct/Roads and Railyards Blvd

Typical Overhead Plus Fee Rate Structure (for information only)	
Overhead %	General Administration
159.50% +	0.00% =
120.00% +	0.00% =
10.00%	
Fringe Benefit %	Combined %
0.00% +	159.50%
0.00% +	120.00%
FEE %	
10.00%	

Name/Classification	Negotiated Flat Hourly Billing		Effective Date of Hourly Rate From	Effective Date of Hourly Rate To	% Escalation Increase (after 5/31/15)	Hourly Range For Class
	Straight	Overtime (1.5x)				
Mark Reno, P.E.	\$175.00	\$175.00	7/1/2013	5/31/2015	0%	
Technical Resource						
Greg Young, P.E.	\$141.00	\$167.40	7/1/2013	5/31/2015	0%	
Asst RE						
Martin Pohl, PE	\$141.00	\$167.40	7/1/2013	5/31/2015	0%	
Senior Engineer						
Brian Newton	\$133.00	\$159.40	7/1/2013	5/31/2015	0%	
Sr. Inspector						
Ramon Montes de Oca	\$138.00	\$164.40	7/1/2013	5/31/2015	0%	
Sr. Inspector						
Erik Dahl	\$133.00	\$159.40	7/1/2013	5/31/2015	0%	
Sr. Inspector						

General Classifications						
Name/Classification	Straight	Overtime (1.5x)	Overtime (2x)	Effective Date of Hourly Rate From	Effective Date of Hourly Rate To	% Escalation Increase (after 5/31/15)
Resident Engineer	\$170.00	\$170.00	\$170.00	7/1/2013	5/31/2015	0%
Asst RE/Sr. Engineer	\$141.00	\$167.40	\$193.80	7/1/2013	5/31/2015	0%
Senior Inspector	\$130.00	\$156.40	\$182.80	7/1/2013	5/31/2015	0%
Office Engineer	\$130.00	\$156.40	\$182.80	7/1/2013	5/31/2015	0%

Typical Overhead Plus Fee Rate Structure (for information only)

NORMAL	Fringe Benefit %	Overhead %	General Administration	Combined %
OVERTIME	0.00% +	159.50% +	0.00% =	159.50%
	0.00% +	120.00% +	0.00% =	120.00%

FEE % 10.00%

Name/Classification	Negotiated Flat Hourly Billing	Effective Date of Hourly Rate	% Escalation Increase (after 5/31/15)	Hourly Range For Class
	Straight	From To		
	Overtime (1.5X)			
	Overtime (2x)			

Attachment 2 Exhibit B

Sheet 17 of 23

DESCRIPTION OF ITEMS	UNIT	COST
Special Tooling		
A. Printing		Note 1
B. Speciality Equipment		Note 1
Travel		
A. Per Diem		Note 3
Tools of the Trade		
A. Computers		N/A
B. Vehicle and Cell Phone		N/A
C. Delivery Services		Note 1

1. Pre-approved actual costs are competitive prices from appropriate vendors in their respective industries and supported by receipts. Items such as special tooling will be reimbursed at actual cost with supporting documentation (invoice).
2. Parking, tolls and local transportation costs resulting from commuting to and from the employee's residence to the job site as defined in the Task Order are not reimbursable.
3. The Project will not reimburse the Consultant for costs to relocate its staff to the geographic area of the contract. The Project will not reimburse the Consultant for any per diem costs unless pre-approved by the Owner's Contract Manager.
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Typical Overhead Plus Fee Rate Structure (for information only)			
	Fringe Benefit %	General Administration %	Combined %
NORMAL	56.74% +	0.00% =	171.36%
OVERTIME	56.74% +	0.00% =	171.36%
	FEE %		
	5.00%		

The following rates do not exceed rates computed using the typical overhead plus fee rate structure.

Name/Classification	Negotiated Flat Hourly Billing		Effective Date of Hourly Rate From	To	% Escalation Increase (after 5/31/15)	Actual Hourly/Rate and/or Average Hourly Rate	Hourly Range For Class
	Straight	Overtime (1.5x)	From	To			
Elias Rashmawi	\$175.00	\$175.00	7/1/2013	5/31/2015	0%		
Environmental Manager							
Brian Egger	\$118.00	\$156.40	7/1/2013	5/31/2015	0%		
Soils and Materials Tester							
Colin Ryan	\$118.00	\$156.40	7/1/2013	5/31/2015	0%		
Soils and Materials Tester							
Dean Mochrie	\$150.00	\$150.00	7/1/2013	5/31/2015	0%		
Hazardous Materials Specialist							

General Classifications

Environmental Manager	\$175.00	\$175.00	7/1/2013	5/31/2015	0%		\$175.00
Soils and Materials Tester	\$118.00	\$156.40	7/1/2013	5/31/2015	0%		\$118.00
Hazardous Materials Specialist	\$150.00	\$150.00	7/1/2013	5/31/2015	0%		\$150.00

Typical Overhead Plus Fee Rate Structure (for information only)

Fringe Benefit %	Overhead %	General Administration %	Combined %
56.74% +	114.62% +	0.00% =	171.36%
56.74% +	114.62% +	0.00% =	171.36%
	5.00%		

The following rates do not exceed rates computed using the typical overhead plus fee rate structure.

Name/Classification	Negotiated Flat Hourly Billing		Effective Date of Hourly Rate	Escalation Increase (after 5/31/15)	Actual Hourly/Average Hourly Rate	Hourly Range For Class
	Straight	Overtime (1.5X)				
DESCRIPTION OF ITEMS	UNIT	COST				
Special Tooling						
A. Printing		Note 1				
B. Specialty Equipment		Note 1				
Travel						
A. Per Diem		Note 3				
Tools of the Trade						
A. Computers		N/A				
B. Vehicle and Cell Phone		N/A				
C. Delivery Services		Note 1				
D. Sample Testing		Note 9				

Attachment 2 Exhibit B
 Sheet 19 of 23

1. Pre-approved actual costs are competitive prices from appropriate vendors in their respective industries and supported by receipts. Items such as special tooling will be reimbursed at actual cost with supporting documentation (invoice).
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6. See attached Sunstar Pricing for Analytical Services



CALIFORNIA STATE
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM BRANCH

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

Sunstar Laboratories, Inc.

25712 Commercentre Drive
Lake Forest, CA 92630

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: 2250
Expiration Date: 07/31/2014
Effective Date: 08/01/2012

Richmond, California
subject to forfeiture or revocation


David Mazzera, Ph.D., Assistant Division Chief
Division of Drinking Water and Environmental Management

Auburn Main Office:
11521 Blocker Drive, Suite 110
Auburn, CA 95603
(530) 887-1494 Fax (530) 887-1495



Modesto Office:
1016 12th Street
Modesto, CA 95354
(209) 522-6273 Fax (209) 522-6274

West Sacramento Office:
2491 Boatman Avenue
West Sacramento, CA 95691
(916) 375-8706 Fax (916) 375-8709

www.blackburnconsulting.com

Fresno Office:
377 W. Fallbrook Ave, Ste. 108
Fresno, CA 93711
(559) 438-8411

2013 LABORATORY FEE SCHEDULE

Geotechnical ▪ Geo-Environmental ▪ Construction Services ▪ Forensics

SOIL CLASSIFICATION		
#200 Sieve Wash	ASTM D1140	\$110
Sieve Analysis to #200	ASTM D6913, CAL 202	\$170
Standard Hydrometer with Sieve Analysis	ASTM D422	\$335
Plasticity Index	ASTM D4318	\$195
Specific Gravity - Soils	AASHTO T100	\$105
MOISTURE / DENSITY		
Moisture Content	ASTM D2216, CAL 226	\$40
Moisture/Density		\$75
SOIL COMPACTION		
Standard Proctor (4" or 6" mold)	ASTM D698	\$305
Modified Proctor (4" or 6" mold)	ASTM D1557	\$305
California Impact	CAL 216	\$305
Check Point (Standard or Modified)		\$140
VOLUME CHANGE		
One-Dimensional Consolidation (6 load increments, includes 2 time rate curves and 2 rebound decrements)	ASTM D2435	\$480
Additional Load or Rebound Decrement		\$32/ea
Additional Time Rate Curves		\$105/ea
Expansion Index	ASTM D4829	\$250
Settlement Swell	ASTM D4546	\$150
STRENGTH		
Unconfined Compression	ASTM D2166	\$140
Compression, Rock <i>Prep & Photos included</i>	ASTM D7012	\$265
Rock Point Load (up to six points)	ASTM D5731	\$65
Compression Test of Cored Concrete Spec.		\$75
California Bearing Ratio (CBR), with curve	ASTM D1883	\$760
California Bearing Ratio (CBR), without curve	ASTM D1883	\$455
Resistance Value	CAL 301, ASTM D2844	\$330
Direct Shear: (per point)		
Undisturbed	ASTM D3080	\$190
Remolded	ASTM D3080	\$195
Triaxial Compression: (per point) Photos of failure upon request		
Undrained, Unconsolidated w/out Pore Pressure	ASTM D2850	\$170
Consolidated, Undrained w/ Pore Pressure Measurements	ASTM D4767	\$500
Consolidated, Drained		\$720
Consolidated, Undrained, no Pore Pressure Measurements		\$280
Specimen Remolding		\$110

Attachment 2 Exhibit B
Sheet 23 of 23

2013 Laboratory Fee Schedule

CORROSIVITY ANALYSIS

Corrosion Analysis Package	CAL 643, 417, 422	\$310
<i>Includes Soil Resistivity, Soil pH, Sulfates / Chlorides. Minimum size is 1,000 grams</i>		
pH	CTM643	\$40
Resistivity	CTM643	\$130

PERMEABILITY

Flex-wall Permeability	ASTM D5084	
<i>Either Constant head or Falling Head / rising Tail Water. Method depends on soil type</i>		
Each Additional Effective Stress		\$110
Specimen Remodeling		\$110

TREATED SOIL TESTS

% Lime for Stabilization - per point (%)	ASTM D6276	\$120
pH of Soil	CTM643	\$40
Modified Proctor	ASTM D1557	\$365
Unconfined Compression Test	ASTM D5102	\$205
One Dimensional Swell	ASTM D4546	\$205

AGGREGATES

Bulk Specific Gravity - Course & Fine Aggregate	ASTM C127 & 128, CAL 206, 207	\$105
Coarse Durability	CAL 229	\$180
Fine Durability	CAL 229	\$180
Sand Equivalent	CAL 217, ASTM D2419	\$200
Cleanliness Value	CAL 227	\$170

ASPHALT

Bulk Specific Gravity - Compacted Hot Mix Asphalt	CAL 308	\$50
Theoretical Max Specific Gravity (Rice)	CAL 309	\$185
LTMD (Set of 5)	CAL 375	\$370

Binder Content

Ignition Oven Correction Factor	CAL 382	\$315
Ignition Oven	CAL 382	\$185
Solvent	AASHTO T164	\$235
Stability (Set of 3)	CAL 366	\$330

Void Content

With Stability and Rice	CAL 367	\$35
Without Stability and Rice	CAL 304, 309, 366, 367, 375	\$670
Moisture Content	CAL 226/370	\$95
Percent of Crushed Particles (per size fraction)	CAL 205	\$160
Fine Aggregate Angularity	AASHTO T304, Method A	\$160
Flat and Elongated Particles (per size)	AASHTO D 4791	\$160

Gradations

Combined Grading 1" through no. 200	CAL 201/202	\$170
Combined Grading 1" through no. 200 with: Sand Equivalent		\$315
Bin Grading (First 2 Bins)	CAL 201/202	\$170
Each Bin Thereafter		\$65
LP-9 (RAP) Bum	LP-9, CT382	\$105

CONCRETE & MASONRY

Concrete Compression Test	ASTM C39	\$35
Masonry or Grout Compression		\$50

Other Tests Quoted Upon Request

EXHIBIT C

PROFESSIONAL SERVICES AGREEMENT FOR DESIGN PROFESSIONALS

FACILITIES AND EQUIPMENT TO BE PROVIDED BY CITY

CITY shall [check one] Not furnish any facilities or equipment for this Agreement; or

furnish the following facilities or equipment for the Agreement [*list, if applicable*]:

EXHIBIT D

PROFESSIONAL SERVICES AGREEMENT FOR DESIGN PROFESSIONALS

GENERAL PROVISIONS

1. Independent Contractor.

- A. It is understood and agreed that CONTRACTOR (including CONTRACTOR's employees) is an independent contractor and that no relationship of employer-employee exists between the parties hereto for any purpose whatsoever. Neither CONTRACTOR nor CONTRACTOR's assigned personnel shall be entitled to any benefits payable to employees of CITY. CITY is not required to make any deductions or withholdings from the compensation payable to CONTRACTOR under the provisions of this Agreement, and CONTRACTOR shall be issued a Form 1099 for its services hereunder. As an independent contractor, CONTRACTOR hereby agrees to indemnify and hold CITY harmless from any and all claims that may be made against CITY based upon any contention by any of CONTRACTOR's employees or by any third party, including but not limited to any state or federal agency, that an employer-employee relationship or a substitute therefor exists for any purpose whatsoever by reason of this Agreement or by reason of the nature and/or performance of any Services under this Agreement. (As used in this Exhibit D, the term "Services" shall include both Services and Additional Services as such terms are defined elsewhere in this Agreement.)
- B. It is further understood and agreed by the parties hereto that CONTRACTOR, in the performance of its obligations hereunder, is subject to the control and direction of CITY as to the designation of tasks to be performed and the results to be accomplished under this Agreement, but not as to the means, methods, or sequence used by CONTRACTOR for accomplishing such results. To the extent that CONTRACTOR obtains permission to, and does, use CITY facilities, space, equipment or support services in the performance of this Agreement, this use shall be at the CONTRACTOR's sole discretion based on the CONTRACTOR's determination that such use will promote CONTRACTOR's efficiency and effectiveness. Except as may be specifically provided elsewhere in this Agreement, the CITY does not require that CONTRACTOR use CITY facilities, equipment or support services or work in CITY locations in the performance of this Agreement.
- C. If, in the performance of this Agreement, any third persons are employed by CONTRACTOR, such persons shall be entirely and exclusively under the direction, supervision, and control of CONTRACTOR. Except as may be specifically provided elsewhere in this Agreement, all terms of employment, including hours, wages, working conditions, discipline, hiring, and discharging, or any other terms of employment or requirements of law, shall be determined by CONTRACTOR. It is further understood and agreed that CONTRACTOR shall issue W-2 or 1099 Forms for income and employment tax purposes, for all of CONTRACTOR's assigned personnel and subcontractors.
- D. The provisions of this Section 1 shall survive any expiration or termination of this Agreement. Nothing in this Agreement shall be construed to create an exclusive relationship between CITY and CONTRACTOR. CONTRACTOR may represent, perform services for, or be employed by such additional persons or companies as CONTRACTOR sees fit provided that CONTRACTOR does not violate the provisions of Section 5, below.

2. **Licenses; Permits, Etc.** CONTRACTOR represents and warrants that CONTRACTOR has all licenses, permits, City Business Operations Tax Certificate, qualifications, and approvals of whatsoever nature that are legally required for CONTRACTOR to practice its profession or provide any services under the Agreement. CONTRACTOR represents and warrants that CONTRACTOR shall, at its sole cost and expense, keep in effect or obtain at all times during the term of this Agreement any licenses, permits, and approvals that are legally required for CONTRACTOR to practice its profession or provide such Services. Without limiting the generality of the foregoing, if CONTRACTOR is an out-of-state corporation, CONTRACTOR warrants and represents that it possesses a valid certificate of qualification to transact business in the State of California issued by the California Secretary of State pursuant to Section 2105 of the California Corporations Code.
3. **Time.** CONTRACTOR shall devote such time and effort to the performance of Services pursuant to this Agreement as is necessary for the satisfactory and timely performance of CONTRACTOR's obligations under this Agreement. Neither party shall be considered in default of this Agreement, to the extent that party's performance is prevented or delayed by any cause, present or future, that is beyond the reasonable control of that party.
4. **CONTRACTOR Not Agent.** Except as CITY may specify in writing, CONTRACTOR and CONTRACTOR's personnel shall have no authority, express or implied, to act on behalf of CITY in any capacity whatsoever as an agent. CONTRACTOR and CONTRACTOR's personnel shall have no authority, express or implied, to bind CITY to any obligations whatsoever.
5. **Conflicts of Interest.** CONTRACTOR covenants that neither it, nor any officer or principal of its firm, has or shall acquire any interest, directly or indirectly, that would conflict in any manner with the interests of CITY or that would in any way hinder CONTRACTOR's performance of Services under this Agreement. CONTRACTOR further covenants that in the performance of this Agreement, no person having any such interest shall be employed by it as an officer, employee, agent or subcontractor, without the written consent of CITY. CONTRACTOR agrees to avoid conflicts of interest or the appearance of any conflicts of interest with the interests of CITY at all times during the performance of this Agreement. If CONTRACTOR is or employs a former officer or employee of the CITY, CONTRACTOR and any such employee(s) shall comply with the provisions of Sacramento City Code Section 2.16.090 pertaining to appearances before the City Council or any CITY department, board, commission or committee.
6. **Confidentiality of CITY Information.** During performance of this Agreement, CONTRACTOR may gain access to and use CITY information regarding inventions, machinery, products, prices, apparatus, costs, discounts, future plans, business affairs, governmental affairs, processes, trade secrets, technical matters, systems, facilities, customer lists, product design, copyright, data, and other vital information (hereafter collectively referred to as "City Information") that are valuable, special and unique assets of the CITY. CONTRACTOR agrees to protect all City Information and treat it as strictly confidential, and further agrees that CONTRACTOR shall not at any time, either directly or indirectly, divulge, disclose or communicate in any manner any City Information to any third party without the prior written consent of CITY. In addition, CONTRACTOR shall comply with all CITY policies governing the use of the CITY network and technology systems, as set forth in applicable provisions of the City of Sacramento Administrative Policy Instructions # 30. A violation by CONTRACTOR of this Section 6 shall be a material violation of this Agreement and shall justify legal and/or equitable relief.

7. CONTRACTOR Information.

- A. CITY shall have full ownership and control, including ownership of any copyrights, of all information prepared, produced, or provided by CONTRACTOR pursuant to this Agreement. In this Agreement, the term "information" shall be construed to mean and include: any and all work product, submittals, reports, plans, specifications, and other deliverables consisting of documents, writings, handwritings, typewriting, printing, photostatting, photographing, computer models, and any other computerized data and every other means of recording any form of information, communications, or representation, including letters, works, pictures, drawings, sounds, or symbols, or any combination thereof. CONTRACTOR shall not be responsible for any unauthorized modification or use of such information for other than its intended purpose by CITY.
- B. CONTRACTOR shall fully defend, indemnify and hold harmless CITY, its officers and employees, and each and every one of them, from and against any and all claims, actions, lawsuits or other proceedings alleging that all or any part of the information prepared, produced, or provided by CONTRACTOR pursuant to this Agreement infringes upon any third party's trademark, trade name, copyright, patent or other intellectual property rights. CITY shall make reasonable efforts to notify CONTRACTOR not later than ten (10) days after CITY is served with any such claim, action, lawsuit or other proceeding, provided that CITY's failure to provide such notice within such time period shall not relieve CONTRACTOR of its obligations hereunder, which shall survive any termination or expiration of this Agreement.
- C. All proprietary and other information received from CONTRACTOR by CITY, whether received in connection with CONTRACTOR's proposal to CITY or in connection with any Services performed by CONTRACTOR, will be disclosed upon receipt of a request for disclosure, pursuant to the California Public Records Act; provided, however, that, if any information is set apart and clearly marked "trade secret" when it is provided to CITY, CITY shall give notice to CONTRACTOR of any request for the disclosure of such information. The CONTRACTOR shall then have five (5) days from the date it receives such notice to enter into an agreement with the CITY, satisfactory to the City Attorney, providing for the defense of, and complete indemnification and reimbursement for all costs (including plaintiff's attorney fees) incurred by CITY in any legal action to compel the disclosure of such information under the California Public Records Act. The CONTRACTOR shall have sole responsibility for defense of the actual "trade secret" designation of such information.
- D. The parties understand and agree that any failure by CONTRACTOR to respond to the notice provided by CITY and/or to enter into an agreement with CITY, in accordance with the provisions of subsection C, above, shall constitute a complete waiver by CONTRACTOR of any rights regarding the information designated "trade secret" by CONTRACTOR, and such information shall be disclosed by CITY pursuant to applicable procedures required by the Public Records Act.

- 8. Standard of Performance.** CONTRACTOR shall perform all Services required pursuant to this Agreement in the manner and according to the standards currently observed by a competent practitioner of CONTRACTOR's profession in California. All products of whatsoever nature that CONTRACTOR delivers to CITY pursuant to this Agreement shall be prepared in a professional manner and conform to the

standards of quality normally observed by a person currently practicing in CONTRACTOR's profession, and shall be provided in accordance with any schedule of performance specified in Exhibit A. CONTRACTOR shall assign only competent personnel to perform Services pursuant to this Agreement. CONTRACTOR shall notify CITY in writing of any changes in CONTRACTOR's staff assigned to perform the Services required under this Agreement, prior to any such performance. In the event that CITY, at any time during the term of this Agreement, desires the removal of any person assigned by CONTRACTOR to perform Services pursuant to this Agreement, because CITY, in its sole discretion, determines that such person is not performing in accordance with the standards required herein, CONTRACTOR shall remove such person immediately upon receiving notice from CITY of the desire of CITY for the removal of such person.

9. Term; Suspension; Termination.

- A. This Agreement shall become effective on the date that it is approved by both parties, set forth on the first page of the Agreement, and shall continue in effect until both parties have fully performed their respective obligations under this Agreement, unless sooner terminated as provided herein.
- B. CITY shall have the right at any time to temporarily suspend CONTRACTOR's performance hereunder, in whole or in part, by giving a written notice of suspension to CONTRACTOR. If CITY gives such notice of suspension, CONTRACTOR shall immediately suspend its activities under this Agreement, as specified in such notice.
- C. CITY shall have the right to terminate this Agreement at any time by giving a written notice of termination to CONTRACTOR. If CITY gives such notice of termination, CONTRACTOR shall immediately cease rendering Services pursuant to this Agreement. If CITY terminates this Agreement:
 - (1) CONTRACTOR shall, not later than five days after such notice of termination, deliver to CITY copies of all information prepared pursuant to this Agreement.
 - (2) CITY shall pay CONTRACTOR the reasonable value of Services rendered by CONTRACTOR prior to termination; provided, however, CITY shall not in any manner be liable for lost profits that might have been made by CONTRACTOR had the Agreement not been terminated or had CONTRACTOR completed the Services required by this Agreement. In this regard, CONTRACTOR shall furnish to CITY such financial information as in the judgment of the CITY is necessary for CITY to determine the reasonable value of the Services rendered by CONTRACTOR. The foregoing is cumulative and does not affect any right or remedy that CITY may have in law or equity.

10. Indemnity.

- A. Indemnity: CONTRACTOR shall defend, hold harmless and indemnify CITY, its officers and employees, and each and every one of them, from and against any and all claims, actions, damages, costs, liabilities, demands, losses, judgments, penalties and expenses of every type and description, including, but not limited to, any fees and/or costs reasonably incurred by CITY's staff attorneys or outside attorneys and any fees and expenses incurred in enforcing this

provision (hereafter collectively referred to as "Claims"), including but not limited to Claims arising from personal injury or death, damage to personal, real, or intellectual property, or the environment, contractual or other economic damages, or regulatory penalties, that arise out of, pertain to, or relate to any negligent act or omission, recklessness, or willful misconduct of CONTRACTOR, its sub-consultants, subcontractors, or agents, and their respective officers and employees, in connection with performance of or failure to perform this Agreement, whether or not such Claims are litigated, settled, or reduced to judgment; provided that the foregoing indemnity does not apply to liability for damages for death or bodily injury to persons, injury to property, or other loss, damage, or expense to the extent arising from (i) the sole negligence or willful misconduct of, or defects in design furnished by, CITY, its agents, servants, or independent contractors who are directly responsible to CITY, or (ii) the active negligence of CITY.

- B. Insurance Policies; Intellectual Property Claims: The existence or acceptance by CITY of any of the insurance policies or coverages described in this Agreement shall not affect or limit any of CITY's rights under this Section 10, nor shall the limits of such insurance limit the liability of CONTRACTOR hereunder. This Section 10 shall not apply to any intellectual property claims, actions, lawsuits, or other proceedings subject to the provisions of Section 7.B., above. The provisions of this Section 10 shall survive any expiration or termination of this Agreement.

11. Insurance Requirements. During the entire term of this Agreement, CONTRACTOR shall maintain the insurance coverage described in this Section 11.

Full compensation for all premiums that CONTRACTOR is required to pay for the insurance coverage described herein shall be included in the compensation specified for the Services provided by CONTRACTOR under this Agreement. No additional compensation will be provided for CONTRACTOR's insurance premiums.

It is understood and agreed by the CONTRACTOR that its liability to the CITY shall not in any way be limited to or affected by the amount of insurance coverage required or carried by the CONTRACTOR in connection with this Agreement.

A. Minimum Scope & Limits of Insurance Coverage

- (1) Commercial General Liability Insurance, providing coverage at least as broad as ISO CGL Form 00 01 on an occurrence basis for bodily injury, including death, of one or more persons, property damage and personal injury, with limits of not less than two million dollars (\$2,000,000) per occurrence. The policy shall provide contractual liability and products and completed operations coverage for the term of the policy.
- (2) Automobile Liability Insurance providing coverage at least as broad as ISO Form CA 00 01 on an occurrence basis for bodily injury, including death, of one or more persons, property damage and personal injury, with limits of not less than two million dollars (\$2,000,000) per occurrence. The policy shall provide coverage for owned, non-owned and/or hired autos as appropriate to the operations of the CONTRACTOR.

No automobile liability insurance shall be required if CONTRACTOR completes the following certification:

"I certify that a motor vehicle will not be used in the performance of any work or services under this agreement." _____ (CONTRACTOR initials)

- (3) Workers' Compensation Insurance with statutory limits, and Employers' Liability Insurance with limits of not less than one million dollars (\$1,000,000). The Worker's Compensation policy shall include a waiver of subrogation for contracts involving construction or maintenance, or if required by the CITY by selecting the option below:

_____ Workers' Compensation waiver of subrogation in favor of the City is required for all work performed by the CONTRACTOR.

No Workers' Compensation insurance shall be required if CONTRACTOR completes the following certification:

"I certify that my business has no employees, and that I do not employ anyone. I am exempt from the legal requirements to provide Workers' Compensation insurance." _____ (CONTRACTOR initials)

- (4) Professional Liability Insurance providing coverage on a claims made basis for errors, omissions or malpractice with limits of not less than two million (\$2,000,000) dollars if required by the CITY under Exhibit A, Section 2.

B. Additional Insured Coverage

- (1) Commercial General Liability Insurance: The CITY, IA Sacramento Holdings, L.L.C, and their officials, employees and volunteers shall be covered by policy terms or endorsement as additional insureds as respects general liability arising out of activities performed by or on behalf of CONTRACTOR, products and completed operations of CONTRACTOR, and premises owned, leased or used by CONTRACTOR. The general liability additional insured endorsement must be signed by an authorized representative of the insurance carrier for contracts involving construction or maintenance, or if required by the CITY by selecting the option below:

_____ Additional insured endorsement must be signed by an authorized representative of the insurance carrier.

If the policy includes a blanket additional insured endorsement or contractual additional insured coverage, the above signature requirement may be fulfilled by submitting that document with a signed declaration page referencing the blanket endorsement or policy form.

- (2) Automobile Liability Insurance: The CITY, IA Sacramento Holdings, L.L.C, and their officials, employees and volunteers shall be covered by policy terms or endorsement as additional insureds as respects auto liability.

C. Other Insurance Provisions

The policies are to contain, or be endorsed to contain, the following provisions:

- (1) Except for professional liability, CONTRACTOR's insurance coverage shall be primary insurance as respects CITY, IA Sacramento Holdings, L.L.C. and their officials, employees and volunteers. Any insurance or self-insurance maintained by CITY, IA Sacramento Holdings L.L.C., and their officials, employees or volunteers shall be in excess of CONTRACTOR's insurance and shall not contribute with it.
- (2) Any failure to comply with reporting provisions of the policies shall not affect coverage provided to CITY, IA Sacramento Holdings L.L.C., and their officials, employees or volunteers.
- (3) Coverage shall state that CONTRACTOR's insurance 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.
- (4) CITY will be provided with thirty (30) days written notice of cancellation or material change in the policy language or terms.

D. Acceptability of Insurance

Insurance shall be placed with insurers with a Bests' rating of not less than A:V. Self-insured retentions, policy terms or other variations that do not comply with the requirements of this Section 11 must be declared to and approved by the CITY Risk Management Division in writing prior to execution of this Agreement.

E. Verification of Coverage

- (1) CONTRACTOR shall furnish CITY with certificates and required endorsements evidencing the insurance required. The certificates and endorsements shall be forwarded to the CITY representative named in Exhibit A. Copies of policies shall be delivered to the CITY on demand. Certificates of insurance shall be signed by an authorized representative of the insurance carrier.
- (2) The CITY may withdraw its offer of contract or cancel this Agreement if the certificates of insurance and endorsements required have not been provided prior to execution of this Agreement. The CITY may withhold payments to CONTRACTOR and/or cancel the Agreement if the insurance is canceled or CONTRACTOR otherwise ceases to be insured as required herein.

F. Subcontractors

CONTRACTOR shall require and verify that all sub-consultants and subcontractors maintain insurance coverage that meets the minimum scope and limits of insurance coverage specified in

subsection A, above (excluding Professional Liability Insurance).

12. Equal Employment Opportunity. During the performance of this Agreement, CONTRACTOR, for itself, its assignees and successors in interest, agrees as follows:

- A. Compliance With Regulations: CONTRACTOR shall comply with the Executive Order 11246 entitled "Equal Opportunity in Federal Employment", as amended by Executive Order 11375 and 12086, and as supplemented in Department of Labor regulations (41 CFR Chapter 60), hereinafter collectively referred to as the "Regulations".
- B. Nondiscrimination: CONTRACTOR, with regards to the work performed by it after award and prior to completion of the work pursuant to this Agreement, shall not discriminate on the ground of race, color, religion, sex, national origin, age, marital status, physical handicap or sexual orientation in selection and retention of subcontractors, including procurement of materials and leases of equipment. CONTRACTOR shall not participate either directly or indirectly in discrimination prohibited by the Regulations.
- C. Solicitations for Subcontractors, Including Procurement of Materials and Equipment: In all solicitations either by competitive bidding or negotiations made by CONTRACTOR for work to be performed under any subcontract, including all procurement of materials or equipment, each potential subcontractor or supplier shall be notified by CONTRACTOR of CONTRACTOR's obligation under this Agreement and the Regulations relative to nondiscrimination on the ground of race, color, religion, sex, national origin, age, marital status, physical handicap or sexual orientation.
- D. Information and Reports: CONTRACTOR shall provide all information and reports required by the Regulations, or by any orders or instructions issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information and its facilities as may be determined by the CITY to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of CONTRACTOR is in the exclusive possession of another who fails or refuses to furnish this information, CONTRACTOR shall so certify to the CITY, and shall set forth what efforts it has made to obtain the information.
- E. Sanctions for Noncompliance: In the event of noncompliance by CONTRACTOR with the nondiscrimination provisions of this Agreement, the CITY shall impose such sanctions as it may determine to be appropriate including, but not limited to:
 - (1) Withholding of payments to CONTRACTOR under this Agreement until CONTRACTOR complies;
 - (2) Cancellation, termination, or suspension of the Agreement, in whole or in part.
- F. Incorporation of Provisions: CONTRACTOR shall include the provisions of subsections A through E, above, in every subcontract, including procurement of materials and leases of equipment, unless exempted by the Regulations, or by any order or instructions issued pursuant thereto. CONTRACTOR shall take such action with respect to any subcontract or procurement as the CITY may direct as a means of enforcing such provisions including sanctions for noncompliance;

provided, however, that in the event CONTRACTOR becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, CONTRACTOR may request CITY to enter such litigation to protect the interests of CITY.

13. **Entire Agreement.** This document, including all Exhibits, contains the entire agreement between the parties and supersedes whatever oral or written understanding they may have had prior to the execution of this Agreement. No alteration to the terms of this Agreement shall be valid unless approved in writing by CONTRACTOR, and by CITY, in accordance with applicable provisions of the Sacramento City Code.
14. **Severability.** If any portion of this Agreement or the application thereof to any person or circumstance shall be held invalid or unenforceable, the remainder of this Agreement shall not be affected thereby and shall be enforced to the greatest extent permitted by law.
15. **Waiver.** Neither CITY acceptance of, or payment for, any Service or Additional Service performed by CONTRACTOR, nor any waiver by either party of any default, breach or condition precedent, shall be construed as a waiver of any provision of this Agreement, nor as a waiver of any other default, breach or condition precedent or any other right hereunder.
16. **Enforcement of Agreement.** This Agreement shall be governed, construed and enforced in accordance with the laws of the State of California. Venue of any litigation arising out of or connected with this Agreement shall lie exclusively in the state trial court or Federal District Court located in Sacramento County in the State of California, and the parties consent to jurisdiction over their persons and over the subject matter of any such litigation in such courts, and consent to service of process issued by such courts.
17. **Assignment Prohibited.** The expertise and experience of CONTRACTOR are material considerations for this Agreement. CITY has a strong interest in the qualifications and capability of the persons and entities that will fulfill the obligations imposed on CONTRACTOR under this Agreement. In recognition of this interest, CONTRACTOR shall not assign any right or obligation pursuant to this Agreement without the written consent of the CITY. Any attempted or purported assignment without CITY's written consent shall be void and of no effect.
18. **Binding Effect.** This Agreement shall be binding on the heirs, executors, administrators, successors and assigns of the parties, subject to the provisions of Section 17, above.
19. **Use Tax Requirements.** During the performance of this Agreement, CONTRACTOR, for itself, its assignees and successors in interest, agrees as follows:
 - A. Use Tax Direct Payment Permit: For all leases and purchases of materials, equipment, supplies, or other tangible personal property used to perform the Agreement and shipped from outside California, the Contractor and any subcontractors leasing or purchasing such materials, equipment, supplies or other tangible personal property shall obtain a Use Tax Direct Payment Permit from the California State Board of Equalization ("SBE") in accordance with the applicable SBE criteria and requirements.

- B. Sellers Permit: For any construction contract and any construction subcontract in the amount of \$5,000,000 or more, Contractor and the subcontractor(s) shall obtain sellers permits from the SBE and shall register the jobsite as the place of business for the purpose of allocating local sales and use tax to the City. Contractor and its subcontractors shall remit the self-accrued use tax to the SBE, and shall provide a copy of each remittance to the City.
- C. The above provisions shall apply in all instances unless prohibited by the funding source for the Agreement.

EXHIBIT E

REQUIREMENTS OF THE NON-DISCRIMINATION IN EMPLOYEE BENEFITS CODE

INTRODUCTION

The Sacramento Non-Discrimination In Employee Benefits Code (the "Ordinance"), codified as Sacramento City Code Chapter 3.54, prohibits City contractors from discriminating in the provision of employee benefits between employees with spouses and employees with domestic partners, and between the spouses and domestic partners of employees.

APPLICATION

The provisions of the Ordinance apply to any contract or agreement (as defined below), between a Contractor and the City of Sacramento, in an amount exceeding \$100,000.00. The Ordinance applies to that portion of a contractor's operations that occur: (i) within the City of Sacramento; (ii) on real property outside the City of Sacramento if the property is owned by the City or if the City has a right to occupy the property; or (iii) at any location where a significant amount of work related to a City contract is being performed.

The Ordinance does not apply: to subcontractors or subcontracts of any Contractor or contractors; to transactions entered into pursuant to cooperative purchasing agreements approved by the Sacramento City Council; to legal contracts of other governmental jurisdictions or public agencies without separate competitive bidding by the City; where the requirements of the ordinance will violate or are inconsistent with the terms or conditions of a grant, subvention or agreement with a public agency or the instructions of an authorized representative of any such agency with respect to any such grant, subvention or agreement; to permits for excavation or street construction; or to agreements for the use of City right-of-way where a contracting utility has the power of eminent domain.

DEFINITIONS

As set forth in the Ordinance, the following definitions apply:

"Contract" means an agreement for public works or improvements to be performed, or for goods or services to be purchased or grants to be provided, at the expense of the City or to be paid out of moneys deposited in the treasury or out of the trust money under the control or collected by the City. "Contract" also means a written agreement for the exclusive use ("exclusive use" means the right to use or occupy real property to the exclusion of others, other than the right reserved by the fee owner) or occupancy of real property for a term exceeding 29 days in any calendar year, whether by singular or cumulative instrument, (i) for the operation or use by others of real property owned or controlled by the City for the operation of a business, social, or other establishment or organization, including leases, concessions, franchises and easements, or (ii) for the City's use or occupancy of real property owned by others, including leases, concessions, franchises and easements.

"Contract" shall not include: a revocable at-will use or encroachment permit for the use of or encroachment on City property regardless of the ultimate duration of such permit; excavation, street construction or street use permits; agreements for the use of City right-of-way where a contracting utility has the power of eminent domain; or agreements governing the use of City property that constitute a public forum for activities that are primarily for the purpose of espousing or advocating causes or ideas and that are generally protected by the First Amendment to the United States Constitution or that are primarily recreational in nature.

"Contractor" means any person or persons, firm, partnership, corporation, company, or combination thereof, that enters into a Contract with the City. "Contractor" does not include a public entity.

"Domestic Partner" means any person who has a currently registered domestic partnership with a governmental entity pursuant to state or local law authorizing the registration.

"Employee Benefits" means bereavement leave; disability, life, and other types of insurance; family medical leave; health benefits; membership or membership discounts; moving expenses; pension and retirement benefits; vacation; travel benefits; and any other benefit given to employees. "Employee benefits" shall not include benefits to the extent that the application of the requirements of this chapter to such benefits may be preempted by federal or state.

CONTRACTOR'S OBLIGATION TO PROVIDE THE CITY WITH DOCUMENTATION AND INFORMATION

Contractor shall provide the City with documentation and information verifying its compliance with the requirements of the Ordinance within ten (10) days of receipt of a request from the City. Contractors shall keep accurate payroll records, showing, for each City Contract, the employee's name, address, Social Security number, work classification, straight time pay rate, overtime pay rate, overtime hours worked, status and exemptions, and benefits for each day and pay period that the employee works on the City Contract. Each request for payroll records shall be accompanied by an affidavit to be completed and returned by the Contractor, as stated, attesting that the information contained in the payroll records is true and correct, and that the Contractor has complied with the requirements of the Ordinance. A violation of the Ordinance or noncompliance with the requirements of the Ordinance shall constitute a breach of contract.

EMPLOYER COMPLIANCE CERTIFICATE AND NOTICE REQUIREMENTS

(a) All contractors seeking a Contract subject to the Ordinance shall submit a completed Declaration of Compliance Form, signed by an authorized representative, with each proposal, bid or application. The Declaration of Compliance shall be made a part of the executed contract, and will be made available for public inspection and copying during regular business hours.

(b) The Contractor shall give each existing employee working directly on a City contract, and (at the time of hire), each new employee, a copy of the notification provided as Attachment "A."

(c) Contractor shall post, in a place visible to all employees, a copy of the notice provided as Attachment "B."

Attachment A



YOUR RIGHTS UNDER THE CITY OF SACRAMENTO'S NON-DISCRIMINATION IN EMPLOYEE BENEFITS CODE

On (date), your employer (the "Employer") entered into a contract with the City of Sacramento (the "City") for (contract details), and as a condition of that contract, agreed to abide by the requirements of the City's Non-Discrimination In Employee Benefits Code (Sacramento City Code Section 3.54).

The Ordinance does not require the Employer to provide employee benefits. The Ordinance does require that if certain employee benefits are provided by the Employer, that those benefits be provided without discrimination between employees with spouses and employees with domestic partners, and without discrimination between the spouse or domestic partner of employees.

The Ordinance covers any employee working on the specific contract referenced above, but only for the period of time while those employees are actually working on this specific contract.

The included employee benefits are:

- Bereavement leave
- Disability, life and other types of insurance
- Family medical leave
- Health benefits
- Membership or membership discounts
- Moving expenses
- Pension and retirement benefits
- Vacation
- Travel benefits
- Any other benefits given to employees

(Employee Benefits does not include benefits that may be preempted by federal or state law.)

If you feel you have been discriminated or retaliated against by your employer in the terms and conditions of your application for employment, or in your employment, or in the application of these employee benefits, because of your status as an applicant or as an employee protected by the Ordinance, or because you reported a violation of the Ordinance, and after having exhausted all remedies with your employer,

You May . . .

- Submit a written complaint to the City of Sacramento, Contract Services Unit, containing the details of the alleged violation. The address is:

City of Sacramento
Procurement Services Division
5730 24th Street, Bldg. 1
Sacramento, CA 95822

- Bring an action in the appropriate division of the Superior Court of the State of California against the Employer and obtain the following remedies:
 - Reinstatement, injunctive relief, compensatory damages and punitive damages
 - Reasonable attorney's fees and costs

Attachment B



YOUR RIGHTS UNDER THE CITY OF SACRAMENTO'S NON-DISCRIMINATION IN EMPLOYEE BENEFITS CODE

If your employer provides employee benefits, they must be provided to those employees working on a City of Sacramento contract without discriminating between employees with spouses and employees with domestic partners.

The included employee benefits are:

- Bereavement leave
- Disability, life and other types of insurance
- Family medical leave
- Health benefits
- Membership or membership discounts
- Moving expenses
- Pension and retirement benefits
- Vacation
- Travel benefits
- Any other benefits given to employees

If you feel you have been discriminated against by your employer . . .

You May . . .

- Submit a written complaint to the City of Sacramento, Contract Services Unit, containing the details of the alleged violation. The address is:

City of Sacramento
Procurement Services Division
5730 24th Street, Bldg. 1
Sacramento, CA 95822

- Bring an action in the appropriate division of the Superior Court of the State of California against the employer and obtain reinstatement, injunctive relief, compensatory damages, punitive damages and reasonable attorney's fees and costs.

Discrimination and Retaliation Prohibited.

If you feel you have been discriminated or retaliated against by your employer in the terms and conditions of your application for employment, or in your employment, because of your status as an applicant or as an employee protected by the Ordinance, or because you reported a violation of this Ordinance . . .

You May Also . . .

Submit a written complaint to the City of Sacramento, Contract Services Unit, at the same address, containing the details of the alleged violation.

**Request for Taxpayer
Identification Number and Certification**

Give Form to the
requester. Do not
send to the IRS.

Name (as shown on your income tax return)

Business name/disregarded entity name, if different from above
Vali Cooper & Associates, Inc.

Check appropriate box for federal tax classification (required):
 Individual/sole proprietor C Corporation S Corporation Partnership Trust/estate
 Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶ _____
 Other (see instructions) ▶ _____

Exempt payee

Address (number, street, and apt. or suite no.)
2000 Powell St., Suite 550
City, state, and ZIP code
Emeryville, CA 94806

Requester's name and address (optional)

List account number(s) here (optional)

Print or type
See Specific Instructions on page 2.

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on the "Name" line to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Note. If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

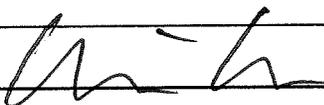
Social security number										
			-				-			
Employer identification number										
6	8	-	0	2	8	4	8	7	3	

Part II Certification

Under penalties of perjury, I certify that:

- The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
- I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
- I am a U.S. citizen or other U.S. person (defined below).

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 4.

Sign Here	Signature of U.S. person ▶ 	Date ▶ 9/24/2013
------------------	--	------------------

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

- Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
- Certify that you are not subject to backup withholding, or
- Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

Note. If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,
- An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership income.

Withholding Exemption Certificate

2011

(This form can only be used to certify exemption from nonresident withholding under California Revenue and Taxation Code (R&TC) Section 18662. Do not use this form for exemption from wage withholding.)

590

File this form with your withholding agent. (Please type or print)

Withholding agent's name

Payee's name Vali Cooper & Associates, Inc.		Payee's <input type="checkbox"/> SOS file no.	<input type="checkbox"/> SSN or ITIN <input type="checkbox"/> CA corp. no.	<input checked="" type="checkbox"/> FEIN 6 8 - 0 2 8 4 8 7 3
Address (number and street, PO Box, or PMB no.) 2000 Powell St., Suite 550			Apt. no./ Ste. no.	
City Emeryville, CA		State CA	ZIP Code 9 4 8 0 6	

Read the following carefully and check the box that applies to the payee.

I certify that for the reasons checked below, the payee named on this form is exempt from the California income tax withholding requirement on payment(s) made to the entity or individual.

Individuals — Certification of Residency:

I am a resident of California and I reside at the address shown above. If I become a nonresident at any time, I will promptly notify the withholding agent. See instructions for General Information D, Who is a Resident, for the definition of a resident.

Corporations:

The above-named corporation has a permanent place of business in California at the address shown above or is qualified through the California Secretary of State (SOS) to do business in California. The corporation will file a California tax return and withhold on payments of California source income to nonresidents when required. If this corporation ceases to have a permanent place of business in California or ceases to do any of the above, I will promptly notify the withholding agent. See instructions for General Information F, What is a Permanent Place of Business, for the definition of permanent place of business.

Partnerships or limited liability companies (LLC):

The above-named partnership or LLC has a permanent place of business in California at the address shown above or is registered with the California SOS, and is subject to the laws of California. The partnership or LLC will file a California tax return and will withhold on foreign and domestic nonresident partners or members when required. If the partnership or LLC ceases to do any of the above, I will promptly inform the withholding agent. For withholding purposes, a limited liability partnership (LLP) is treated like any other partnership.

Tax-Exempt Entities:

The above-named entity is exempt from tax under California Revenue and Taxation Code (R&TC) Section 23701 _____ (insert letter) or Internal Revenue Code Section 501(c) _____ (insert number). The tax-exempt entity will withhold on payments of California source income to nonresidents when required. If this entity ceases to be exempt from tax, I will promptly notify the withholding agent. Individuals cannot be tax-exempt entities.

Insurance Companies, Individual Retirement Arrangements (IRAs), or Qualified Pension/Profit Sharing Plans:

The above-named entity is an insurance company, IRA, or a federally qualified pension or profit-sharing plan.

California Trusts:

At least one trustee and one noncontingent beneficiary of the above-named trust is a California resident. The trust will file a California fiduciary tax return and will withhold on foreign and domestic nonresident beneficiaries when required. If the trustee becomes a nonresident at any time, I will promptly notify the withholding agent.

Estates — Certification of Residency of Deceased Person:

I am the executor of the above-named person's estate. The decedent was a California resident at the time of death. The estate will file a California fiduciary tax return and will withhold on foreign and domestic nonresident beneficiaries when required.

Nonmilitary Spouse of a Military Servicemember:

I am a nonmilitary spouse of a military servicemember and I meet the Military Spouse Residency Relief Act (MSRRA) requirements. See instructions for General Information E, MSRRA.

CERTIFICATE: Please complete and sign below.

Under penalties of perjury, I hereby certify that the information provided in this document is, to the best of my knowledge, true and correct. If conditions change, I will promptly notify the withholding agent.

Payee's name and title (type or print) Marian Ross/CFO Daytime telephone no. 510-446-8301

Payee's signature  Date 9/24/2013

Client#: 310729

VALICOOP

ACORD™

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
9/24/2013

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Hub International HUB Int'l Insurance Serv. Inc. P.O. Box 4047 Concord, CA 94524-4047	CONTACT NAME:		
	PHONE (A/C, No, Ext):	925 609-6500	FAX (A/C, No): 925 609-6550
INSURED Vali Cooper & Associates, Inc. 2000 Powell Street, Suite 550 Emeryville, CA 94608	INSURER(S) AFFORDING COVERAGE		NAIC #
	INSURER A:	Hanover Insurance Company	22292
	INSURER B:	Navigators Specialty Ins Co	36056
	INSURER C:	Travelers Prop Cas Co of Amer	25674
	INSURER D:	Continental Casualty Company	20443
	INSURER E:	Massachusetts Bay Insurance Co	22306
	INSURER F:		

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	GENERAL LIABILITY		ZHF897008903	12/30/2012	12/30/2013	EACH OCCURRENCE \$1,000,000
	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY					DAMAGE TO RENTED PREMISES (Ea occurrence) \$1,000,000
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR					MED EXP (Any one person) \$10,000
	<input checked="" type="checkbox"/> Ded: 0					PERSONAL & ADV INJURY \$1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:					GENERAL AGGREGATE \$2,000,000
	<input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input checked="" type="checkbox"/> LOC					PRODUCTS - COM/POP AGG \$2,000,000
E	AUTOMOBILE LIABILITY		ADF895285503	12/30/2012	12/30/2013	COMBINED SINGLE LIMIT (Ea accident) \$1,000,000
	<input checked="" type="checkbox"/> ANY AUTO					BODILY INJURY (Per person) \$
	<input type="checkbox"/> ALL OWNED AUTOS	<input checked="" type="checkbox"/> SCHEDULED AUTOS				BODILY INJURY (Per accident) \$
	<input checked="" type="checkbox"/> HIRED AUTOS	<input type="checkbox"/> NON-OWNED AUTOS				PROPERTY DAMAGE (Per accident) \$
						\$
B	UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR		SE12EXC701858IC	12/30/2012	12/30/2013	EACH OCCURRENCE \$10,000,000
	<input checked="" type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE					AGGREGATE \$10,000,000
	DED <input checked="" type="checkbox"/> RETENTION \$0					\$
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY		PJUB8464L16212	12/30/2012	12/30/2013	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	<input type="checkbox"/> Y / <input type="checkbox"/> N				E.L. EACH ACCIDENT \$1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below	N/A				E.L. DISEASE - EA EMPLOYEE \$1,000,000
						E.L. DISEASE - POLICY LIMIT \$1,000,000
D	PROFESSIONAL LIAB Claims-Made		AEH288342192	12/30/2012	12/30/2013	Per Claim: \$5,000,000 Aggregate: \$5,000,000 Ded: \$35,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Re: Project #T15135800, CM Services for 5th Street Viaduct.
The City of Sacramento, IA Sacramento Holdings, L.L.C., and their officials, employees and volunteers as Additional Insured as respects General Liability & Auto Liability per attached forms 421-0778 0909 & CA2048 0299; and coverage applies on a Primary basis per 421-0452 0607 & CA0001 0306. General Liability & Auto Liability Separation of Insureds applies per CG0001 1207 & CA0001 0306. Waiver of Subrogation in favor of (See Attached Descriptions)

CERTIFICATE HOLDER City of Sacramento Public Works Engineering Svcs Division 915 I Street, Room 2000 Sacramento, CA 95814-2702	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE 

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DESCRIPTIONS (Continued from Page 1)

the City of Sacramento applies per WC990376. All as required by written contract.

"Should the policies be cancelled before the expiration date, Hub International Insurance Services Inc. (Hub), independent of any rights which may be afforded within the policies to the certificate holder named below, will provide to such certificate holder notice of such cancellation within thirty (30) days of the cancellation date, except in the event the cancellation is due to non-payment of premium, in which case Hub will provide to such certificate holder notice of such cancellation within ten (10) days of the cancellation date."

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

CALIFORNIA COMMERCIAL GENERAL LIABILITY SPECIAL BROADENING ENDORSEMENT

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SUMMARY OF COVERAGES

1. Additional Insured by Contract, Agreement or Permit	Included
2. Additional Insured - Broad Form Vendors	Included
3. Aggregate Limit per Location	Included
4. Alienated Premises	Included
5. Bodily Injury Redefined	Included
6. Broad Form Property Damage - Borrowed Equipment, Customers Goods & Use of Elevators	Included
7. Extended Property Damage	Included
8. Incidental Malpractice (Employed nurses, EMT's & paramedics)	Included
9. Knowledge of Occurrence	Included
10. Liberalization Clause	Included
11. Medical Payments - Increased Limit	\$ 10,000
12. Mobile Equipment Redefined	Included
13. Newly Acquired or Formed Organizations - Covered until end of policy period	Included
14. Non-owned Watercraft	51 ft.
15. Personal Injury - Broad Form	Included
16. Product Recall Expense	
- Each Occurrence Limit	\$ 25,000
- Aggregate Limit	\$ 50,000
17. Property Damage Legal Liability (Fire, Lighting, Explosion, Smoke or Leakage Damage)	\$ 500,000
18. Supplementary Payments Increased Limits	
- Bail Bonds	\$ 2,500
- Loss of Earnings	\$ 300
19. Unintentional Failure to Disclose Hazards	Included
20. Unintentional Failure to Notify	Included

This endorsement amends coverages provided under the Commercial General Liability Coverage Form through new coverages, higher limits and broader coverage grants.

1. **Additional Insured by Contract, Agreement or Permit**

Under **Section II - Who Is An insured**, Paragraph 4. is added as follows:

4. a. Any person or organization with whom you agreed, because of a written contract, written agreement or permit to provide insurance, is an insured, but only with respect to:

(1) "Your work" for the additional insured(s) at the location designated in the contract, agreement or permit; or

(2) Premises you own, rent, lease or occupy. This insurance applies on a primary basis if that is required by the written contract, written agreement or permit.

b. This provision does not apply:

(1) Unless the written contract or written agreement has been executed or permit has been issued prior to the "bodily injury", "property damage", "personal injury" or "advertising injury".

Page 1 of 6

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421-0778 09 09

1141

- (2) To any person or organization included as an insured by an endorsement issued by us and made part of this Coverage Part.
- (3) To any person or organization included as an insured under item 2 of this endorsement.
- (4) To any lessor of equipment:
 - (a) After the equipment lease expires; or
 - (b) If the "bodily injury", "property damage", "personal injury" or "advertising injury" arises out of sole negligence of the lessor.
- (5) To any:
 - (a) Owners or other interests from whom land has been leased which takes place after the lease for the land expires; or
 - (b) Managers or lessors of premises if:
 - (i) The occurrence takes place after you cease to be a tenant in that premises; or
 - (ii) The "bodily injury", "property damage", "personal injury" or "advertising injury" arises out of structural alterations, new construction or demolition operations performed by or on behalf of the manager or lessor.
- (4) Repackaging, unless unpacked solely for the purpose of inspection, demonstration, testing, or the substitution of parts under instruction from the manufacturer, and then repackaged in the original container;
- (5) Any failure to make such inspection, adjustments, tests or servicing as the vendor has agreed to make or normally undertakes to make in the usual course of business in connection with the sale of the product;
- (6) Demonstration, installation, servicing or repair operations, except such operations performed at the vendor's premises in connection with the sale of the product;
- (7) Products which, after distribution or sale by you, have been labeled or relabeled or used as a container, part or ingredient of any thing or substance by or for the vendor.

c. This insurance does not apply to any insured person or organization, from whom you have acquired such products, or any ingredient, part or container, entering into, accompanying or containing such products.

2. Additional Insured - Broad Form Vendors

Under **Section II - Who Is An Insured**, Paragraph 5. is added as follows:

- 5. a. Any person or organization with whom you agreed, because of a written contract or written agreement to provide insurance, but only with respect to "bodily injury" or "property damage" arising out of "your products" which are distributed or sold in the regular course of the vendor's business, subject to the following additional exclusions:
- b. The insurance afforded the vendor does not apply to:
 - (1) "Bodily injury" or "property damage" for which the vendor is obligated to pay damages by reasons of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages that the insured would have in the absence of the contract or agreement;
 - (2) Any express warranty unauthorized by you;
 - (3) Any physical or chemical change in the product made intentionally by the vendor;

3. Aggregate Limit Per Location

- (1) Under **Section III - Limits of Insurance** the General Aggregate Limit applies separately to each of your "locations" owned by or rented to you.
- (2) Under **Section V - Definitions**, definition 23. is added as follows:

23. "Location" means premises involving the same or connecting lots, or premises whose connection is interrupted only by a street, roadway, waterway or right-of-way of a railroad.

4. Alienated Premises

Under **Section I - Coverage A**, paragraph 2. Exclusions, j. (2) is replaced in its entirety with the following:

- (2) Premises you sell, give away or abandon, if the "property damage" arises out of any part of those premises and occurred from hazards that were known by you, or should have reasonably been known by you, at the time the property was transferred or abandoned.

5. Bodily Injury Redefined

Under **Section V - Definitions**, definition 3. "bodily injury" is replaced in its entirety with the following:

Page 2 of 6

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THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.
Other Insurance – Primary and Non-Contributory
(Additional Insured)

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

The following is added to **Section IV – Commercial General Liability Conditions**

4. Other Insurance

a. Additional Insureds

If you agree in a written contract, written agreement or permit that the insurance provided to any person or organization included as an Additional Insured under **Section II – Who is An Insured**, is primary and non-contributory, the following applies:

If other valid and collectible insurance is available to the Additional Insured for a loss we cover under Coverages **A** or **B** of this Coverage Part, our obligations are limited as follows:

1. Primary Insurance

This insurance is primary to other insurance that is available to the Additional Insured which covers the Additional Insured as a Named Insured. We will not seek contribution from any other insurance available to the Additional Insured except:

- i. For the sole negligence of the Additional Insured;
- ii. when the Additional Insured is an Additional Insured under another primary liability policy; or
- iii. when 2. below applies.

If this insurance is primary, our obligations are not affected unless any of the other insurance is also primary. Then, we will share with all that other insurance by the method described in 3. below.

2. Excess Insurance

This insurance is excess over:

- (1) Any of the other insurance, whether primary, excess, contingent or on any other basis:

- (a) That is Fire, Extended Coverage, Builder's Risk, Installation Risk or similar coverage for "your work";
- (b) That is Fire insurance for premises rented to the Additional Insured or temporarily occupied by the Additional Insured with permission of the owner;
- (c) That is insurance purchased by the Additional Insured to cover the Additional Insured's liability as a tenant for "property damage" to premises rented to the Additional Insured or temporarily occupied by the Additional Insured with permission of the owner; or
- (d) If the loss arises out of the maintenance or use of aircraft, "autos" or watercraft to the extent not subject to Exclusion g. of Section **1 – Coverage A – Bodily Injury And Property Damage Liability**.

When this insurance is excess, we will have no duty under Coverages **A** or **B** to defend the insured against any "suit" if any other insurer has a duty to defend the insured against that "suit". If no other insurer defends, we will undertake to do so, but we will be entitled to the insured's rights against all those other insurers.

When this insurance is excess over other insurance, we will pay only our share of the amount of the loss, if any, that exceeds the sum of:

- (1) The total amount that all such other insurance would pay for the loss in the absence of this insurance; and
- (2) The total of all deductible and self-insured amounts under all that other insurance.

We will share the remaining loss, if any, with any other insurance that is not described in this Excess Insurance provision and was not bought specifically to apply in excess of the Limits of Insurance shown in the Declarations of this Coverage Part.

3. Method Of Sharing

If all of the other insurance permits contribution by equal shares, we will follow this method also. Under this approach each insurer contributes equal amounts until it has paid its applicable limit of insurance or none of the loss remains, whichever comes first.

If any of the other insurance does not permit contribution by equal shares, we will contribute by limits. Under this method, each insurer's share is based on the ratio of its applicable limit of insurance to the total applicable limits of insurance of all insurers.

(3) When this insurance is excess over other insurance, we will pay only our share of the amount of the loss, if any, that exceeds the sum of:

(a) The total amount that all such other insurance would pay for the loss in the absence of this insurance; and

(b) The total of all deductible and self-insured amounts under all that other insurance.

(4) We will share the remaining loss, if any, with any other insurance that is not described in this Excess Insurance provision and was not bought specifically to apply in excess of the Limits of Insurance shown in the Declarations of this Coverage Part.

c. Method Of Sharing

If all of the other insurance permits contribution by equal shares, we will follow this method also. Under this approach each insurer contributes equal amounts until it has paid its applicable limit of insurance or none of the loss remains, whichever comes first.

If any of the other insurance does not permit contribution by equal shares, we will contribute by limits. Under this method, each insurer's share is based on the ratio of its applicable limit of insurance to the total applicable limits of insurance of all insurers.

5. Premium Audit

a. We will compute all premiums for this Coverage Part in accordance with our rules and rates.

b. Premium shown in this Coverage Part as advance premium is a deposit premium only. At the close of each audit period we will compute the earned premium for that period and send notice to the first Named Insured. The due date for audit and retrospective premiums is the date shown as the due date on the bill. If the sum of the advance and audit premiums paid for the policy period is greater than the earned premium, we will return the excess to the first Named Insured.

c. The first Named Insured must keep records of the information we need for premium computation, and send us copies at such times as we may request.

6. Representations

By accepting this policy, you agree:

a. The statements in the Declarations are accurate and complete;

b. Those statements are based upon representations you made to us; and

c. We have issued this policy in reliance upon your representations.

7. Separation Of Insureds

Except with respect to the Limits of Insurance, and any rights or duties specifically assigned in this Coverage Part to the first Named Insured, this insurance applies:

a. As if each Named Insured were the only Named Insured; and

b. Separately to each insured against whom claim is made or "suit" is brought.

8. Transfer Of Rights Of Recovery Against Others To Us

If the insured has rights to recover all or part of any payment we have made under this Coverage Part, those rights are transferred to us. The insured must do nothing after loss to impair them. At our request, the insured will bring "suit" or transfer those rights to us and help us enforce them.

9. When We Do Not Renew

If we decide not to renew this Coverage Part, we will mail or deliver to the first Named Insured shown in the Declarations written notice of the nonrenewal not less than 30 days before the expiration date.

If notice is mailed, proof of mailing will be sufficient proof of notice.

SECTION V – DEFINITIONS

1. "Advertisement" means a notice that is broadcast or published to the general public or specific market segments about your goods, products or services for the purpose of attracting customers or supporters. For the purposes of this definition:

a. Notices that are published include material placed on the Internet or on similar electronic means of communication; and

b. Regarding web-sites, only that part of a website that is about your goods, products or services for the purposes of attracting customers or supporters is considered an advertisement.

2. "Auto" means:

a. A land motor vehicle, trailer or semitrailer designed for travel on public roads, including any attached machinery or equipment; or

b. Any other land vehicle that is subject to a compulsory or financial responsibility law or other motor vehicle insurance law in the state where it is licensed or principally garaged.

However, "auto" does not include "mobile equipment".



VALI COOPER & ASSOCIATES INC

ZHF 8970089 03

HUB INTERNATIONAL INS

Commercial General Liability Coverage Part Declaration

Audit Frequency:	Annual	
Limits of Insurance:		
General Aggregate Limit		\$2,000,000
Products-Completed Operations are Included in the General Aggregate Limit		
Each Occurrence Limit		\$1,000,000
Personal and Advertising Injury Limit		\$1,000,000
Fire Damage Limit, Any One Fire		\$1,000,000
Medical Expense Limit, Any One Person		\$5,000
General Liability Deductible:		
Total Advance Commercial General Liability Premium		\$18,420.00

Forms Applicable to General Liability Coverage Parts:

*Asterisk denotes new or changed form

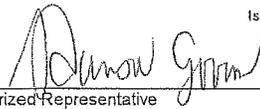
<u>Form Number</u>	<u>Edition Date</u>	<u>Description</u>
* 221-0163	10/03	MANUSCRIPTED FORM
* 401-1236	08/11	BLANKET NOTICE OF CANCELLATION
421-0022	12/90	Asbestos Liability Exclusion
421-0037	06/96	Lead Poisoning Liability Exclusion
* 421-0307	10/03	Manuscript Endorsement
421-0452	06/07	Other Insurance-Primary and Non-Contributory (additional Insured)
421-0778	09/09	California Commercial General Liability Special Broadening Endorsement
421-0803	12/09	Broadened Coverage For Non-Owned Watercraft
421-0805	12/09	Broadened Coverage For Newly Acquired Or Formed Organizations
421-0806	12/09	Property Damage To Your Work
421-0818	12/09	Worldwide Coverage Territory
421-0820	12/09	Exclusion- Infringement Of Copyright, Patent, Trademark Or Trade Secret - Changes
421-0832	12/09	Broadened Property Damage - Rented Premises
421-1471	10/10	Broadened Coverage For Non-Owned Aircraft - Hired, Chartered Or Loaned With Paid Crew
CG 00 01	12/07	Commercial General Liability Coverage Form
CG 00 68	05/09	Recording And Distribution of Material or Information In Violation of Law Exclusion
CG 04 35	12/07	Employee Benefits Liability Coverage
* CG 20 10	07/04	Additional Insured - Owners, Lessees or Contractors - Scheduled Person or Organization

421-0340 01/05

Page 8
Agent

Issued 12/27/2012

0660


Authorized Representative



VALI COOPER & ASSOCIATES INC

ZHF 8970089 03

HUB INTERNATIONAL INS

Commercial General Liability Classification Schedule Declaration

Forms Applicable to General Liability Coverage Parts:

*Asterisk denotes new or changed form

<u>Form Number</u>	<u>Edition Date</u>	<u>Description</u>
CG 20 11	01/96	Additional Insured - Managers or Lessors of Premises
* CG 20 37	07/04	Additional Insured - Owners, Lessees or Contractors - Completed Operations
CG 21 47	12/07	Employment - Related Practices Exclusion
CG 21 52	07/98	Exclusion - Financial Services
CG 21 55	09/99	Total Pollution With a Hostile Fire Exception
CG 21 67	12/04	Fungi or Bacteria Exclusion
CG 21 70	01/08	Cap On Losses From Certified Acts Of Terrorism
CG 21 76	01/08	Exclusion of Punitive Damages Related To a Certified Act of Terrorism
CG 21 96	03/05	Silica or Silica-Related Dust Exclusion
CG 22 33	07/98	Exclusion - Testing or Consulting Errors and Omissions
CG 22 34	07/98	Exclusion - Construction Management Errors and Omissions
CG 22 43	07/98	Exclusion - Engineers, Architects or Surveyors Professional Liability
* CG 24 04	05/09	Waiver of Transfer of Rights of Recovery Against Others to Us
* CG 24 17	10/01	Contractual Liability - Railroads
CG 25 03	05/09	Designated Construction Project (s) General Aggregate Limit
CG 32 34	01/05	California Changes



THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ THIS CAREFULLY.

AMEND PRODUCTS COMPLETED OPERATIONS AGGREGATE TO SHOW \$2,000,000 IN LIEU OF INCLUDED IN THE GENERAL AGGREGATE.

Nothing herein contained shall be held to vary, alter, waive or extend any of the terms, conditions, agreements or limitations of the policy other than as above stated.

(Completion of the following, including countersignature, is required to make this endorsement effective only when it is issued subsequent to preparation of the Policy.)

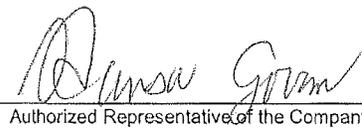
Effective _____ this endorsement forms a part of Policy No. _____

Issued to _____

By _____

Date of Issue _____

Countersigned by _____


Authorized Representative of the Company

221-0163 (10-03)

POLICY #: ADF895285503

COMMERCIAL AUTO
CA 20 48 02 99

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

DESIGNATED INSURED

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM
GARAGE COVERAGE FORM
MOTOR CARRIER COVERAGE FORM
TRUCKERS COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by this endorsement.

This endorsement identifies person(s) or organization(s) who are "insureds" under the Who Is An Insured Provision of the Coverage Form. This endorsement does not alter coverage provided in the Coverage Form.

This endorsement changes the policy effective on the inception date of the policy unless another date is indicated below.

Endorsement Effective:	12/30/2012
Named Insured:	Vali Cooper & Associates Inc.

SCHEDULE

Name of Person(s) or Organization(s):
BLANKET - AS REQUIRED BY WRITTEN CONTRACT.

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to the endorsement.)

Each person or organization shown in the Schedule is an "insured" for Liability Coverage, but only to the extent that person or organization qualifies as an "insured" under the Who Is An Insured Provision contained in Section II of the Coverage Form.

5. Other Insurance

- a. For any covered "auto" you own, this Coverage Form provides primary insurance. For any covered "auto" you don't own, the insurance provided by this Coverage Form is excess over any other collectible insurance. However, while a covered "auto" which is a "trailer" is connected to another vehicle, the Liability Coverage this Coverage Form provides for the "trailer" is:
 - (1) Excess while it is connected to a motor vehicle you do not own.
 - (2) Primary while it is connected to a covered "auto" you own.
- b. For Hired Auto Physical Damage Coverage, any covered "auto" you lease, hire, rent or borrow is deemed to be a covered "auto" you own. However, any "auto" that is leased, hired, rented or borrowed with a driver is not a covered "auto".
- c. Regardless of the provisions of Paragraph a. above, this Coverage Form's Liability Coverage is primary for any liability assumed under an "insured contract".
- d. When this Coverage Form and any other Coverage Form or policy covers on the same basis, either excess or primary, we will pay only our share. Our share is the proportion that the Limit of Insurance of our Coverage Form bears to the total of the limits of all the Coverage Forms and policies covering on the same basis.

6. Premium Audit

- a. The estimated premium for this Coverage Form is based on the exposures you told us you would have when this policy began. We will compute the final premium due when we determine your actual exposures. The estimated total premium will be credited against the final premium due and the first Named Insured will be billed for the balance, if any. The due date for the final premium or retrospective premium is the date shown as the due date on the bill. If the estimated total premium exceeds the final premium due, the first Named Insured will get a refund.
- b. If this policy is issued for more than one year, the premium for this Coverage Form will be computed annually based on our rates or premiums in effect at the beginning of each year of the policy.

7. Policy Period, Coverage Territory

Under this Coverage Form, we cover "accidents" and "losses" occurring:

- a. During the policy period shown in the Declarations; and
- b. Within the coverage territory.

The coverage territory is:

- a. The United States of America;
- b. The territories and possessions of the United States of America;
- c. Puerto Rico;
- d. Canada; and
- e. Anywhere in the world if:

- (1) A covered "auto" of the private passenger type is leased, hired, rented or borrowed without a driver for a period of 30 days or less; and
- (2) The "insured's" responsibility to pay damages is determined in a "suit" on the merits, in the United States of America, the territories and possessions of the United States of America, Puerto Rico, or Canada or in a settlement we agree to.

We also cover "loss" to, or "accidents" involving, a covered "auto" while being transported between any of these places.

8. Two Or More Coverage Forms Or Policies Issued By Us

If this Coverage Form and any other Coverage Form or policy issued to you by us or any company affiliated with us apply to the same "accident", the aggregate maximum Limit of Insurance under all the Coverage Forms or policies shall not exceed the highest applicable Limit of Insurance under any one Coverage Form or policy. This condition does not apply to any Coverage Form or policy issued by us or an affiliated company specifically to apply as excess insurance over this Coverage Form.

SECTION V – DEFINITIONS

- A. "Accident" includes continuous or repeated exposure to the same conditions resulting in "bodily injury" or "property damage".
- B. "Auto" means:
 - 1. A land motor vehicle, "trailer" or semitrailer designed for travel on public roads; or

2. Any other land vehicle that is subject to a compulsory or financial responsibility law or other motor vehicle insurance law where it is licensed or principally garaged.

However, "auto" does not include "mobile equipment".

- C. "Bodily injury" means bodily injury, sickness or disease sustained by a person including death resulting from any of these.
- D. "Covered pollution cost or expense" means any cost or expense arising out of:
 1. Any request, demand, order or statutory or regulatory requirement that any "insured" or others test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of "pollutants"; or
 2. Any claim or "suit" by or on behalf of a governmental authority for damages because of testing for, monitoring, cleaning up, removing, containing, treating, detoxifying or neutralizing, or in any way responding to or assessing the effects of "pollutants".

"Covered pollution cost or expense" does not include any cost or expense arising out of the actual, alleged or threatened discharge, dispersal, seepage, migration, release or escape of "pollutants":

- a. That are, or that are contained in any property that is:
 - (1) Being transported or towed by, handled, or handled for movement into, onto or from the covered "auto";
 - (2) Otherwise in the course of transit by or on behalf of the "insured";
 - (3) Being stored, disposed of, treated or processed in or upon the covered "auto";
- b. Before the "pollutants" or any property in which the "pollutants" are contained are moved from the place where they are accepted by the "insured" for movement into or onto the covered "auto"; or
- c. After the "pollutants" or any property in which the "pollutants" are contained are moved from the covered "auto" to the place where they are finally delivered, disposed of or abandoned by the "insured".

Paragraph a. above does not apply to fuels, lubricants, fluids, exhaust gases or other similar "pollutants" that are needed for or result from the normal electrical, hydraulic or mechanical functioning of the covered "auto" or its parts, if:

- (1) The "pollutants" escape, seep, migrate, or are discharged, dispersed or released directly from an "auto" part designed by its manufacturer to hold, store, receive or dispose of such "pollutants"; and
- (2) The "bodily injury", "property damage" or "covered pollution cost or expense" does not arise out of the operation of any equipment listed in Paragraph 6.b. or 6.c. of the definition of "mobile equipment".

Paragraphs b. and c. above do not apply to "accidents" that occur away from premises owned by or rented to an "insured" with respect to "pollutants" not in or upon a covered "auto" if:

- (1) The "pollutants" or any property in which the "pollutants" are contained are upset, overturned or damaged as a result of the maintenance or use of a covered "auto"; and
- (2) The discharge, dispersal, seepage, migration, release or escape of the "pollutants" is caused directly by such upset, overturn or damage.

- E. "Diminution in value" means the actual or perceived loss in market value or resale value which results from a direct and accidental "loss".
- F. "Employee" includes a "leased worker". "Employee" does not include a "temporary worker".
- G. "Insured" means any person or organization qualifying as an insured in the Who Is An Insured provision of the applicable coverage. Except with respect to the Limit of Insurance, the coverage afforded applies separately to each insured who is seeking coverage or against whom a claim or "suit" is brought.
- H. "Insured contract" means:
 1. A lease of premises;
 2. A sidetrack agreement;
 3. Any easement or license agreement, except in connection with construction or demolition operations on or within 50 feet of a railroad;



WORKERS COMPENSATION
AND
EMPLOYERS LIABILITY POLICY

ENDORSEMENT WC 99 03 76 (A) - 001

POLICY NUMBER: (PJUB-8464L16-2-12)

**WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS
ENDORSEMENT - CALIFORNIA
(BLANKET WAIVER)**

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule.

The additional premium for this endorsement shall be 2 . % of the California workers' compensation premium.

Schedule

Person or Organization

Job Description

ANY PERSON OR ORGANIZATION FOR
WHICH THE INSURED HAS AGREED
BY WRITTEN CONTRACT EXECUTED
PRIOR TO LOSS TO FURNISH THIS
WAIVER.

This endorsement changes the policy to which it is attached and is effective on the date issued unless otherwise stated.

(The information below is required only when this endorsement is issued subsequent to preparation of the policy.)

Endorsement Effective
Insured

Policy No.

Endorsement No.
Premium

Insurance Company

Countersigned by _____

DATE OF ISSUE: 12-17-12

ST ASSIGN:

Page 1 of 1

**COOPERATIVE AGREEMENT FOR
DESIGN AND CONSTRUCTION OF ELECTRIC FACILITIES SERVING THE
RAILYARDS PROJECT - IC IIG (CITY PN: T15135800, SMUD WORK
ORDER NO. 30080669 (Railyards Building), 30080672 (5th Street
Viaduct) & 30080724 (5th Street North) AND NOTIFICATION NO.
30464862, 30464966 & 30464766)**

This agreement, dated _____, 2013, for reference, is between the **CITY OF SACRAMENTO**, a municipal corporation (the "City"), and the **SACRAMENTO MUNICIPAL UTILITY DISTRICT**, a municipal utility district ("SMUD").

RECITALS

WHEREAS, the City is constructing new infrastructure and site improvements within the Railyards Development area (Railyards Buidling and 5th Street) in the downtown area of the City of Sacramento (the "Project"), and

WHEREAS, SMUD electrical service is needed to provide power to the new infrastructure serving Railyards Building and 5th street, including streetlights, traffic signals, irrigation controllers and provide design and support for underground substructures for future development.

WHEREAS, the CITY desires to install conduits, transformers, conductors, and appurtenances as part of the construction of the Project, and

WHEREAS, Thomas submitted an application to SMUD and paid a deposit in the amount of \$30,000 (the "Deposit") to have SMUD perform preliminary engineering necessary for SMUD to prepare final plans and specifications (the "Plans and Specifications") for use by the City to install the Substructure;

WHEREAS, after Thomas submitted the application and paid the Deposit, IA Sacramento Holdings, L.L.C. ("IAH") acquired Thomas's interests in the Railyards through foreclosure, including Thomas's interest in the Deposit;

WHEREAS, in connection with its construction of 5th Street, the City submitted a new application to SMUD to perform all the work necessary, including preparation of the Plans and Specifications, to provide electrical service to the Project (the "City's Application");

WHEREAS, SMUD has been provided electronic base sheets, single line diagrams, load data, switchboard and other information about 5th Street requested by SMUD to complete the Plans and Specifications for the Substructure.

WHEREAS, on April 15, 2013, SMUD provided an estimate of \$502,000 (the "Cost Estimate") for SMUD to perform all the work necessary, including preparation of the Plans and Specifications, to provide electrical service to the Project. The Cost Estimate does not include the cost of installing the Substructure; and,

WHEREAS, on April 15, 2013, IAH provided a letter (attachment A) to SMUD authorizing the Deposit to be applied to the City's Application.

With these background facts in mind, the City and SMUD agree as follows:

1. SMUD shall provide City with final Plans and Specifications for the Substructure.
2. SMUD will provide and install electrical conductors, transformers, switchgear, and any other equipment necessary to provide electric service to the Project within and upon the Substructure, as detailed in the Plans and Specifications (the "SMUD Work"). SMUD will perform the SMUD Work in accordance with prudent utility standards. SMUD and the City will agree on a schedule for performance of the SMUD Work.
3. The SMUD Work is subject to and will be performed in accordance with "Extension of Facilities to Non-Residential Premises Rule and Regulation 16", (Exhibit "A") unless otherwise specified within this agreement.
4. The City will install or cause to be installed the Substructure detailed in the Plans and Specifications necessary for SMUD to provide electric service to the Project ("City Work"). The City will install the City Work, or cause the City Work to be installed, in accordance with SMUD's Rule and Regulation 16 and prudent utility standards. The City Work will be subject to inspection and approval by SMUD. The cost of the City Work shall be the sole responsibility of the City.
5. The City shall reimburse SMUD only for the labor and material costs actually incurred by SMUD in performing the SMUD Work, up to a maximum amount of \$502,000 (the "NTE Amount"), which includes the Deposit plus an additional \$472,000. Although the final costs of the SMUD Work may be more or less than the Cost Estimate, SMUD is not required to incur any costs that exceed the NTE Amount, and the City is not required to reimburse SMUD for any costs that exceed the NTE Amount, unless SMUD and City agree in writing upon the additional reimbursement due for such costs.
6. SMUD shall deduct payment for the performance of the SMUD Work from the Deposit. After the Deposit reaches \$0.00, then SMUD, at its election, may either submit progressive billings to City based on SMUD's costs incurred in performing the SMUD Work or it may submit a final invoice to City itemizing the costs incurred by SMUD in performing the SMUD Work. City shall to pay SMUD for such progressive billings and/or the final billing, subject to the provisions of Section 5, above, within 30 days of its receipt of billing from SMUD. In any event, not later than 180 days after SMUD has completed and closed the SMUD Work through its standard work practices, it shall submit a final statement to the City that itemizes all the costs incurred by SMUD in performing the SMUD Work, all deductions from the Deposit, and all payments made

by the City.

7. The City shall have the right to audit SMUD's cost records relating to the SMUD Work for a period of three (3) years from and after the date of City's final payment to SMUD.
8. The City shall execute all other documents reasonably required by SMUD and consistent with SMUD's Rules, Regulations and Electrical Service Requirements to provide for the conveyance to SMUD of the City Work detailed on the Commitment along with a grant of an easement, on terms agreed upon by the parties, to allow SMUD to access, operate and maintain SMUD facilities at the Project site.
9. SMUD and CITY, respectively, as indemnitor, will indemnify the other, as indemnitee, and save it harmless from any and all loss, damage, expense and liability resulting from injuries to or death of persons, including, but not limited to, employees of either party hereto, and damage to or destruction of property, including, but not limited to, the property of either party hereto, arising out of or in any way connected with the performance of this agreement or any operations hereunder by indemnitor, its agents or employees, excepting only such injury, death, damage or destruction as may be caused by the sole negligence or willful misconduct of the indemnitee, its agents or employees. Indemnitor shall, upon indemnitee's request, defend at its sole cost any suit asserting a claim covered by this indemnity.

It is the intent of the parties hereto that, where negligence is determined to have been contributory, principles of comparative negligence will be followed and each party shall bear the proportionate costs of any loss, damage, expense and liability attributable to that party's negligence. The party's obligations under this section survive the termination of this agreement.

10. Notwithstanding Section 9 of this agreement, in no event shall SMUD be liable or responsible for any costs, losses claims, damages, interruption of business, or expenses incurred by the City, its agents, contractors or any third party arising from delays in completing the SMUD Work.
11. Any notice that either party may or is required to give the other shall be in writing, and shall be personally delivered to or sent by regular U.S. Mail to the following addresses:

TO CITY

Jon Blank
Supervising Engineer
City of Sacramento
915 I Street, Room 200
Sacramento, CA 95814
Phone: (916) 808-7914
E-mail to jblank@cityofsacramento.org

TO SMUD

Matthew C. Schaedler
Distribution Design Supervisor
SMUD
P.O. Box 15830
Sacramento, CA 95852-1830
Phone: (916) 732-6367
E-mail to mschaed@smud.org

12. This agreement shall not be assigned by either party. This agreement shall bind the successors of either party in the same manner as if they were expressly named.

13. A party's failure to insist on strict performance of this agreement or to exercise any right or remedy upon breach of this agreement will not constitute a waiver of the performance, right, or remedy. A party's waiver of another party's breach of any provision in this agreement will not constitute a continuing waiver or a waiver of any subsequent breach of the same or any other provision. A waiver is binding only if set forth in a writing signed by the waiving party.
14. This agreement sets forth the parties' entire understanding regarding the matters set forth above and is intended to be their final, complete, and exclusive expression of those matters. It supersedes all prior or contemporaneous agreements, representations, and negotiations—written, oral, express, or implied—and may be modified only by another written agreement signed by both parties.
15. This Agreement may be executed in counterparts, each of which shall be deemed to be the original, and all of which together shall constitute one and the same instrument. . Facsimiles, PDFs, and photocopies of signature pages of this agreement will have the same binding effect as originals.
16. The laws of the State of California shall govern interpretation and enforcement of this agreement, except that that the rule of interpretation in California Civil Code section 1654 will not apply.

CITY OF SACRAMENTO

**SACRAMENTO MUNICIPAL
UTILITY DISTRICT**

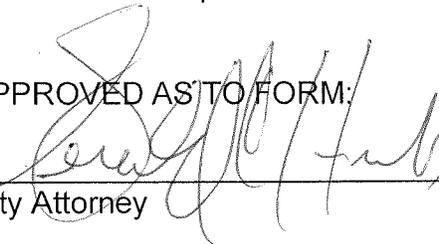
By: _____

Jerry Way
Director of Transportation

By:  _____

Ed LaBranch
Manager, T & D Design, Const, & Maint

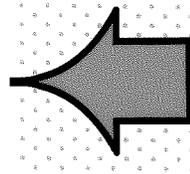
APPROVED AS TO FORM:



City Attorney

ATTEST:

City Clerk



**COOPERATIVE AGREEMENT FOR
DESIGN AND CONSTRUCTION OF ELECTRIC FACILITIES SERVING THE
RAILYARDS PROJECT - IC TOD (CITY PN: T15135800, SMUD WORK
ORDER NO. 30080668 (5th Street South) & 30080755 (5th Street Bridge)
AND NOTIFICATION NO. 30464798 & 30464911)**

This agreement, dated _____, 2013, for reference, is between the **CITY OF SACRAMENTO**, a municipal corporation (the "City"), and the **SACRAMENTO MUNICIPAL UTILITY DISTRICT**, a municipal utility district ("SMUD").

RECITALS

WHEREAS, the City is constructing new infrastructure and site improvements within the Railyards Development area (Railyards Buidling and 5th Street) in the downtown area of the City of Sacramento (the "Project"), and

WHEREAS, SMUD electrical service is needed to provide power to the new infrastructure serving 5th Street South and 5th Street Bridge, including streetlights, traffic signals, irrigation controllers and provide design and support for underground substructures for future development.

WHEREAS, the CITY desires to install conduits, transformers, conductors, and appurtenances as part of the construction of the Project, and

WHEREAS, Thomas submitted an application to SMUD and paid a deposit in the amount of \$20,000 (the "Deposit") to have SMUD perform preliminary engineering necessary for SMUD to prepare final plans and specifications (the "Plans and Specifications") for use by the City to install the Substructure;

WHEREAS, after Thomas submitted the application and paid the Deposit, IA Sacramento Holdings, L.L.C. ("IAH") acquired Thomas's interests in the Railyards through foreclosure, including Thomas's interest in the Deposit;

WHEREAS, in connection with its construction of 5th Street, the City submitted a new application to SMUD to perform all the work necessary, including preparation of the Plans and Specifications, to provide electrical service to the Project (the "City's Application");

WHEREAS, SMUD has been provided electronic base sheets, single line diagrams, load data, switchboard and other information about 5th Street requested by SMUD to complete the Plans and Specifications for the Substructure.

WHEREAS, on April 15, 2013, SMUD provided an estimate of \$88,000 (the "Cost Estimate") for SMUD to perform all the work necessary, including preparation of the Plans and Specifications, to provide electrical service to the Project. The Cost Estimate does not include the cost of installing the Substructure; and,

WHEREAS, on April 15, 2013, IAH provided a letter (attachment A) to SMUD authorizing the Deposit to be applied to the City's Application.

With these background facts in mind, the City and SMUD agree as follows:

1. SMUD shall provide City with final Plans and Specifications for the Substructure.
2. SMUD will provide and install electrical conductors, transformers, switchgear, and any other equipment necessary to provide electric service to the Project within and upon the Substructure, as detailed in the Plans and Specifications (the "SMUD Work"). SMUD will perform the SMUD Work in accordance with prudent utility standards. SMUD and the City will agree on a schedule for performance of the SMUD Work.
3. The SMUD Work is subject to and will be performed in accordance with "Extension of Facilities to Non-Residential Premises Rule and Regulation 16", (Exhibit "A") unless otherwise specified within this agreement.
4. The City will install or cause to be installed the Substructure detailed in the Plans and Specifications necessary for SMUD to provide electric service to the Project ("City Work"). The City will install the City Work, or cause the City Work to be installed, in accordance with SMUD's Rule and Regulation 16 and prudent utility standards. The City Work will be subject to inspection and approval by SMUD. The cost of the City Work shall be the sole responsibility of the City.
5. The City shall reimburse SMUD only for the labor and material costs actually incurred by SMUD in performing the SMUD Work, up to a maximum amount of \$88,000 (the "NTE Amount"), which includes the Deposit plus an additional \$68,000. Although the final costs of the SMUD Work may be more or less than the Cost Estimate, SMUD is not required to incur any costs that exceed the NTE Amount, and the City is not required to reimburse SMUD for any costs that exceed the NTE Amount, unless SMUD and City agree in writing upon the additional reimbursement due for such costs.
6. SMUD shall deduct payment for the performance of the SMUD Work from the Deposit. After the Deposit reaches \$0.00, then SMUD, at its election, may either submit progressive billings to City based on SMUD's costs incurred in performing the SMUD Work or it may submit a final invoice to City itemizing the costs incurred by SMUD in performing the SMUD Work. City shall to pay SMUD for such progressive billings and/or the final billing, subject to the provisions of Section 5, above, within 30 days of its receipt of billing from SMUD. In any event, not later than 180 days after SMUD has completed and closed the SMUD Work through its standard work practices, it shall submit a final statement to the City that itemizes all the costs incurred by SMUD in performing the SMUD Work, all deductions from the Deposit, and all payments made by the City.

7. The City shall have the right to audit SMUD's cost records relating to the SMUD Work for a period of three (3) years from and after the date of City's final payment to SMUD.
8. The City shall execute all other documents reasonably required by SMUD and consistent with SMUD's Rules, Regulations and Electrical Service Requirements to provide for the conveyance to SMUD of the City Work detailed on the Commitment along with a grant of an easement, on terms agreed upon by the parties, to allow SMUD to access, operate and maintain SMUD facilities at the Project site.
9. SMUD and CITY, respectively, as indemnitor, will indemnify the other, as indemnitee, and save it harmless from any and all loss, damage, expense and liability resulting from injuries to or death of persons, including, but not limited to, employees of either party hereto, and damage to or destruction of property, including, but not limited to, the property of either party hereto, arising out of or in any way connected with the performance of this agreement or any operations hereunder by indemnitor, its agents or employees, excepting only such injury, death, damage or destruction as may be caused by the sole negligence or willful misconduct of the indemnitee, its agents or employees. Indemnitor shall, upon indemnitee's request, defend at its sole cost any suit asserting a claim covered by this indemnity.

It is the intent of the parties hereto that, where negligence is determined to have been contributory, principles of comparative negligence will be followed and each party shall bear the proportionate costs of any loss, damage, expense and liability attributable to that party's negligence. The party's obligations under this section survive the termination of this agreement.

10. Notwithstanding Section 9 of this agreement, in no event shall SMUD be liable or responsible for any costs, losses claims, damages, interruption of business, or expenses incurred by the City, its agents, contractors or any third party arising from delays in completing the SMUD Work.
11. Any notice that either party may or is required to give the other shall be in writing, and shall be personally delivered to or sent by regular U.S. Mail to the following addresses:

TO CITY

Jon Blank
 Supervising Engineer
 City of Sacramento
 915 I Street, Room 200
 Sacramento, CA 95814
 Phone: (916) 808-7914
 E-mail to jblank@cityofsacramento.org

TO SMUD

Matthew C. Schaedler
 Distribution Design Supervisor
 SMUD
 P.O. Box 15830
 Sacramento, CA 95852-1830
 Phone: (916) 732-6367
 E-mail to mschaed@smud.org

12. This agreement shall not be assigned by either party. This agreement shall bind the successors of either party in the same manner as if they were expressly named.
13. A party's failure to insist on strict performance of this agreement or to exercise any right or remedy upon breach of this agreement will not constitute a waiver of the

performance, right, or remedy. A party's waiver of another party's breach of any provision in this agreement will not constitute a continuing waiver or a waiver of any subsequent breach of the same or any other provision. A waiver is binding only if set forth in a writing signed by the waiving party.

14. This agreement sets forth the parties' entire understanding regarding the matters set forth above and is intended to be their final, complete, and exclusive expression of those matters. It supersedes all prior or contemporaneous agreements, representations, and negotiations—written, oral, express, or implied—and may be modified only by another written agreement signed by both parties.
15. This Agreement may be executed in counterparts, each of which shall be deemed to be the original, and all of which together shall constitute one and the same instrument. . Facsimiles, PDFs, and photocopies of signature pages of this agreement will have the same binding effect as originals.
16. The laws of the State of California shall govern interpretation and enforcement of this agreement, except that that the rule of interpretation in California Civil Code section 1654 will not apply.

CITY OF SACRAMENTO

**SACRAMENTO MUNICIPAL
UTILITY DISTRICT**

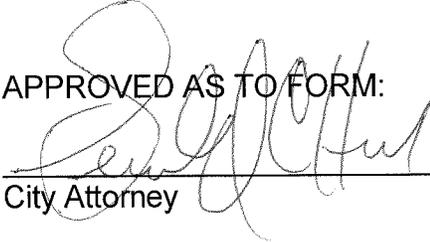
By: _____

Jerry Way
Director of Transportation

By:  _____

Ed LaBranch
Manager, T & D Design, Const, & Maint

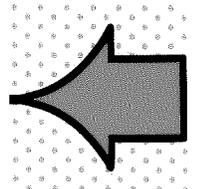
APPROVED AS TO FORM:



City Attorney

ATTEST:

City Clerk





September 26, 2013

JERRY WAY
CITY OF SACRAMENTO
915 I STREET, 2ND FLOOR
SACRAMENTO , CA 95814

RE: Contract ID: 1160897: RAILYARDS BLVD BACKBONE

Dear JERRY WAY ,

Enclosed are gas and/or electric agreements for your project located at:

RAILYARDS BLVD BACKBONE, SACRAMENTO, 95814

This letter summarizes the agreements for this project.

	Non-Refundable Payment	Refundable Option*	50% Discount Option*
Gas Distribution and Service Extension	\$9,372.43	\$43,175.24	\$0.00
Less Credit (Engineering Advance, etc.)	\$2,000.00	\$0.00	\$0.00
TOTAL **	\$7,372.43	\$43,175.24	\$0.00
TOTAL PAYMENT DUE	\$50,547.67	OR	\$7,372.43

* Only applies to Rule 15 Refundable Amounts. Amount shown is less credit for associated Applicant work.
** The Income Tax Component of Contribution (ITCC) is included in the above charges when applicable.

Please sign both copies of the agreement and return one copy of the agreement to the address below along with your payment and retain one copy for your records. If the agreement is not returned to PG&E within 90 days of the date of this letter, the proposed agreement is canceled and PG&E may need to re-estimate the job.

Changes to the agreement, either to any of the terms or to the amount owing, are not permitted, and any change or interlineations voids the agreement. The payment of any amount less than the full amount shown will be deposited by PG&E, but PG&E will not begin any work on this contract until the amount is paid in full. The contract shall be deemed effective the date a fully executed copy is received by PG&E. Please allow 0 days from PG&E's receipt of the Agreement for construction to commence.

PG&E is committed to providing timely and efficient service and we look forward to continuing to work with you on this and future projects.

Should you have any questions regarding these contracts, please contact your project manager Demetrius D. Williams at 707-449-5890 or DDWC@pge.com.

Please send the executed Agreements and payment to:

PG&E CFM/PPC DEPARTMENT
PO BOX 997340
Sacramento, CA 95899-7340

Sincerely,

Brian Sweeney
Brian Sweeney
Service Planning Supervisor



105949035G



Dear JERRY WAY,

In response to your application for service, enclosed is the new CPUC-required form, "Statement of Applicant's Contract Anticipated Costs," (SACAC) which identifies PG&E's cost for the refundable work that is PG&E's responsibility to install as part your job. However, this is work that you can elect to provide under the competitive bidding provisions of Gas/Electric Rules 15 and 16. You can perform this work yourself, hire a contractor, or hire PG&E to do this work. Regardless of whom you choose to do the work, you must complete and return this form.

- If you elect to perform this work or have a contractor do it, please enter your costs in the section of the form entitled "Applicant Costs."
- If you elect to perform this work yourself or have a contractor do it and choose not to provide your costs, please so indicate in the section entitled "Applicant's Election Not To Provide Costs," date, sign and return the form.
- If you want PG&E to perform the work, check the section "Applicant's Election Not To Provide Costs," date, sign and return the form.

PG&E's costs are valid for 90 days from 09/26/2013

PG&E cannot proceed with any work on your application until you sign and return the SACAC form.

Please return this document with any other contract documents regarding this job to:

PG&E CFM/PPC DEPARTMENT
PO BOX 997340
Sacramento, CA 95899-7340

If you have any questions regarding this form please contact your project manager.



105949035G



**STATEMENT OF APPLICANT'S CONTRACT
ANTICIPATED COSTS.***

Project Name: RAILYARDS BLVD BACKBONE

Project Location: RAILYARDS BLVD BACKBONE, SACRAMENTO, 95814

Notification Number: 105949035

PM Number(s): (Gas) 30921249 (Electric)

APPLICANT COSTS

The following statement must only include the contracted anticipated installed costs of facilities installed by the Applicant that are refundable and that are PG&E's responsibility under its tariffs.

The costs provided by the Applicant must be taken from the Applicant's contract with its contractor. If the Applicant will be performing the work itself, the Applicant must also complete and sign this form.

The Applicant's statement of costs will be compared with PG&E's estimated installed costs of the same facilities, the lower of which will be used to determine the amount subject to allowances and refunds in accordance with the provisions of PG&E's Gas and Electric Rules 15 and 16.

If the Applicant chooses not to provide its costs, it must complete the last section of this form. Until the Applicant either provides the refundable cost from its contract with its contractor (or its own cost, if applicable), or returns this form indicating that it will not do so, PG&E will not proceed with any work on the Applicant's project.

GAS

Residential Service Facilities:

Applicant: \$ _____

PG&E: \$0.00

Number of gas service: 0 Stubs: 5

ELECTRIC

Residential Service Facilities:

Applicant: \$ _____

PG&E: \$0.00

Number of Electric service: 0

- Applicant's statement of costs include: overhead or underground service conductors, poles, service transformers, connection fittings, service pipe, valves, service connections, and other PG&E-owned service equipment, as detailed in Gas and Electric Rule 16.
- Applicant's statement of costs DOES NOT include: inspection fees, nonresidential service costs, regulators, or PG&E-owned metering equipment.



105949035G

GAS

Gas Distribution Facilities
and Non-Residential Service Services:

Applicant: \$ _____

PG&E: \$47,989.21

ELECTRIC

Electric Distribution Facilities
and Non-Residential Service Services:

Applicant: \$ _____

PG&E: \$0.00

GAS DISTRIBUTION TRENCH

Applicant: \$ _____

PG&E: \$8,677.48

- Applicant's statement of costs include: cables, switches, transformers, distribution main, valves, regulators, nonresidential service costs, and other distribution facilities required to complete the distribution line extension, as detailed in Gas and Electric Rule 15 as PG&E's responsibility.
- Applicant's statement of costs DOES NOT include: inspection fees, tie-in of system by PG&E, distribution substructures, electric trench, conduits, feeder conduits, or protective structures, as detailed in Gas and Electric Rule 15.

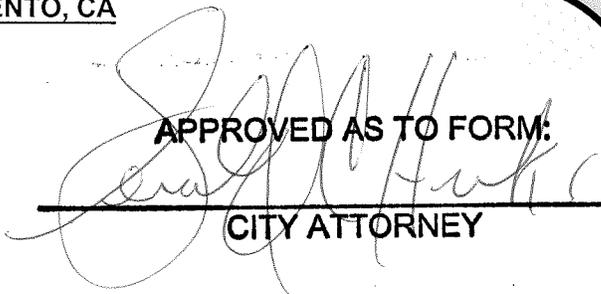
I declare under penalty of perjury that the foregoing is true and correct.

APPLICANT'S ELECTION NOT TO PROVIDE COSTS: (if this option selected, box must be checked)

I choose not to provide to the utility my refundable costs for this project as taken from my contract with my contractor, or as performed by myself, and acknowledge that PG&E will use its estimate of the refundable costs for this project in the contract between it and me.

Executed on _____ at SACRAMENTO, CA
(Date) (City)

By:

APPROVED AS TO FORM:


CITY ATTORNEY

Print Applicant Name: JERRY WAY

Signed: _____

Title: _____



105949035G



DISTRIBUTION:
Applicant (copy)
Division (copy)
CFM (Original)
T&CS

REFERENCES:
Notification # 105949035
Contract # 1160897
E-PM #
G-PM # 30921249
Prior MLX E/G 1967
Customer # 944461

DISTRIBUTION SERVICE AND EXTENSION AGREEMENT DECLARATIONS 1

Submitted to Applicant by: DEMETRIUS D. WILLIAMS

Date of issuance: September 25, 2013

- 1. CITY OF SACRAMENTO, A Government Agency (Applicant), has requested PACIFIC GAS & ELECTRIC COMPANY, a California corporation (PG&E), to deliver Gas energy to the property situated at RAILYARDS BLVD BACKBONE, SACRAMENTO, 95814 and shown on the attached drawings.
2. Applicable Documents. The cost summary for the facilities to be installed is attached hereto as Exhibit A. These facilities shall be installed in accordance with the applicable rules on file with the California Public Utilities Commission (which may include Gas and Electric Rules 2, 13, 15, 16, and 20), as well as the requirements set forth in the Provisions and the General Terms and Conditions for Gas and Electric Service by Applicant.
3. Construction Options. The responsibility for providing line extension work is divided between PG&E and the Applicant. However, Applicant may choose to have a qualified contractor perform some of the work that is PG&E's responsibility, and may choose to have PG&E perform some or all of the work that is the Applicant's responsibility. PG&E will reimburse or collect money based on its estimate of the costs, subject to the applicable rules. Based on Applicant's request, the contract costs are based on the following construction options:

Table with 2 main sections: PG&E Responsibility and Applicant Responsibility. Each section has columns for Gas/Electric and To Be Performed By (PG&E/Applicant).

1. PG&E's responsibilities per Rule 15.b.1.b and Rule 16.D.2
2. Applicant's responsibilities per Rule 15.b.1.a and Rule 16.D.1



4. N/A

Refund/Discount Option Selection

Applicant, in accordance with PG&E's extension rules, must select **one** of the following options for each commodity you are requesting service (gas and/or electric). Once the selection has been made, it cannot be changed.

Gas <input type="checkbox"/> 10-Year Subject to Refund Option - or <input type="checkbox"/> Non-Refundable 50% Discount Option	Electric <input type="checkbox"/> 10-Year Subject to Refund Option - or <input type="checkbox"/> Non-Refundable 50% Discount Option
--	---

ACCEPTED:

APPLICANT: CITY OF SACRAMENTO, A Government Agency

By:
(Authorized Signature)
JERRY WAY
(Type or Print Name)
TITLE:
DATE:
MAILING ADDRESS: 915 I STREET, 2ND FLOOR SACRAMENTO, CA 95814

PACIFIC GAS AND ELECTRIC COMPANY:

By:
Brian Sweeney
(Authorized Signature)
Brian Sweeney
(Type or Print Name)
TITLE: Service Planning Supervisor
DIVISION: Sacramento
DATE:



105949035G



Pacific Gas and Electric Company
DISTRIBUTION AND SERVICE EXTENSION AGREEMENT
EXHIBIT A - COST SUMMARY

REFERENCES: Notification # 105949035
 Contract # 1160897
 E-PM #
 G-PM # 30921249

Applicant: CITY OF SACRAMENTO, A Government Agency
 Project Location/Name: RAILYARDS BLVD BACKBONE, SACRAMENTO, 95814

SUMMARY OF PAYMENTS

The total cash payment you need to make depends upon your selection of the 10 Year Refundable Advance Option or the Non-Refundable Discount Option for your gas and/or electric extension under Rule 15. Since you may elect one option for the gas extension and a different option for the electric extension, several different cash payments are available. Each payment option is summarized below. These payments include all billing under this Agreement including payments subject to refund, and non-refundable payments. To determine what is refundable or non-refundable, or to see full detailed billing information, please see the attached cost summaries. Even if you have no payment due for your gas and/or electric extension (Rule 15), you must still elect the 10 Year Refundable or Non-Refundable Discount Option for each extension on the second page of the Declarations.

10 Year Refundable Advance Option - Gas & Electric ⁽¹⁾	<u>\$52,547.67</u> ⁽²⁾
-- OR	
Non-Refundable Discount Option - Gas & Electric ⁽¹⁾	<u>\$9,372.43</u> ⁽³⁾
-- OR	
10 Year Refundable Advance Option - Gas / ⁽¹⁾	<u>\$52,547.67</u> ⁽²⁾
Non-Refundable Discount Option - Electric	
-- OR	
10 Year Refundable Advance Option - Electric / ⁽¹⁾	<u>\$9,372.43</u> ⁽²⁾
Non-Refundable Discount Option - Gas	

-
- (1) Amounts shown do not include reimbursements for facilities that are normally the responsibility of PG&E per our tariffs. See the Reimbursement Summary for a total of all Reimbursements to be paid upon acceptance of facilities.
 - (2) The payment amount shown on this line includes both refundable payments under Rule 15 for the gas and/or electric extension, plus other non-refundable payments. The total payment is not subject to refund. Please see the attached detailed Cost Summaries to determine the portion of this payment that may be subject to refund.
 - (3) The payment amount shown on this line includes only non-refundable payments under Rule 15 for the gas and/or electric extension, plus other non-refundable payments. None of the payment shown is subject to refund.



105949035G



**Pacific Gas and Electric Company
DISTRIBUTION AND SERVICE EXTENSION AGREEMENT
EXHIBIT A - COST SUMMARY ***

REFERENCES:

Notification # 105949035
Contract # 1160897
G-PM # 30921249
GRR-PM #
MLX #

Applicant CITY OF SACRAMENTO, A Government Agency

Project Location/Name: RAILYARDS BLVD BACKBONE, SACRAMENTO, 95814

GAS DISTRIBUTION LINE AND SERVICE EXTENSION COST SUMMARY

Cost of Ownership charges as described in the rules and in the Unsupported Extension Cost section of the Provisions of this Agreement: Apply

Total number of residential lots/units for this project: 0
Total number of non-residential lots/units for this project: 0

Calculations to determine excess residential service allowance to be applied to distribution line refundable amount on a per lot/unit basis:

Cost of Services: ⁽⁵⁾

Engineering & Administrative Costs				<u>\$0.00</u>
Value of Applicant Design Work		(+)		<u>\$0.00</u>
Service Tie-In Cost (Pressurized) by PG&E		(+)		<u>\$0.00</u>
Gas Metering & Regulation		(+)		<u>\$0.00</u>
Not Available		(+)		<u>\$0.00</u>
Inspection Fees		(+)		<u>\$0.00⁽⁴⁾</u>
Service Cost - PG&E installed	# Services		<u>0</u>	(+) <u>\$0.00</u>
Service Cost - Applicant installed	# Services		<u>0</u>	(+) <u>\$0.00⁽⁵⁾</u>
Total Estimated Cost of Service Subject to Allowance				(=) <u>\$0.00</u>

Cost of Service Within Allowance:

Residential Service Allowance

Water Heaters:	<u>\$529.00</u>	x	<u>0</u>	Units		<u>\$0.00</u>
Space Heaters:	<u>\$647.00</u>	x	<u>0</u>	Units	(+)	<u>\$0.00</u>
Oven / Range:	<u>\$57.00</u>	x	<u>0</u>	Units	(+)	<u>\$0.00</u>
Dryer Stub:	<u>\$22.00</u>	x	<u>0</u>	Units	(+)	<u>\$0.00</u>

Total Residential Service Allowance	(-)	<u>\$0.00⁽¹⁾</u>
Excess Service Cost	(=)	<u>\$0.00</u>
Estimated Service Cost Within Allowance (Total less Excess)	(=)	<u>\$0.00</u>

Average Cost per Lot or Unit Within Allowance

\$0.00 / 0 = \$0.00

Excess Service Allowance Applied to Distribution Line Extension Refundable

Amount per Lot or Unit:

\$0.00 - \$0.00 = \$0.00 **
Allowance Ave. Cost / Unit



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Allowances

Residential:	\$529.00	x	0		\$0.00
Water Heaters:			Lots / Units		
	\$647.00	x	0		\$0.00
Space Heaters:			Lots / Units		
	\$57.00	x	0		\$0.00
Oven / Range:			Lots / Units		
	\$22.00	x	0		\$0.00
Dryer Stub:			Lots / Units		
SUB TOTAL Residential Allowance					\$0.00
plus ITCC @ 22%			Residential Allowances	(+)	\$0.00
TOTAL Residential Allowances				(=)	\$0.00
Non-Residential:	\$0.00	/	0.1668	=	\$0.00
Net Annual Revenue			Cost-of-Service-Factor		
plus ITCC @ 22%			Non-Residential Allowances	(+)	\$0.00
SUB TOTAL Non-Residential Allowances				(=)	\$0.00
less Residential Service Allowance:					
(0 x \$0.00) + 22% ITCC =					\$0.00
Lots/Units			Ave. Cost / Unit		
Total Gas Distribution Main Extension Allowance				(=)	\$0.00

Amount Subject to Refund

Engineering & Administrative Costs					\$17,496.14
Value of Applicant Design Work				(+)	\$0.00
Tie-In of Distribution by PG&E				(+)	\$7,674.82
Gas Metering (Non-Residential Projects)				(+)	\$0.00
N/A				(+)	\$0.00
PG&E installed - Cost of Distribution Main and Non-Res Svcs.				(+)	\$0.00
Applicant installed - Cost of Distribution Main and Non-Res Svcs.				(+)	\$47,989.21 ⁽⁵⁾
PG&E installed - Cost of Distribution Main Trench.				(+)	\$0.00
Applicant installed - Cost of Distribution Main Trench.				(+)	\$8,677.48 ⁽⁵⁾
Inspection Fees				(+)	\$0.00 ⁽⁴⁾
SUB TOTAL				(=)	\$81,837.64
plus ITCC 22%				(+)	\$18,004.28
Total Refundable Amount				(=)	\$99,841.93
Less Total Allowances (not to exceed Total Refundable Amount)					\$0.00
Balance: Net Refundable Amount				(=)	\$99,841.93
10 Year Refundable Advance Option					
Balance: Net Refundable Amount					\$99,841.93
Less Credit for Value of Applicant Design Work				(-)	\$0.00
Less Cost of Dist. Main Ext. and Non-Res Svcs. installed by Applicant				(-)	\$47,989.21 ⁽⁵⁾
Less Distribution Main Trench by Applicant				(-)	\$8,677.48 ⁽⁵⁾
Net 10 Year Refundable Advance Option Payment				(=)	\$43,175.24 ⁽²⁾
Non-Refundable Discount Option					
Balance: Net Refundable Amount					\$99,841.93
\$99,841.93 x 0.50 =				(-)	\$49,920.96
Balance			Discount Rate		
Less Credit for Value of Applicant Design Work				(-)	\$0.00
Less Cost of Dist. Main Ext. and Non-Res Svcs. installed by Applicant				(-)	\$47,989.21 ⁽⁵⁾
Less Cost of Distribution Main Trench by Applicant				(-)	\$8,677.48 ⁽⁵⁾
Net Non-Refundable Discount Option Payment				(=)	-\$6,745.73 ⁽²⁾



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Non-Refundable Payments

Rule 16 Non-Refundable Payments

Excess Service Costs		<u>\$0.00</u>
Service Costs Beyond Preferred Service Location	(+)	<u>\$0.00</u>
Value of Rule 16 Land Rights Costs	(+)	<u>\$0.00</u>
Value of Gas Service Trench in the Franchise Area or on 3rd Party Property	(+)	<u>\$0.00</u>
Inspection Fees	(+)	<u>\$0.00</u>
Rule 16 Trench Permits Obtained by PG&E	(+)	<u>\$0.00</u>
Other Taxable Charges: N/A	(+)	<u>\$0.00</u>
Cost of Additional Rule 16 Applicant Design Plan Checks	(+)	<u>\$0.00</u>
SUB TOTAL	(=)	<u>\$0.00</u>
Plus ITCC @ <u>22%</u>	(+)	<u>\$0.00</u>
Other Non-taxable Charges: N/A	(+)	<u>\$0.00</u>
D.04-05-055 Line Extension Costs Residential	(+)	<u>\$0.00</u>
D.04-05-055 Line Extension Costs Non-Residential	(+)	<u>\$0.00</u>
Inspection Fees (not subject to ITCC)	(+)	<u>\$0.00</u>
Plus Gas Service Trench installed by PG&E on Private Property	(+)	<u>\$0.00</u>
Less Excess Service Facilities Installed by Applicant	(-)	<u>\$0.00</u>
Less Service Costs Beyond Preferred Location by Applicant	(-)	<u>\$0.00</u>
Less Gas Service Trench in the Franchise Area or on & 3rd Party Property installed by Applicant	(-)	<u>\$0.00</u>
Less Rule 16 Applicant Design Work Associated with Excess	(-)	<u>\$0.00</u>
Total Rule 16 Non-Refundable Payment	(=)	<u>\$0.00</u>

Rule 15 Non-Refundable Payments

Inspection Fees		<u>\$7,682.32</u>
Re-engineering / Composite Fees	(+)	<u>\$0.00</u>
Cost of Additional Applicant Design Plan Checks	(+)	<u>\$0.00</u>
Value of Distribution Main Substructures	(+)	<u>\$0.00</u>
PG&E Land Rights Costs	(+)	<u>\$0.00</u>
Rule 15 Trench Permits Obtained by PG&E	(+)	<u>\$0.00</u>
N/A	(+)	<u>\$0.00</u>
SUB TOTAL	(=)	<u>\$7,682.32</u>
Plus ITCC @ <u>22%</u>	(+)	<u>\$1,690.11</u>
Less Distribution Main Substructures Installed by Applicant	(-)	<u>\$0.00</u>
Total Non-Refundable Gas Rule 15 Payment	(=)	<u>\$9,372.43</u>

Relocation / Rearrangement of PG&E Facilities

Value of Relocation/Rearrangement Facilities		<u>\$0.00</u>
Value of Relocation/Rearrangement Conduits & Substructures	(+)	<u>\$0.00</u>
Value of Relocation/Rearrangement Trench & Excavation	(+)	<u>\$0.00</u>
Engineering & Administrative Costs	(+)	<u>\$0.00</u>



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Value of Relocation Applicant Design Work	(+)	<u>\$0.00</u>	
Cost of Additional Applicant Design Plan Checks	(+)	<u>\$0.00</u>	
Tie-In of Relocation/Rearrangement by PG&E	(+)	<u>\$0.00</u>	
Relocation/Rearrangement Trench Permits Obtained by PG&E	(+)	<u>\$0.00</u>	
Relocation/Rearrangement Land Rights	(+)	<u>\$0.00</u>	
Relocation/Rearrangement Inspection Fees	(+)	<u>\$0.00</u>	
SUB TOTAL	(=)	<u>\$0.00</u>	
Plus ITCC @ 22%	(+)	<u>\$0.00</u>	
Plus Relocation/Rearrangement - Non Taxable	(+)	<u>\$0.00</u>	
Less Relocation/Rearrangement Facilities Installed by Applicant	(-)	<u>\$0.00</u>	
Less Substructures Installed by Applicant	(-)	<u>\$0.00</u>	
Less Trench & Excavation Provided by Applicant	(-)	<u>\$0.00</u>	
Less Value of Relocation Applicant Design Work	(-)	<u>\$0.00</u>	
Less Relocation/Rearrangement Salvage	(-)	<u>\$0.00</u>	
Total Payment for Gas Distribution Line and Service Extension			(=) <u>\$0.00</u>

Total Payment for Gas Distribution Main and Service Extension

Cash Payment - 10-Year Refundable Advance Option

Rule 15 Refundable Advance Payment		<u>\$43,175.24</u> ⁽³⁾	
Rule 16 Non-Refundable Payment	(+)	<u>\$0.00</u>	
Rule 15 Non-Refundable Payment	(+)	<u>\$9,372.43</u>	
Relocation/Rearrangement of PG&E Facilities Payment	(+)	<u>\$0.00</u>	
Total			(=) <u>\$52,547.67</u>

Cash Payment - Non-Refundable Discount Option

Rule 15 Non-Refundable Discount Option Payment		<u>\$0.00</u> ⁽³⁾	
Rule 16 Non-Refundable Payment (Not Subject to Discount)	(+)	<u>\$0.00</u>	
Rule 15 Non-Refundable Payment (Not Subject to Discount)	(+)	<u>\$9,372.43</u>	
Relocation/Rearrangement of PG&E Facilities Payment	(+)	<u>\$0.00</u>	
Total			(=) <u>\$9,372.43</u>

Value of Gas Facility Reinforcements by PG&E: \$0.00 based upon Applicant's estimated gas load of: 0.0 Mcfh

(Reference: Payment Adjustments. Excess Facilities section of the Provisions)

- (1) Total Service Allowance not to exceed the Cost of Service
- (2) 10 Year Refundable and Discount Option credit amounts will be paid upon acceptance of facilities. Credit amounts are subject to future deficiency billing in accordance with the tariff.
- (3) 10 Year Refundable and Discount Option credit amounts do not offset Other Non-Refundable or Relocation Fees. See Reimbursement Summary for a total of Reimbursements and Credits to be paid upon acceptance of facilities.
- (4) Inspection Fees (Only Refundable if Applicant's Actual Cost is Used. Applicant's Actual Cost + Inspection Cannot Exceed PG&E's Estimate)
- (5) The lower of PG&E's estimated costs or the Applicant's Contract Anticipated Costs (as documented on Form 79-1003 "Statement of Contract Anticipated Costs") will be used to establish the cost of Service and Distribution Line Extension subject to Allowance

**** PG&E USE ONLY**

Excess service allowance applied to distribution refundable amount per lot/unit

<u>\$0.00</u>	+	<u>\$0.00</u>	(=)	<u>\$0.00</u>
Allowance		22% ITCC		Refund per Residential Lot/Unit



105949035G



**Pacific Gas and Electric Company
DISTRIBUTION AND SERVICE EXTENSION AGREEMENT
EXHIBIT A - COST SUMMARY**

REFERENCES:

Notification # 105949035
 Contract # 1160897
 E15-PM # 30921249
 E16R-PM #
 E20B-PM #
 E20C-PM #
 G15-PM # 30921249
 G16R-PM #

Applicant: CITY OF SACRAMENTO, A Government Agency
 Project Location/Name: RAILYARDS BLVD BACKBONE, SACRAMENTO, 95814

REIMBURSEMENT SUMMARY

Reimbursements are provided for facilities that are installed by the Applicant which are normally the responsibility of PG&E per our tariffs. Reimbursements will be made after the facilities are accepted by PG&E, operational and ready to supply service. Reimbursable payments made for services will be reimbursed at the average rate shown as each service is connected. All reimbursements will be based upon PG&E's estimated costs.

Electric Rule 15

10 Year Refundable Advance Credit Amount		<u>\$0.00</u> ⁽¹⁾	
		- or -	
Non-Refundable Discount Option Credit Amount		<u>\$0.00</u> ⁽¹⁾	
Joint Pole Credits	(+)	<u>\$0.00</u>	
PG&E Betterments	(+)	<u>\$0.00</u>	
SUB TOTAL:	w/ 10 Year Refundable Advance Credit Amount	(=)	<u>\$0.00</u>
			- or -
	w/ Non-Refundable Discount Credit Amount	(=)	<u>\$0.00</u>

Electric Rule 16

Joint Pole Credits		<u>\$0.00</u>	
Applicant Design Work within the Allowance	(+)	<u>\$0.00</u>	
SUB TOTAL:		(=)	<u>\$0.00</u>

Reimbursements per Service Completion - Electric

Energized System	<u>\$0.00</u> /service ⁽²⁾
Non-energized System	<u>\$0.00</u> /service ⁽²⁾

Electric Rule 20B

Joint Pole Credits		<u>\$0.00</u>	
Rule 20B Payment Credit	(+)	<u>\$0.00</u>	
SUB TOTAL:		(=)	<u>\$0.00</u>

Electric Rule 20C

Joint Pole Credits		<u>\$0.00</u>	
Rule 20C Payment Credit	(+)	<u>\$0.00</u>	
SUB TOTAL:		(=)	<u>\$0.00</u>



105949035G

Streetlights

LS-1

Standard Luminaries		<u>\$0.00</u>	
Standard Poles & Arms	(+)	<u>\$0.00</u>	
Protective Tubes	(+)	<u>\$0.00</u>	
Internal Wiring	(+)	<u>\$0.00</u>	
Overhead Conductor	(+)	<u>\$0.00</u>	
Underground Conductor	(+)	<u>\$0.00</u>	
Connections	(+)	<u>\$0.00</u>	

LS-2

Connections	(+)	<u>\$0.00</u>	
SUB TOTAL:		(=)	<u>\$0.00</u>

Gas Rule 15

10 Year Refundable Advance Credit Amount		<u>\$0.00</u> ⁽¹⁾	
		- or -	
Non-Refundable Discount Option Credit Amount		<u>\$6,745.73</u> ⁽¹⁾	
PG&E Betterments	(+)	<u>\$0.00</u>	
SUB TOTAL:	w/ 10 Year Refundable Advance Credit Amount	(=)	<u>\$0.00</u>
		- or -	
	w/ Non-Refundable Discount Credit Amount	(=)	<u>\$6,745.73</u>

Gas Rule 16

Stub Services		<u>\$0.00</u>	
Applicant Design Work within the Allowance	(+)	<u>\$0.00</u>	
SUB TOTAL:		(=)	<u>\$0.00</u>

Reimbursements per Service Completion - Gas

Pressurized System	<u>\$0.00</u> /service ⁽²⁾
Non-Pressurized System	<u>\$0.00</u> /service ⁽²⁾

Total Reimbursement

10 Year Refundable Advance Option - Gas & Electric	<u>\$0.00</u> ⁽³⁾
-- OR	
Non-Refundable Discount Option - Gas & Electric	<u>\$6,745.73</u> ⁽³⁾
-- OR	
10 Year Refundable Advance Option - Gas / Non-Refundable Discount Option - Electric	<u>\$0.00</u> ⁽³⁾
-- OR	
10 Year Refundable Advance Option - Electric / Non-Refundable Discount Option - Gas	<u>\$6,745.73</u> ⁽³⁾

- (1) 10 Year Refundable and Discount Option credit amounts will be paid upon acceptance of facilities. Credit amounts are subject to future deficiency billing in accordance with the tariff.
- (2) This Reimbursement will be paid on a per service basis as each service is completed.
- (3) Excludes service completion reimbursements made under Rule 16. Service completion reimbursements will be made as each service is connected, on a per service basis.



105949035G



September 25, 2013

JERRY WAY
CITY OF SACRAMENTO
915 I STREET, 2nd FLOOR
SACRAMENTO , CA 95814

RE: Contract ID: 1160679: RAILYARDS 5th STREET

Dear JERRY WAY ,

Enclosed are gas and/or electric agreements for your project located at:

5TH ST SOUTH OF UPRR, SACRAMENTO, 95814

This letter summarizes the agreements for this project.

	Non-Refundable Payment	Refundable Option*	50% Discount Option*
Gas Distribution and Service Extension	\$7,322.21	\$33,809.40	\$8,784.49
Less Credit (Engineering Advance, etc.)	\$2,000.00	\$0.00	\$0.00
TOTAL **	\$5,322.21	\$33,809.40	\$8,784.49
TOTAL PAYMENT DUE	\$39,131.61	OR	\$14,106.70

* Only applies to Rule 15 Refundable Amounts. Amount shown is less credit for associated Applicant work.

** The Income Tax Component of Contribution (ITCC) is included in the above charges when applicable.

Please sign both copies of the agreement and return one copy of the agreement to the address below along with your payment and retain one copy for your records. If the agreement is not returned to PG&E within 90 days of the date of this letter, the proposed agreement is canceled and PG&E may need to re-estimate the job.

Changes to the agreement, either to any of the terms or to the amount owing, are not permitted, and any change or interlineations voids the agreement. The payment of any amount less than the full amount shown will be deposited by PG&E, but PG&E will not begin any work on this contract until the amount is paid in full. The contract shall be deemed effective the date a fully executed copy is received by PG&E. Please allow 0 days from PG&E's receipt of the Agreement for construction to commence.

PG&E is committed to providing timely and efficient service and we look forward to continuing to work with you on this and future projects.

Should you have any questions regarding these contracts, please contact your project manager Demetrius D. Williams at 707-449-5890 or DDWC@pge.com.

Please send the executed Agreements and payment to:

PG&E CFM/PPC DEPARTMENT
PO BOX 997340
Sacramento, CA 95899-7340

Sincerely,

Brian Sweeney

Brian Sweeney
Service Planning Supervisor



105949039G



Dear JERRY WAY,

In response to your application for service, enclosed is the new CPUC-required form, "Statement of Applicant's Contract Anticipated Costs," (SACAC) which identifies PG&E's cost for the refundable work that is PG&E's responsibility to install as part your job. However, this is work that you can elect to provide under the competitive bidding provisions of Gas/Electric Rules 15 and 16. You can perform this work yourself, hire a contractor, or hire PG&E to do this work. Regardless of whom you choose to do the work, you must complete and return this form.

- If you elect to perform this work or have a contractor do it, please enter your costs in the section of the form entitled "Applicant Costs."
- If you elect to perform this work yourself or have a contractor do it and choose not to provide your costs, please so indicate in the section entitled "Applicant's Election Not To Provide Costs," date, sign and return the form.
- If you want PG&E to perform the work, check the section "Applicant's Election Not To Provide Costs," date, sign and return the form.

PG&E's costs are valid for 90 days from 09/25/2013

PG&E cannot proceed with any work on your application until you sign and return the SACAC form.

Please return this document with any other contract documents regarding this job to:

PG&E CFM/PPC DEPARTMENT
PO BOX 997340
Sacramento, CA 95899-7340

If you have any questions regarding this form please contact your project manager.



105949039G



**STATEMENT OF APPLICANT'S CONTRACT
ANTICIPATED COSTS.***

Project Name: RAILYARDS 5th STREET

Project Location: 5TH ST SOUTH OF UPRR, SACRAMENTO, 95814

Notification Number: 105949039

PM Number(s): (Gas) 30921251 (Electric)

APPLICANT COSTS

The following statement must only include the contracted anticipated installed costs of facilities installed by the Applicant that are refundable and that are PG&E's responsibility under its tariffs.

The costs provided by the Applicant must be taken from the Applicant's contract with its contractor. If the Applicant will be performing the work itself, the Applicant must also complete and sign this form.

The Applicant's statement of costs will be compared with PG&E's estimated installed costs of the same facilities, the lower of which will be used to determine the amount subject to allowances and refunds in accordance with the provisions of PG&E's Gas and Electric Rules 15 and 16.

If the Applicant chooses not to provide its costs, it must complete the last section of this form. Until the Applicant either provides the refundable cost from its contract with its contractor (or its own cost, if applicable), or returns this form indicating that it will not do so, PG&E will not proceed with any work on the Applicant's project.

GAS

Residential Service Facilities:

Applicant: \$ _____

PG&E: \$0.00

Number of gas service: 0 Stubs: 5

ELECTRIC

Residential Service Facilities:

Applicant: \$ _____

PG&E: \$0.00

Number of Electric service: 0

- Applicant's statement of costs include: overhead or underground service conductors, poles, service transformers, connection fittings, service pipe, valves, service connections, and other PG&E-owned service equipment, as detailed in Gas and Electric Rule 16.
- Applicant's statement of costs **DOES NOT** include: inspection fees, nonresidential service costs, regulators, or PG&E-owned metering equipment.



105949039G

GAS

**Gas Distribution Facilities
and Non-Residential Service Services:**

Applicant: \$ _____

PG&E: \$12,892.09

ELECTRIC

**Electric Distribution Facilities
and Non-Residential Service Services:**

Applicant: \$ _____

PG&E: \$0.00

GAS DISTRIBUTION TRENCH

Applicant: \$ _____

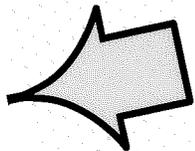
PG&E: \$3,348.32

- Applicant's statement of costs include: cables, switches, transformers, distribution main, valves, regulators, nonresidential service costs, and other distribution facilities required to complete the distribution line extension, as detailed in Gas and Electric Rule 15 as PG&E's responsibility.
- Applicant's statement of costs DOES NOT include: inspection fees, tie-in of system by PG&E, distribution substructures, electric trench, conduits, feeder conduits, or protective structures, as detailed in Gas and Electric Rule 15.

I declare under penalty of perjury that the foregoing is true and correct.

APPLICANT'S ELECTION NOT TO PROVIDE COSTS: (if this option selected, box must be checked)

I choose not to provide to the utility my refundable costs for this project as taken from my contract with my contractor, or as performed by myself, and acknowledge that PG&E will use its estimate of the refundable costs for this project in the contract between it and me.



Executed on _____ (Date) at SACRAMENTO, CA (City)

By:

[Handwritten Signature]

CITY ATTORNEY

APPROVED AS TO FORM.

Print Applicant Name: JERRY WAY

SIGN HERE (with arrow pointing left)

Signed: _____

Title: _____



105949039G



DISTRIBUTION:

- Applicant (copy)
- Division (copy)
- CFM (Original)
- T&CS

REFERENCES:

Notification #	105949039
Contract #	1160679
E-PM #	
G-PM #	30921251
Prior MLX E /G	2013
Customer #	944468

DISTRIBUTION SERVICE AND EXTENSION AGREEMENT DECLARATIONS 1

Submitted to Applicant by: DEMETRIUS D. WILLIAMS

Date of issuance: September 25, 2013

- CITY OF SACRAMENTO, A Government Agency (Applicant), has requested PACIFIC GAS & ELECTRIC COMPANY, a California corporation (PG&E), to deliver Gas energy to the property situated at 5TH ST SOUTH OF UPRR, SACRAMENTO, 95814 and shown on the attached drawings.**
- Applicable Documents.** The cost summary for the facilities to be installed is attached hereto as Exhibit A. These facilities shall be installed in accordance with the applicable rules on file with the California Public Utilities Commission (which may include Gas and Electric Rules 2, 13, 15, 16, and 20), as well as the requirements set forth in the Provisions and the General Terms and Conditions for Gas and Electric Service by Applicant.
- Construction Options.** The responsibility for providing line extension work is divided between PG&E and the Applicant. However, Applicant may choose to have a qualified contractor perform some of the work that is PG&E's responsibility, and may choose to have PG&E perform some or all of the work that is the Applicant's responsibility. PG&E will reimburse or collect money based on its estimate of the costs, subject to the applicable rules. Based on Applicant's request, the contract costs are based on the following construction options:

PG&E Responsibility ¹		To Be Performed By	
		PG&E	Applicant
Gas	Main Trench	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Main Pipe Installation	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Service Pipe Installation	<input type="checkbox"/>	<input type="checkbox"/>
Electric	Distribution Wire and Equipment Installation	<input type="checkbox"/>	<input type="checkbox"/>
	Service Wire Installation	<input type="checkbox"/>	<input type="checkbox"/>

Applicant Responsibility ²		To Be Performed By	
		PG&E	Applicant
Gas	Service Trench	<input type="checkbox"/>	<input type="checkbox"/>
Electric	Distribution Trench	<input type="checkbox"/>	<input type="checkbox"/>
	Service Trench	<input type="checkbox"/>	<input type="checkbox"/>
	Distribution Substructure Installation	<input type="checkbox"/>	<input type="checkbox"/>
	Service Substructure Installation	<input type="checkbox"/>	<input type="checkbox"/>

1. PG&E's responsibilities per Rule 15.b.1.b and Rule 16.D.2
2. Applicant's responsibilities per Rule 15.b.1.a and Rule 16.D.1



4. N/A

Refund/Discount Option Selection

Applicant, in accordance with PG&E's extension rules, must select one of the following options for each commodity you are requesting service (gas and/or electric). Once the selection has been made, it cannot be changed.

Gas <input type="checkbox"/> 10-Year Subject to Refund Option - or <input checked="" type="checkbox"/> Non-Refundable 50% Discount Option	Electric <input type="checkbox"/> 10-Year Subject to Refund Option - or <input type="checkbox"/> Non-Refundable 50% Discount Option
---	---

ACCEPTED:

APPLICANT: CITY OF SACRAMENTO, A Government Agency

By:	SIGN HERE
(Authorized Signature)	
JERRY WAY	
(Type or Print Name)	
TITLE:	
DATE:	
MAILING ADDRESS: 915 I STREET, 2ND FLOOR SACRAMENTO, CA 95814	

PACIFIC GAS AND ELECTRIC COMPANY:

By:	Brian Sweeney
(Authorized Signature)	
Brian Sweeney	
(Type or Print Name)	
TITLE:	Service Planning Supervisor
DIVISION:	Sacramento
DATE:	



105949039G



**Pacific Gas and Electric Company
DISTRIBUTION AND SERVICE EXTENSION AGREEMENT
EXHIBIT A - COST SUMMARY**

REFERENCES: Notification # 105949039
Contract # 1160679
E-PM #
G-PM # 30921251

Applicant: CITY OF SACRAMENTO, A Government Agency

Project Location/Name: 5TH ST SOUTH OF UPRR, SACRAMENTO, 95814

SUMMARY OF PAYMENTS

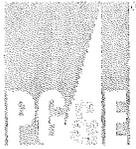
The total cash payment you need to make depends upon your selection of the 10 Year Refundable Advance Option or the Non-Refundable Discount Option for your gas and/or electric extension under Rule 15. Since you may elect one option for the gas extension and a different option for the electric extension, several different cash payments are available. Each payment option is summarized below. These payments include all billing under this Agreement including payments subject to refund, and non-refundable payments. To determine what is refundable or non-refundable, or to see full detailed billing information, please see the attached cost summaries. Even if you have no payment due for your gas and/or electric extension (Rule 15), you must still elect the 10 Year Refundable or Non-Refundable Discount Option for each extension on the second page of the Declarations.

10 Year Refundable Advance Option - Gas & Electric ⁽¹⁾	<u>\$41,131.61</u> ⁽²⁾
-- OR	
Non-Refundable Discount Option - Gas & Electric ⁽¹⁾	<u>\$16,106.70</u> ⁽³⁾
-- OR	
10 Year Refundable Advance Option - Gas / ⁽¹⁾	<u>\$41,131.61</u> ⁽²⁾
Non-Refundable Discount Option - Electric	
-- OR	
10 Year Refundable Advance Option - Electric / ⁽¹⁾	<u>\$16,106.70</u> ⁽²⁾
Non-Refundable Discount Option - Gas	

-
- (1) Amounts shown do not include reimbursements for facilities that are normally the responsibility of PG&E per our tariffs. See the Reimbursement Summary for a total of all Reimbursements to be paid upon acceptance of facilities.
 - (2) The payment amount shown on this line includes both refundable payments under Rule 15 for the gas and/or electric extension, plus other non-refundable payments. The total payment is not subject to refund. Please see the attached detailed Cost Summaries to determine the portion of this payment that may be subject to refund.
 - (3) The payment amount shown on this line includes only non-refundable payments under Rule 15 for the gas and/or electric extension, plus other non-refundable payments. None of the payment shown is subject to refund.



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**Pacific Gas and Electric Company
DISTRIBUTION AND SERVICE EXTENSION AGREEMENT
EXHIBIT A - COST SUMMARY ***

REFERENCES:
Notification # 105949039
Contract # 1160679
G-PM # 30921251
GRR-PM #
MLX #

Applicant CITY OF SACRAMENTO, A Government Agency
Project Location/Name: 5TH ST SOUTH OF UPRR, SACRAMENTO, 95814

GAS DISTRIBUTION LINE AND SERVICE EXTENSION COST SUMMARY

**Cost of Ownership charges as described in the rules and in the Unsupported Extension
Cost section of the Provisions of this Agreement: Apply**

Total number of residential lots/units for this project: 0
Total number of non-residential lots/units for this project: 0

Calculations to determine excess residential service allowance to be applied to distribution line refundable amount on a per lot/unit basis:

Cost of Services:⁽⁶⁾

Engineering & Administrative Costs					<u>\$0.00</u>
Value of Applicant Design Work			(+)		<u>\$0.00</u>
Service Tie-In Cost (Pressurized) by PG&E			(+)		<u>\$0.00</u>
Gas Metering & Regulation			(+)		<u>\$0.00</u>
Not Available			(+)		<u>\$0.00</u>
Inspection Fees			(+)		<u>\$0.00⁽⁴⁾</u>
Service Cost - PG&E installed	# Services	<u>0</u>	(+)		<u>\$0.00</u>
Service Cost - Applicant installed	# Services	<u>0</u>	(+)		<u>\$0.00⁽⁵⁾</u>
Total Estimated Cost of Service Subject to Allowance				(=)	<u>\$0.00</u>

Cost of Service Within Allowance:

Residential Service Allowance

Water Heaters:	<u>\$529.00</u>	x	<u>0</u>	Units	<u>\$0.00</u>
Space Heaters:	<u>\$647.00</u>	x	<u>0</u>	Units	(+) <u>\$0.00</u>
Oven / Range:	<u>\$57.00</u>	x	<u>0</u>	Units	(+) <u>\$0.00</u>
Dryer Stub:	<u>\$22.00</u>	x	<u>0</u>	Units	(+) <u>\$0.00</u>

Total Residential Service Allowance			(-)		<u>\$0.00⁽¹⁾</u>
Excess Service Cost			(=)		<u>\$0.00</u>
Estimated Service Cost Within Allowance (Total less Excess)			(=)		<u>\$0.00</u>

Average Cost per Lot or Unit Within Allowance

\$0.00 / 0 = \$0.00

Excess Service Allowance Applied to Distribution Line Extension Refundable

Amount per Lot or Unit:

\$0.00 - \$0.00 = \$0.00^{**}
Allowance Ave. Cost / Unit



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Allowances

Residential:	<u>\$529.00</u>	x	<u>0</u>		<u>\$0.00</u>
Water Heaters:			Lots / Units		
	<u>\$647.00</u>	x	<u>0</u>		<u>\$0.00</u>
Space Heaters:			Lots / Units		
	<u>\$57.00</u>	x	<u>0</u>		<u>\$0.00</u>
Oven / Range:			Lots / Units		
	<u>\$22.00</u>	x	<u>0</u>		<u>\$0.00</u>
Dryer Stub:			Lots / Units		

SUB TOTAL Residential Allowance \$0.00

plus ITCC @ 22% Residential Allowances (+) \$0.00

TOTAL Residential Allowances (=) \$0.00

Non-Residential: \$0.00 / 0.1668 = \$0.00

Net Annual Revenue Cost-of-Service-Factor

plus ITCC @ 22% Non-Residential Allowances (+) \$0.00

SUB TOTAL Non-Residential Allowances (=) \$0.00

less Residential Service Allowance:

(0 x \$0.00) + 22% = \$0.00
 Lots/Units Ave. Cost / Unit ITCC

Total Gas Distribution Main Extension Allowance (=) \$0.00

Amount Subject to Refund

Engineering & Administrative Costs \$15,523.70

Value of Applicant Design Work (+) \$0.00

Tie-In of Distribution by PG&E (+) \$9,260.32

Gas Metering (Non-Residential Projects) (+) \$0.00

N/A (+) \$0.00

PG&E installed - Cost of Distribution Main and Non-Res Svcs. (+) \$0.00

Applicant installed - Cost of Distribution Main and Non-Res Svcs. (+) \$12,892.09⁽⁵⁾

PG&E installed - Cost of Distribution Main Trench. (+) \$0.00

Applicant installed - Cost of Distribution Main Trench. (+) \$3,348.32⁽⁵⁾

Inspection Fees (+) \$0.00⁽⁴⁾

SUB TOTAL (=) \$41,024.44

plus ITCC 22% (+) \$9,025.38

Total Refundable Amount (=) \$50,049.81

Less Total Allowances (not to exceed Total Refundable Amount) \$0.00

Balance: Net Refundable Amount (=) \$50,049.81

10 Year Refundable Advance Option

Balance: Net Refundable Amount \$50,049.81

Less Credit for Value of Applicant Design Work (-) \$0.00

Less Cost of Dist. Main Ext. and Non-Res Svcs. installed by Applicant (-) \$12,892.09⁽⁵⁾

Less Distribution Main Trench by Applicant (-) \$3,348.32⁽⁵⁾

Net 10 Year Refundable Advance Option Payment (=) \$33,809.40⁽²⁾

Non-Refundable Discount Option

Balance: Net Refundable Amount \$50,049.81

\$50,049.81 x 0.50 = \$25,024.91
 Balance Discount Rate

Less Credit for Value of Applicant Design Work (-) \$0.00

Less Cost of Dist. Main Ext. and Non-Res Svcs. installed by Applicant (-) \$12,892.09⁽⁵⁾

Less Cost of Distribution Main Trench by Applicant (-) \$3,348.32⁽⁵⁾

Net Non-Refundable Discount Option Payment (=) \$8,784.49⁽²⁾



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Non-Refundable Payments

Rule 16 Non-Refundable Payments

Excess Service Costs		<u>\$0.00</u>
Service Costs Beyond Preferred Service Location	(+)	<u>\$0.00</u>
Value of Rule 16 Land Rights Costs	(+)	<u>\$0.00</u>
Value of Gas Service Trench in the Franchise Area or on 3rd Party Property	(+)	<u>\$0.00</u>
Inspection Fees	(+)	<u>\$0.00</u>
Rule 16 Trench Permits Obtained by PG&E	(+)	<u>\$0.00</u>
Other Taxable Charges: N/A	(+)	<u>\$0.00</u>
Cost of Additional Rule 16 Applicant Design Plan Checks	(+)	<u>\$0.00</u>
SUB TOTAL	(=)	<u>\$0.00</u>
Plus ITCC @ <u>22%</u>	(+)	<u>\$0.00</u>
Other Non-taxable Charges: N/A	(+)	<u>\$0.00</u>
D.04-05-055 Line Extension Costs Residential	(+)	<u>\$0.00</u>
D.04-05-055 Line Extension Costs Non-Residential	(+)	<u>\$0.00</u>
Inspection Fees (not subject to ITCC)	(+)	<u>\$0.00</u>
Plus Gas Service Trench installed by PG&E on Private Property	(+)	<u>\$0.00</u>
Less Excess Service Facilities Installed by Applicant	(-)	<u>\$0.00</u>
Less Service Costs Beyond Preferred Location by Applicant	(-)	<u>\$0.00</u>
Less Gas Service Trench in the Franchise Area or on & 3rd Party Property installed by Applicant	(-)	<u>\$0.00</u>
Less Rule 16 Applicant Design Work Associated with Excess	(-)	<u>\$0.00</u>
Total Rule 16 Non-Refundable Payment	(=)	<u>\$0.00</u>

Rule 15 Non-Refundable Payments

Inspection Fees		<u>\$6,001.81</u>
Re-engineering / Composite Fees	(+)	<u>\$0.00</u>
Cost of Additional Applicant Design Plan Checks	(+)	<u>\$0.00</u>
Value of Distribution Main Substructures	(+)	<u>\$0.00</u>
PG&E Land Rights Costs	(+)	<u>\$0.00</u>
Rule 15 Trench Permits Obtained by PG&E	(+)	<u>\$0.00</u>
N/A	(+)	<u>\$0.00</u>
SUB TOTAL	(=)	<u>\$6,001.81</u>
Plus ITCC @ <u>22%</u>	(+)	<u>\$1,320.40</u>
Less Distribution Main Substructures Installed by Applicant	(-)	<u>\$0.00</u>
Total Non-Refundable Gas Rule 15 Payment	(=)	<u>\$7,322.21</u>

Relocation / Rearrangement of PG&E Facilities

Value of Relocation/Rearrangement Facilities		<u>\$0.00</u>
Value of Relocation/Rearrangement Conduits & Substructures	(+)	<u>\$0.00</u>
Value of Relocation/Rearrangement Trench & Excavation	(+)	<u>\$0.00</u>
Engineering & Administrative Costs	(+)	<u>\$0.00</u>



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Value of Relocation Applicant Design Work	(+)	<u>\$0.00</u>	
Cost of Additional Applicant Design Plan Checks	(+)	<u>\$0.00</u>	
Tie-In of Relocation/Rearrangement by PG&E	(+)	<u>\$0.00</u>	
Relocation/Rearrangement Trench Permits Obtained by PG&E	(+)	<u>\$0.00</u>	
Relocation/Rearrangement Land Rights	(+)	<u>\$0.00</u>	
Relocation/Rearrangement Inspection Fees	(+)	<u>\$0.00</u>	
SUB TOTAL	(=)	<u>\$0.00</u>	
Plus ITCC @ 22%	(+)	<u>\$0.00</u>	
Plus Relocation/Rearrangement - Non Taxable	(+)	<u>\$0.00</u>	
Less Relocation/Rearrangement Facilities Installed by Applicant	(-)	<u>\$0.00</u>	
Less Substructures Installed by Applicant	(-)	<u>\$0.00</u>	
Less Trench & Excavation Provided by Applicant	(-)	<u>\$0.00</u>	
Less Value of Relocation Applicant Design Work	(-)	<u>\$0.00</u>	
Less Relocation/Rearrangement Salvage	(-)	<u>\$0.00</u>	
Total Payment for Gas Distribution Line and Service Extension	(=)		<u>\$0.00</u>

Total Payment for Gas Distribution Main and Service Extension

Cash Payment - 10-Year Refundable Advance Option

Rule 15 Refundable Advance Payment		<u>\$33,809.40</u> ⁽³⁾	
Rule 16 Non-Refundable Payment	(+)	<u>\$0.00</u>	
Rule 15 Non-Refundable Payment	(+)	<u>\$7,322.21</u>	
Relocation/Rearrangement of PG&E Facilities Payment	(+)	<u>\$0.00</u>	
Total	(=)		<u>\$41,131.61</u>

Cash Payment - Non-Refundable Discount Option

Rule 15 Non-Refundable Discount Option Payment		<u>\$8,784.49</u> ⁽³⁾	
Rule 16 Non-Refundable Payment (Not Subject to Discount)	(+)	<u>\$0.00</u>	
Rule 15 Non-Refundable Payment (Not Subject to Discount)	(+)	<u>\$7,322.21</u>	
Relocation/Rearrangement of PG&E Facilities Payment	(+)	<u>\$0.00</u>	
Total	(=)		<u>\$16,106.70</u>

Value of Gas Facility Reinforcements by PG&E: \$0.00 based upon Applicant's estimated gas load of: 0.0 Mcfh

(Reference: Payment Adjustments. Excess Facilities section of the Provisions)

- (1) Total Service Allowance not to exceed the Cost of Service
- (2) 10 Year Refundable and Discount Option credit amounts will be paid upon acceptance of facilities. Credit amounts are subject to future deficiency billing in accordance with the tariff.
- (3) 10 Year Refundable and Discount Option credit amounts do not offset Other Non-Refundable or Relocation Fees. See Reimbursement Summary for a total of Reimbursements and Credits to be paid upon acceptance of facilities.
- (4) Inspection Fees (Only Refundable if Applicant's Actual Cost is Used. Applicant's Actual Cost + Inspection Cannot Exceed PG&E's Estimate)
- (5) The lower of PG&E's estimated costs or the Applicant's Contract Anticipated Costs (as documented on Form 79-1003 "Statement of Contract Anticipated Costs") will be used to establish the cost of Service and Distribution Line Extension subject to Allowance

**** PG&E USE ONLY**

Excess service allowance applied to distribution refundable amount per lot/unit

<u>\$0.00</u>	+	<u>\$0.00</u>	(=)	<u>\$0.00</u>
Allowance		22% ITCC		Refund per Residential Lot/Unit



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**Pacific Gas and Electric Company
DISTRIBUTION AND SERVICE EXTENSION AGREEMENT
EXHIBIT A - COST SUMMARY**

REFERENCES:

Notification # 105949039
 Contract # 1160679
 E15-PM # 30921251
 E16R-PM #
 E20B-PM #
 E20C-PM #
 G15-PM # 30921251
 G16R-PM #

Applicant: **CITY OF SACRAMENTO, A Government Agency**
 Project Location/Name: **5TH ST SOUTH OF UPRR, SACRAMENTO, 95814**

REIMBURSEMENT SUMMARY

Reimbursements are provided for facilities that are installed by the Applicant which are normally the responsibility of PG&E per our tariffs. Reimbursements will be made after the facilities are accepted by PG&E, operational and ready to supply service. Reimbursable payments made for services will be reimbursed at the average rate shown as each service is connected. All reimbursements will be based upon PG&E's estimated costs.

Electric Rule 15

10 Year Refundable Advance Credit Amount		<u>\$0.00</u> ⁽¹⁾	
		- or -	
Non-Refundable Discount Option Credit Amount		<u>\$0.00</u> ⁽¹⁾	
Joint Pole Credits	(+)	<u>\$0.00</u>	
PG&E Betterments	(+)	<u>\$0.00</u>	
SUB TOTAL:	w/ 10 Year Refundable Advance Credit Amount	(=)	<u>\$0.00</u>
			- or -
	w/ Non-Refundable Discount Credit Amount	(=)	<u>\$0.00</u>

Electric Rule 16

Joint Pole Credits		<u>\$0.00</u>	
Applicant Design Work within the Allowance	(+)	<u>\$0.00</u>	
SUB TOTAL:		(=)	<u>\$0.00</u>

Reimbursements per Service Completion - Electric

Energized System	<u>\$0.00</u> /service ⁽²⁾
Non-energized System	<u>\$0.00</u> /service ⁽²⁾

Electric Rule 20B

Joint Pole Credits		<u>\$0.00</u>	
Rule 20B Payment Credit	(+)	<u>\$0.00</u>	
SUB TOTAL:		(=)	<u>\$0.00</u>

Electric Rule 20C

Joint Pole Credits		<u>\$0.00</u>	
Rule 20C Payment Credit	(+)	<u>\$0.00</u>	
SUB TOTAL:		(=)	<u>\$0.00</u>



105949039G

Streetlights

LS-1

Standard Luminaries		<u>\$0.00</u>	
Standard Poles & Arms	(+)	<u>\$0.00</u>	
Protective Tubes	(+)	<u>\$0.00</u>	
Internal Wiring	(+)	<u>\$0.00</u>	
Overhead Conductor	(+)	<u>\$0.00</u>	
Underground Conductor	(+)	<u>\$0.00</u>	
Connections	(+)	<u>\$0.00</u>	

LS-2

Connections	(+)	<u>\$0.00</u>	
SUB TOTAL:		(=)	<u>\$0.00</u>

Gas Rule 15

10 Year Refundable Advance Credit Amount		<u>\$0.00</u> ⁽¹⁾	
		- or -	
Non-Refundable Discount Option Credit Amount		<u>\$0.00</u> ⁽¹⁾	
PG&E Betterments	(+)	<u>\$0.00</u>	
SUB TOTAL: w/ 10 Year Refundable Advance Credit Amount		(=)	<u>\$0.00</u>
		- or -	
w/ Non-Refundable Discount Credit Amount		(=)	<u>\$0.00</u>

Gas Rule 16

Stub Services		<u>\$0.00</u>	
Applicant Design Work within the Allowance	(+)	<u>\$0.00</u>	
SUB TOTAL:		(=)	<u>\$0.00</u>

Reimbursements per Service Completion - Gas

Pressurized System	<u>\$0.00</u> /service ⁽²⁾
Non-Pressurized System	<u>\$0.00</u> /service ⁽²⁾

Total Reimbursement

10 Year Refundable Advance Option - Gas & Electric	<u>\$0.00</u> ⁽³⁾
-- OR	
Non-Refundable Discount Option - Gas & Electric	<u>\$0.00</u> ⁽³⁾
-- OR	
10 Year Refundable Advance Option - Gas / Non-Refundable Discount Option - Electric	<u>\$0.00</u> ⁽³⁾
-- OR	
10 Year Refundable Advance Option - Electric / Non-Refundable Discount Option - Gas	<u>\$0.00</u> ⁽³⁾

- (1) 10 Year Refundable and Discount Option credit amounts will be paid upon acceptance of facilities. Credit amounts are subject to future deficiency billing in accordance with the tariff.
- (2) This Reimbursement will be paid on a per service basis as each service is completed.
- (3) Excludes service completion reimbursements made under Rule 16. Service completion reimbursements will be made as each service is connected, on a per service basis.



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PLAT: 2525 G3, H3
 CPA: 06S814
 TBA: P04
 EZ: 06-07-C
 MAOP 50#

NOTIFY U.S.A.
 48 HOURS PRIOR TO TRENCHING
 CALL: 811
 DATE: _____
 TICKET # _____
 BY: _____

PROJECT CONDITIONS STAMP

Type(s) of Work:
 New Business
 PG&E Maintenance & Construction

Project Conditions:
 NONE APPARENT (If project design changes, contact ADE)
 or
 CONDITIONS APPLY:
 PERMITS TAILBOARD OTHER
 (Provide additional information on line below)

BY: JARED PIMENTEL JIPL 07-23-13
 SIGNATURE, NAME, [CORPORATE ID], DATE

INSPECTION PER GS&S D-40

Steel _____ Plastic Fusion _____
 (Oxy) Welder: _____ Fusion By: _____
 (Arc) Welder: _____ Inspected By: _____
 Inspected by: _____

TEST AT 100-110 PSI FOR MINIMUM OF 5 MIN.

PRESSURE	DURATION	INITIALS	DATE OF TEST

PLASTIC PIPE DATA

SIZE	MANUFACTURED	DATE OF MANUFACTURE

UTILITY CONTACTS

UTILITY	CONTACT	PHONE #	JOB #
SMUD	KIM HOLDER	916-732-5814	30080724 30080872 30080869
PG&E GAS	DEMETRIUS WILLIAMS	916-386-5013	30921249
AT&T	MIKE LUDS	916-453-7126	8726445
COMCAST	MARK DUBY	916-830-6743	

MINIMUM COVER AND CLEARANCES

	G	T	C	S	P	COVER
GAS	-	12"	12"	6"	12"	24", 30" STREET
TELE.	12"	-	1"	12"	12"	24", 30" STREET
CAV	12"	1"	-	12"	12"	24", 30" STREET
ELEC. SEC.	6"	12"	12"	-	3"	24", 30" STREET
ELEC. PRL	12"	12"	12"	3"	-	30", 36" STREET

- SYMBOL LEGEND**
- AT&T PTS 3060
 - AT&T PTS 65
 - 18"x24" VAULT (COMCAST)
 - 17"x30" SERVICE BOX (SMUD)
 - 6'x8' SPLICING VAULT (SMUD)
 - 8'x14' SPLICING VAULT (SMUD)
 - TRANSFORMER PAD (SMUD)
 - 4'x4' TIE-IN HOLE (PG&E)
 - PL CAP WITH PIG TAIL
 - 3 WAY TEE
 - ELECTRONIC MARKER
 - 4" PL MAIN
 - JT TRENCH ROUTE
 - REDUCER

INSPECTION PER GS&S D-40

Steel _____ Plastic Fusion _____
 (Oxy) Welder: _____ Fusion By: _____
 (Arc) Welder: _____ Inspected By: _____
 Inspected by: _____

INSTALL DIRECT BURIAL PLASTIC MAINS & SERVICES PER GAS STANDARDS A90-A91.2, A93-A93.1 & D21. INSTALL PLASTIC MAIN & SERVICE INSERT PER GAS STANDARDS A90.1-A90.3, A91.2-A93.1 & D21

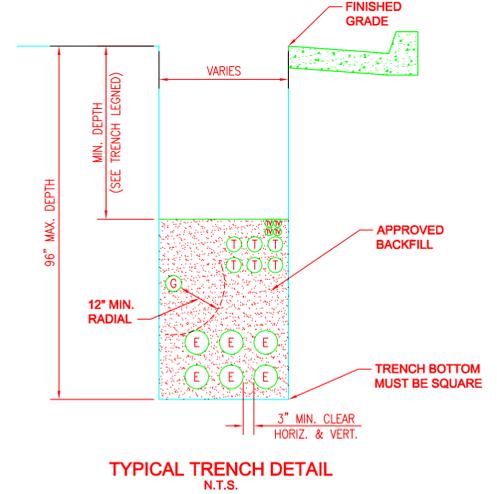
JOINT UTILITY TRENCH NOTES
PG&E NOTES

APPLICANT TO INSTALL 1,243' OF 4"(HP) PL MAIN
 APPLICANT TO TRENCH ALL

- PG&E TO PERFORM TRENCH INSPECTION. DEVELOPER TO CONFORM TO PG&E INSPECTION REQUIREMENTS.
- DEVELOPER TO TRENCH AND BACKFILL.
- SAND IMPORT MAY BE REQUIRED. BEDDING & BACKFILL MATERIAL MUST MEET PG&E GAS STANDARDS
- GAS FACILITIES TO BE INSTALLED BY APPLICANT
- TRENCHING AGENT TO MAINTAIN A MINIMUM 5" HORIZONTAL SEPARATION BETWEEN PG&E FACILITIES AND ALL WET FACILITIES.
- TRENCHING AGENT TO PROVIDE A BELL HOLE AT ALL PG&E TIE-IN LOCATIONS MINIMUM 4'x4'x12" BELOW EXISTING GAS FACILITIES.
- APPLICANT TO OBTAIN ALL REQUIRED ENCROACHMENT PERMITS.
- THE JOINT TRENCH CONFIGURATION FOLLOWS A LOCAL AGREEMENT WITH PG&E, SMUD, TELEPHONE COMPANIES AND CABLE COMPANIES. THIS CONFIGURATION MEETS THE REQUIREMENTS OF THE JOINT TRENCH STANDARDS (S5453).
- INSTALL DIRECT BURIAL PLASTIC MAINS AND SERVICES PER GAS STANDARDS A90-A91.2, A93-A93.1 AND D21. INSTALL PLASTIC MAIN AND SERVICE INSERT PER GAS STANDARDS A90.1-A90.3, A91.2-A93.1 AND D21.

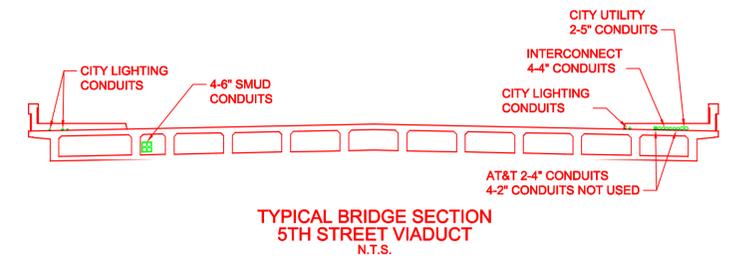
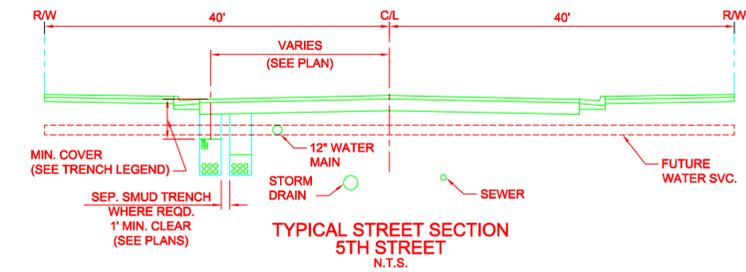
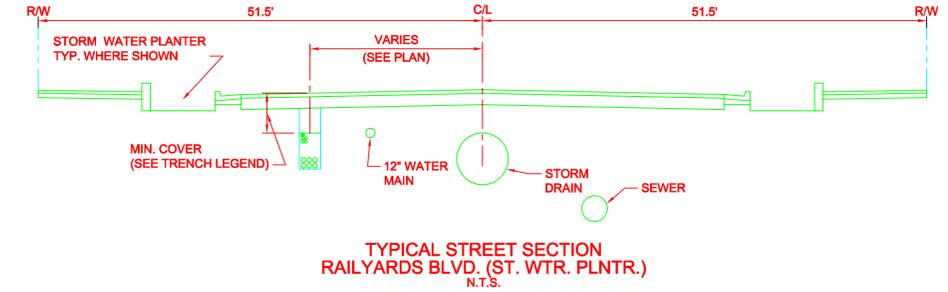
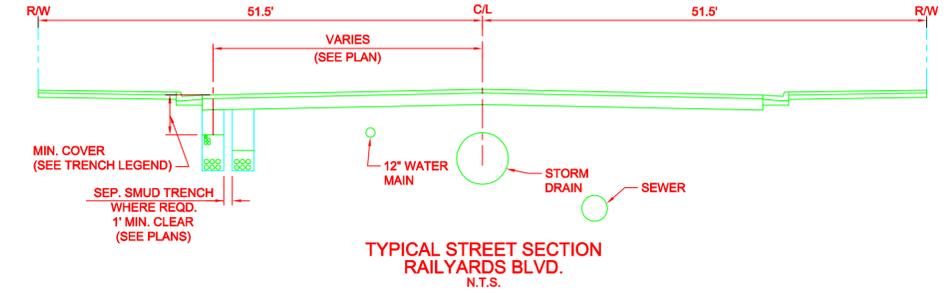
SMUD NOTES:

- WHEN DIGGING IN ANY AREA THAT CONTAINS COBBLES OR BACKFILL MATERIAL LARGER THAN 3", APPROVED BACKFILL MATERIAL WILL BE REQUIRED 12" OVER TOP MOST UTILITY. TRENCHING AGENTS ARE RESPONSIBLE TO CHECK EACH UTILITY'S REQUIREMENTS AT THE PRE-CONSTRUCTION MEETING.
- ALL TRENCHES & CONDUITS SHALL BE EXCAVATED AND PLACED PER SMUD STANDARDS & SHALL BE COMPACTED TO 95% RELATIVE DENSITY.
- CALL U.S.A. BEFORE DIGGING (1-800-642-2444) 48 HOURS PRIOR TO TRENCHING.
- MEASUREMENTS AND SCALE ARE APPROXIMATE. THE CONTRACTOR SHALL LOCATE PRECISELY TO AVOID DAMAGE. SMUD ACCEPTS NO RESPONSIBILITY FOR COMPLETE ACCURACY OF THIS PRINT.
- TRENCH BOTTOM MUST BE SQUARED & CLEANED.
- ALL SMUD CONDUITS SHALL BE SEPARATED FROM ALL FOREIGN SUBSTRUCTURES (EXCEPT COMMUNICATION SYSTEMS) BY A CLEARANCE OF AT LEAST 12" WHEN PARALLELING AND BY AT LEAST 6" WHEN CROSSING.
- IN ALL CONDITIONS, ALL LOCAL, STATE, AND FEDERAL SAFETY REQUIREMENTS MUST BE MET.
- ALL FACILITY NOTCHES ADJOINING MAIN LINE TRENCH REQUIRE TAPERS. SEE SMUD DEVELOPMENT REQUIREMENTS/PARTICIPATING UTILITY REQUIREMENTS.



CONTRACTOR CONSTRUCTION REFERENCES

- REFER TO GAS STANDARDS A-90 & A-91 FOR TYPICAL DIRECT BURIAL PLASTIC GAS MAIN AND SERVICE INSTALLATION, DRAWING #'S 283429 & 283430.
- REFER TO GAS STANDARDS A-90.1 & A-91.2 FOR TYPICAL PLASTIC GAS MAIN AND SERVICE INSERT CONSTRUCTION, DRAWING #'S 283725 & 283431.
- REFER TO GAS STANDARDS A-90.2 & A-90.3, D-12, D-13.1 & D-14 FOR TYPICAL ANODE AND LOCATING WIRE INSTALLATION ON DIRECT BURIAL PLASTIC GAS MAIN AND SERVICES, DRAWING #'S 283752, 283753, 282650, 283593 & 283975.
- REFER TO GAS STANDARDS A-34 FOR TEST CRITERIA ON GAS MAIN AND SERVICES.
- PACIFIC GAS AND ELECTRIC TO PERFORM ALL HOT TIE-INS AND PURGING OF GAS PIPING PER GAS STANDARD A-38.
- CONTRACTOR IS RESPONSIBLE FOR CROSSING EXISTING WATER, SEWER AND STORM DRAIN LINES, EITHER UNDER OR OVER, AS REQUIRED TO MEET PG&E COVER AND CLEARANCE REQUIREMENTS. REFER TO STANDARD PRACTICE 463-4.



ENGINEERING AND PLANNING DEPT.
 850 STILLWATER ROAD
 WEST SACRAMENTO, CA

EST: JARED PIMENTEL
 ADE: MIKE CORDOVA
 SUPV: BRAD RICE
 REP: DEMETRIUS WILLIAMS
 PLNR: ROSA BARAAS

CO: _____
 SD: _____
 NOTIFY: 105949039
 Other: _____
 SHEETS: 1 OF 3
 REV: 2

DATE: 06-27-13
 SCALE: NTS

ORDER # DWN CRKO SUPV APVD BY _____
 DESCRIPTION _____
 NO. DATE _____

5TH STREET 4" (HP) PL
 RAILYARDS BOULEVARD
 SACRAMENTO RAILYARDS

PHONE # _____
 FAX # _____
 PM: 30921251

